

UNIVERSITI MALAYSIA KELANTAN

CURRENT ISSUES IN ENTREPRENEURSHIP AND BUSINESS

*A COMPILATION OF PAPER SUBMITTED
AT INTERNATIONAL SEMINAR OF
ENTREPRENEURSHIP AND BUSINESS 2020*



**FACULTY OF
ENTREPRENEURSHIP &
BUSINESS**

CURRENT ISSUES IN ENTREPRENEURSHIP AND BUSINESS

*A COMPILATION OF PAPER SUBMITTED AT INTERNATIONAL SEMINAR OF
ENTREPRENEURSHIP AND BUSINESS 2020*

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PREFACE

The e-book of the 8th International Seminar of Entrepreneurship and Business (ISEB 2020) is an electronic publication for revised and extended papers presented at the ISEB 2020 on the 22 November 20120. This conference was organized by Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan. All papers in the e-book correspond to communications submitted and accepted for the ISEB 2020 conference. The committee received encouraging submission from various academic fields for this conference. All papers to the conference went through a blind review by the reviewers prior to being accepted to the conference. A total of 48 articles were presented at the conference and included in the eBook.

On the whole, the eBook presents a comprehensive overview of ongoing studies in latest issues and challenges in the field of Entrepreneurship and Business, particularly on Digital Entrepreneurship and beyond. The e-book contains thirteen parts that represent papers presented across 13 sub-themes at the ISEB 2020 conference. The editors and co-editors do not necessarily endorse or share the ideas and views presented in or implied by the papers included in this book.

Access to open e-book can be viewed or downloaded through <https://fkip-portal.umk.edu.my/web/chapterinbook/paper?purl=current-issues-entrepreneurship-business-2020>.

We hope this e-book will provide a useful reference for academicians and researchers. With the large number of participants, this conference has achieved its main goal which is to unite educators, researchers and industry players to share results and knowledge in order to stimulate and maintain a research culture in the university.

Representing the editorial committee, I would like to thank all the evaluators of the working papers in their tireless efforts to review and evaluate the papers submitted for this conference. I would also like to thank all the authors for reviewing their papers immediately according to the requirements of the conference. Finally, special thanks are extended to the organizers of the ISEB 2020 committee, for making this conference a success.

Editorial Member

INTERNATIONAL SEMINAR ON ENTREPRENEURSHIP AND BUSINESS (ISEB) 2020

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SUB-SESSION 1

ACCOUNTING

Does Corporate Governance Reforms Make the Difference? The Case of Malaysia

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Abstract - This paper reviews the performance of corporate governance practices in Malaysia from the beginning of the twenty-first century until recently. This paper also highlights the history of corporate governance practices in Malaysia and the scenario of accounting manipulations. Malaysia is a multi-ethnic society that requires managing corporations and firms collectively. Hence, corporate governance practices and good practices are compelled to fit society's uniqueness. This paper used the survey findings from the year 2002 to the year 2018 and discussed the corporate governance performance related to accounting manipulations in Malaysia. The market ranking survey oversees five (5) categories of corporate governance scores: rules and regulations, enforcement, political/regulatory environment, adoption of International Generally Accepted Accounting Principle, and corporate governance culture. The findings reported that firms in Malaysia have benefited from good laws and regulations through corporate governance reforms.

Keywords: corporate governance; accounting manipulations; financial statement fraud

Introduction

Studies confirm that strong corporate governance structures and practices are able to minimize accounting manipulations in firms (GarcíaLara, Osma, & Neophytou, 2009; Yang, Jiao, & Buckland, 2017). Shu, Chen, and Lin (2018) revealed that effective corporate governance could improve internal control quality. On top of that, a multitude of studies has emphasised the importance of corporate governance in firms as it could enhance financial reporting quality (Smaili & Labelle, 2009; Nor, Ahmad, & Saleh, 2010; Sapena Bolufer, Paniagua, Rivelles, & Sapena, 2018; Iqbal & Nawaz, 2019). As a developing country, Malaysia has always been the focus of numerous potential investors who seek stable, sustainable, trustworthy, and reliable firms to capitalise their resources.

There were no enforcement bodies during that time to ensure that firms complied with these accounting standards (Tan, 2000). In the beginning, Malaysia adopted the accounting standards in compliance with the International Financial Reporting Standards (IFRS) and International Accounting Standards (IAS) issued by the International Accounting Standard Board (IASB). A formal enquiry will be conducted against firms that ignore these requirements, where appropriate action will be affected on the guilty firms (Tan, 2000). However, these issues underline the punitive measures instead of preventive ones. Consequently, the Malaysian Accounting Standard Board (MASB) was formed under the

Financial Reporting Act (1997). The formation of the MASB obliged authorities to issue, revise, review, and adopt accounting standards in Malaysian businesses (Saleh, Iskandar, & Rahmat, 2005). Presently, financial reporting in Malaysia has adopted the Malaysian Financial Reporting Standards (MFRS) issued by MASB since January 1st, 2012. The MFRS is a standard that wholly complies with the IFRS framework, increasing the credibility and transparency of financial reporting in Malaysia. This compliance aligns with the global business requirements and needs, and thus, the convergence has helped Malaysian businesses with the standardised assurance that comply with the IFRS.

In Malaysia, corporate financial reporting is primarily governed through the Malaysian Code of Corporate Governance (MCCG), the Companies Act 1965 (Act 125), the Bursa Malaysia Listing Requirements, and the International Standard on Auditing (ISA). These rules and regulations significantly contribute, influence, and act as controlling mediators in preventing accounting manipulations in Malaysia (Wahab, How, & Verhoeven, 2007). These laws and regulations are authorised by the Securities Commission of Malaysia (SCM), the Companies Commission of Malaysia (CCM), the Bursa Malaysia, and the Malaysian Institute of Accountants (MIA). As the authorised regulatory bodies, these empowered agencies are responsible for ensuring strict compliance with the financial reporting standards.

The Reforms of the MCCG and Corporate Governance Attributes

Established in the year 1998, the Malaysian Institute of Corporate Governance (MICG) is an independent corporate governance institute and is the most recognised agency allied with corporate governance matters in Malaysia. Its primary function is to create awareness and good corporate governance in Malaysia by insisting that every public firm's board of directors complies with the MCCG in its annual reports. The MICG also handles corporate governance matters that complement the CCM, Bursa Malaysia, SCM, and MIA.

Since the year 1993, the SCM has taken consistent actions to reinforce the corporate governance regulatory framework. The MCCG was issued in 2000 as a commitment of the government and the private sector to promote sound corporate governance standards in Malaysia. In the year 2007, a revised version of the MCCG was published. Other milestones in the SCM corporate governance journey included the establishment of the Corporate Governance Blueprint 2011 to encourage greater internalisation of good governance culture, mandate the establishment of a Nominating Committee, review the development of integrated reporting, establish an institutional investors council, and formulate an industry-driven institutional investors code. In 2012, the SC issued the MCCG 2012 to remain relevant and globally aligned as the best practices and standards.

In 2017, the SC released the new and enhanced MCCG that supersedes the previous MCCG. Following that, the SCM has published the Corporate Governance Strategic Priorities 2017-2020, which focused on five priorities: to enhance the corporate governance regulatory framework, strengthen the corporate governance ecosystem, promote greater gender diversity on boards, embed corporate governance culture early in the life cycle of companies and among youth, and leverage technology to reinforce monitoring of corporate governance practices and shareholder activism. The following sections describe the content of the board of directors and audit committee classified in the MCCG best practices in Malaysia.

Beasley (1996) conducted a pioneer study on corporate governance and financial statement fraud. The studies on corporate governance effectiveness also grows since the last decade. A study by Kouaib and Almulhim (2019) discovers that boards' diversity is associated with . The MCCG stated that an effective board ensures the duties discharged cover the issues of planning, evaluating, and implementing the best practices, which improve a firms' performance. The board also needs to ascertain that the firm conforms with enacted laws, policies, and standards produced by regulators and policymakers. The MCCG and the Bursa Malaysia stated that the board members must have a balanced number of executive and non-

executive directors. This balance is required so that no individual or group of individuals can dominate the board's decision-making. Besides, the MCCG and the Bursa Malaysia stated that an effective percentage of independent non-executive directors should be one-third of the board membership. Another requirement of the MCCG is selecting the board of directors, which should be based on skills, expertise, experience, and integrity to preserve and enhance professionalism and qualifications.

In addition, compulsory attendance to training programmes prescribed by Bursa Malaysia for all board members is necessary to enable directors to discharge their duties effectively. Moreover, all attendance or absenteeism during training courses must be disclosed in the annual report. This rule is written in Practice Note Five (5) in pursuance of the compulsory Main Board listing requirement. The MCCG addresses the scenario of having the same person holding the position of Chairman and Chief Executive Officer (CEO), also known as duality, which could reduce the quality of financial reporting. Due to this possible conflict of interest, the MCCG advises different people to hold this position to provide a balance of power and authority.

Accounting manipulations in Malaysia has always been the public's concern with regard to professional ethics. In the event of corporate collapse, one should not ignore the importance of audit quality (Muñoz-Izquierdo, Camacho-Miñano, Segovia-Vargas, & Pascual-Ezama, 2019). In 1994, Bursa Malaysia deemed it necessary for public firms in Malaysia to establish audit committees to improve the monitoring system of financial reporting processes and corporate governance. According to the MCCG, the chairman of the audit committee must not be the chairman of the board. The audit committee should also comprise solely of independent directors. This independence is assured as the audit committee must respond directly to the head of the firm's internal auditors.

Furthermore, the audit committee must possess the necessary skills, including financial literacy, knowledge in financial reporting processes, and consistent participation in continuous professional development courses to remain informed of accounting and auditing standards, practices, and rules. Also, internal audit should be executed objectively and always independent from the management and the functions of its audits. The audit committee must be responsible for deciding the audit fees and appoint an external auditor for the firm. The MCCG emphasises that the audit committee must undertake an in-depth review of the quarterly and year-end financial reports and offer assurance on the compliance of all accounting standards and legal requirements. Moreover, the audit committee must be accountable for issues regarding ongoing concerns, an audit's changes or adjustments, and accounting policies and practices in financial reporting. The ISA 240 on *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements* highlights the auditor's responsibility to prevent and detect any financial statement fraud. The ISA 240 further stated that the auditor should be aware of potential earnings management activities, leading to illegal accounting adjustments. Given the importance of audit committees, their tasks could help strengthen the corporate governance structure, particularly in identifying any financial reporting threats.

3. Methodology

3.1 Sampling and Data Collection

This research discussed the mixed performance of corporate governance practices in Malaysia. As an overview of the results of corporate governance practices in Malaysia, this research included the findings generated from a periodic corporate governance report, namely *CG Watch*, from 2003 to 2018. Since 2003, the Credit Lyonnais Securities Asia (CLSA) has collaborated with the Asian Corporate Governance Association (ACGA) to publish corporate governance reports every two years under the publication named *CG Watch*. Presently, the ACGA and CLSA have produced nine (9) reports. The ACGA must

circulate the market rankings survey as the methodology used in gathering corporate governance performance in Asia. The *CG Watch Report* consists of twelve (12) markets from countries in Asia-Pacific (i.e., Malaysia, China, Hong Kong, India, Indonesia, Korea, Philippines, Singapore, Taiwan, Thailand, Australia, Japan). A collective result from Malaysia's corporate governance is gathered for this research.

Since its early publication, the market ranking survey oversees five (5) categories of corporate governance scores: the rules and regulations (examining fundamental rules on corporate disclosure, governance and shareholder rights, assessing the way specific rules were being implemented by companies), enforcement (evaluate the rigour and depth of public and private enforcement), political/regulatory environment (overview of the key regulatory and governmental institutions overseeing the capital markets, including central banks, securities commissions, stock exchanges, the judiciary, anti-corruption commissions, and the media), adoption of International Generally Accepted Accounting Principle (IGAAP) (rating the quality of accounting and auditing standards and practices as well as the effectiveness of audit regulations), and corporate governance culture (the category that focused on company practices on governance, the involvement of shareholder groups, professional bodies, business associations, and others). In the 2018 *CG Watch Report*, the categories had increased to seven (7), namely government and public governance, regulators, corporate governance rules, listed companies, investors, auditors and regulators, and civil society and media.

The score for each corporate governance category is scaled between one (1) to ten (10). Throughout the years, the surveys involved rigorous questions filled by the CLSA's analysts for the companies included. There were instances where the questions were separated, combined, deleted, and added. The scoring system also changed over the years to achieve the best possible survey findings and minimise the possibility of neutral-bias. For example, the survey was previously started with a 'yes' and 'no' answer but has changed to a five-point system (0, 0.25, 0.5, 0.75, 1), and then to the latest six-point scoring system (0, 1, 2, 3, 4, 5). The purpose of this reorganisation is to draw better recommendations towards targeted stakeholders.

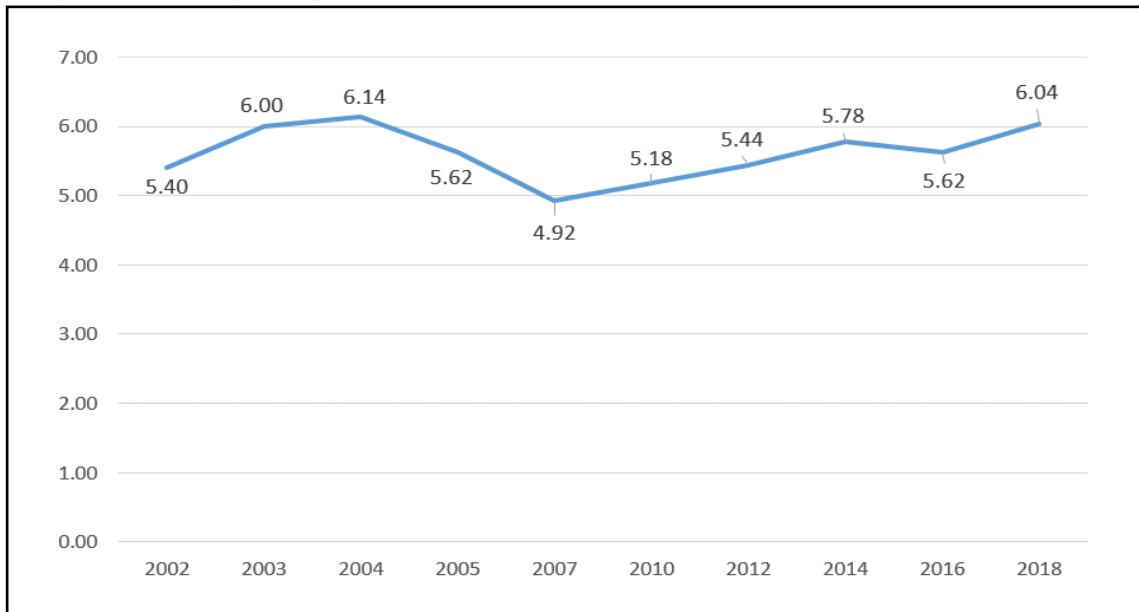
4. Results

4.1 Average Corporate Governance Score

Referring to Figure 1, from 2002 to 2018, the average corporate governance scores from scale one (1) to ten (10) have exhibited a mixture of an upward and downward shift of data over time. Various significant events that occurred in Malaysia have directly or indirectly influenced the corporate governance score. For instance, the implementation and enforcement of new corporate governance initiatives were introduced in 2001. This implementation only stabilised until the year 2003. The corporate firms in Malaysia are moving in the right direction, and their performance has not been affected by any major changes in the past years. Besides, there are indications of stricter enforcement and transparency issues.

Additionally, the CG scores in 2007 improved slowly as the company law amendments transpire. Despite multiple accounting manipulations recorded in large and popular firms, the corporate governance scores consistently improved until 2014. The steady improvement indicates that corporate governance issues are always closely monitored to minimise negative influence towards other operating firms. This improvement is made possible from the government's continued implementation of CG Blueprint 2011. Although the graph shows a slight downward trend, Malaysia continued to improve corporate governance practices and became among the early adopter of corporate social responsibility and reporting standards. In 2018, Malaysia was declared the biggest gainer and toughest competitor compared to other countries despite the year's political changes.

Figure 1: Average Corporate Governance Score from the year 2002 to the year 2018

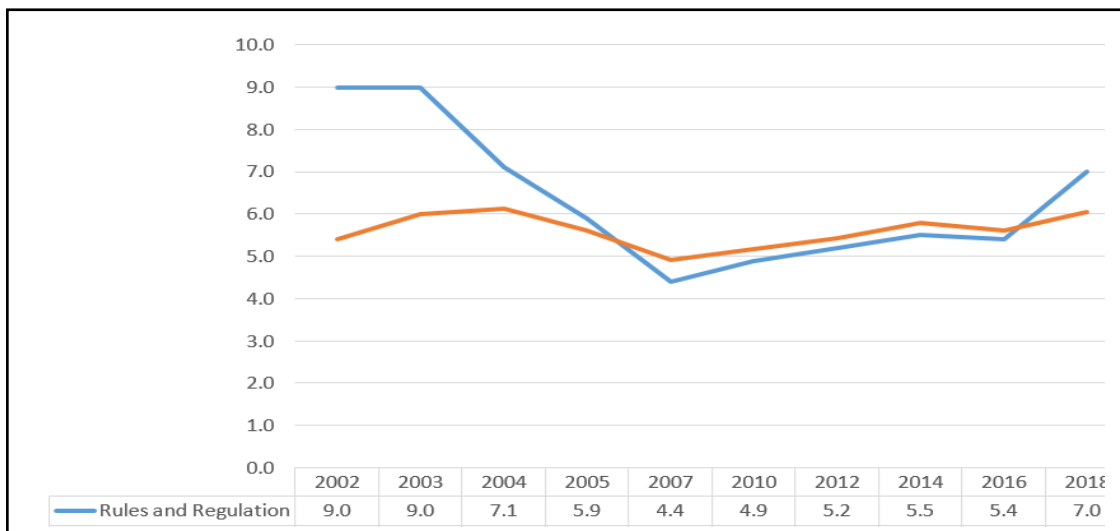


Subheadings 4.2 to 4.6 elaborate on the patterns of average corporate governance scores compared to five (5) categories of corporate governance scores, namely rules and regulations, enforcement, political/regulatory environment adoption of IGAAP, and corporate governance culture assessed in the *CG Watch Report* from 2003 to 2018.

4.2 Rules and Regulations

The corporate governance environment in Malaysia faces continuous evolvement, a sign of adapting to global changes. This consistent growth is possible through the revision of numerous regulatory requirements, including the appointment of the board of directors, audit committee, and accounting standards to ensure Malaysian corporate governance practices are in the right direction. Figure 2 provides the graphical corporate governance scores regarding the rules and regulations from 2002 to 2018.

Figure 2: Rules and Regulations vs Average Corporate Governance Score

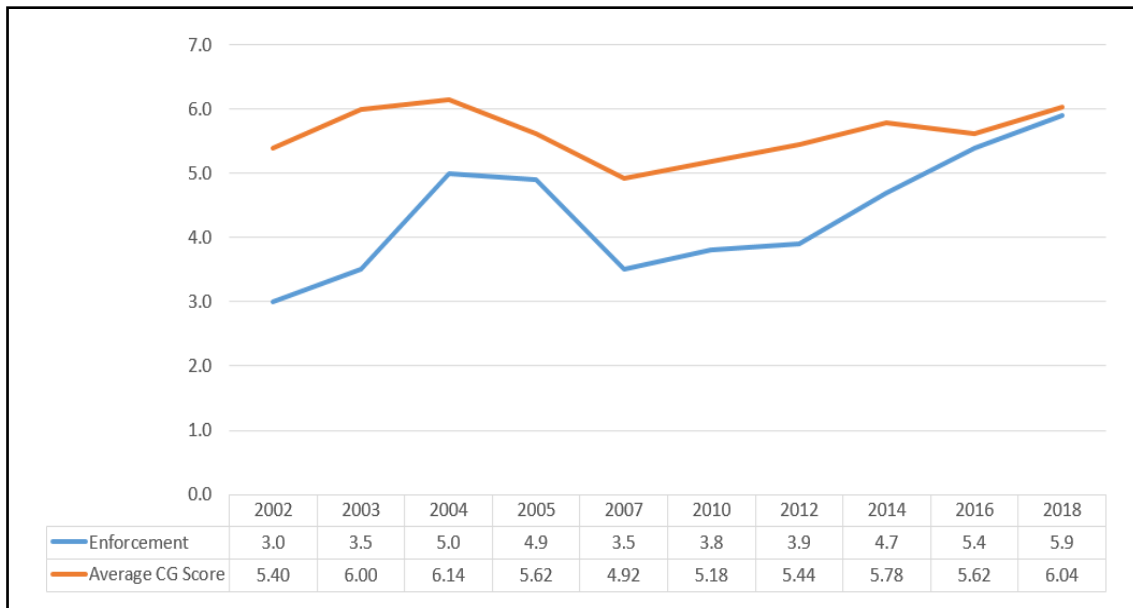


The above graph shows that corporate governance scores of rules and regulations remained static from 2002 to 2003. The score is also higher than the average corporate governance scores, proving that the rules and regulation are one of the factors that greatly affect positive average corporate governance scores. After 2003, the score declined until 2007 and then reached below the average corporate governance scores, despite the changes in overall corporate governance scores. As mentioned previously, the revised version of MCCG was published where various rules and regulations were established, requiring expertise and enforcement. Later, the rules and regulations graph trend followed the average corporate governance scores and shifted above the average score in 2018. The reason behind the rules and regulation not achieving high scores as 2002 and 2003 despite the upgrade of enforcement and expertise is due to the issue of One (1) Malaysia Development Berhad (1MDB) crisis. This crisis involved a political and regulatory environment for the public and corporate governance, which directly affected the corporate governance scores in total.

4.3 Enforcement

Enforcement is a sign of a country's stricter implementation of the MCCG. Multiple management and financial fraud are detected through tougher enforcement. Malaysia regards corporate governance matters seriously, as proven through the conviction of guilty individuals who could face the court, pay fines, and even prison time for securities crime. Figure 3 shows the scale of the corporate governance score, which presents the score of enforcement is below the average corporate governance score. The occurrence of accounting manipulations and continuous violation of the law signifies that Malaysia has weak enforcement of regulations. However, from the start of 2010 to 2018, the increment of enforcement scores is positive and improved. Interestingly, the enforcement score increment reached close to the average corporate governance score. This score indicates the true level of progress made by the regulators in gaining investors' confidence in the Malaysian market.

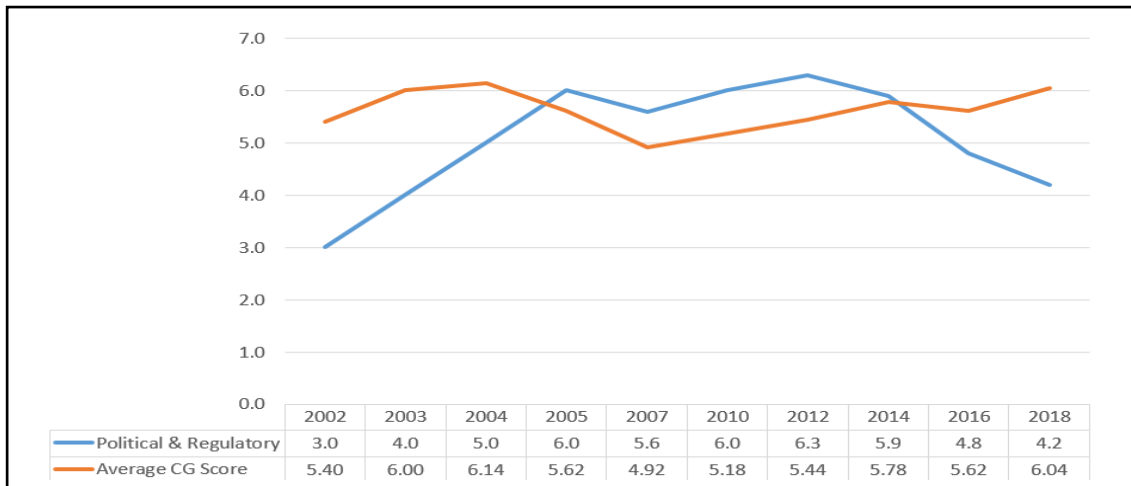
Figure 3: Enforcement vs. Average Corporate Governance Score



4.4 Political and Regulatory Environment

Similar to other countries, Malaysia endures several political issues that affect its citizens and investors. As shown in Figure 4, from the start of 2002 to 2005, the score of the political and regulatory environment is below-average but increased until it exceeds the average corporate governance score. The positive improvement signifies that firms are taking transparency and accountability issues seriously. Nevertheless, there are still doubts about the regulatory system's effectiveness, which caused slight descending scores in 2007 but remained above the average of corporate governance scores. The drop is quickly mended, and the scores increased again until the year 2012. Due to various concerns over fighting corruption, media freedom, investigations, unsolved crimes and prosecutions, the scores for the political and regulatory environment has dropped below the average corporate governance scores.

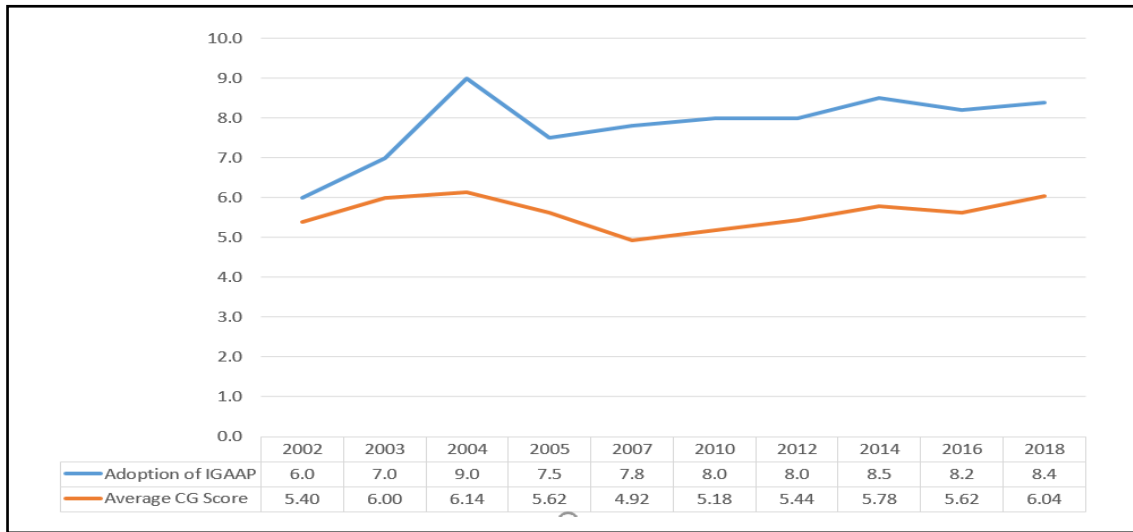
Figure 4: Political and Regulatory Environment vs. Average Corporate Governance Score



4.5 Adoption of International Generally Accepted Accounting Principle (IGAAP)

The adoption of IGAAP proves that firms in a country are making continuous effort to ensure local reporting standards align with the international standards. In Malaysia, the IFRS has been promoted since the year 2004. As displayed previously, the score for IGAAP adoption is constantly over the average corporate governance score. For years, Malaysia has been ahead of other Asian countries in adopting the international approach. Malaysia has fully adopted IFRS at the beginning of 2012. The decrement in 2004's score followed the reduction of average corporate governance score, which occurred in the same year of stricter enforcement and the financial and operational struggles faced by multiple public firms. At present, the adoption of IGAAP scores are stable for more than a decade and maintained the above-average corporate governance scores during these years.

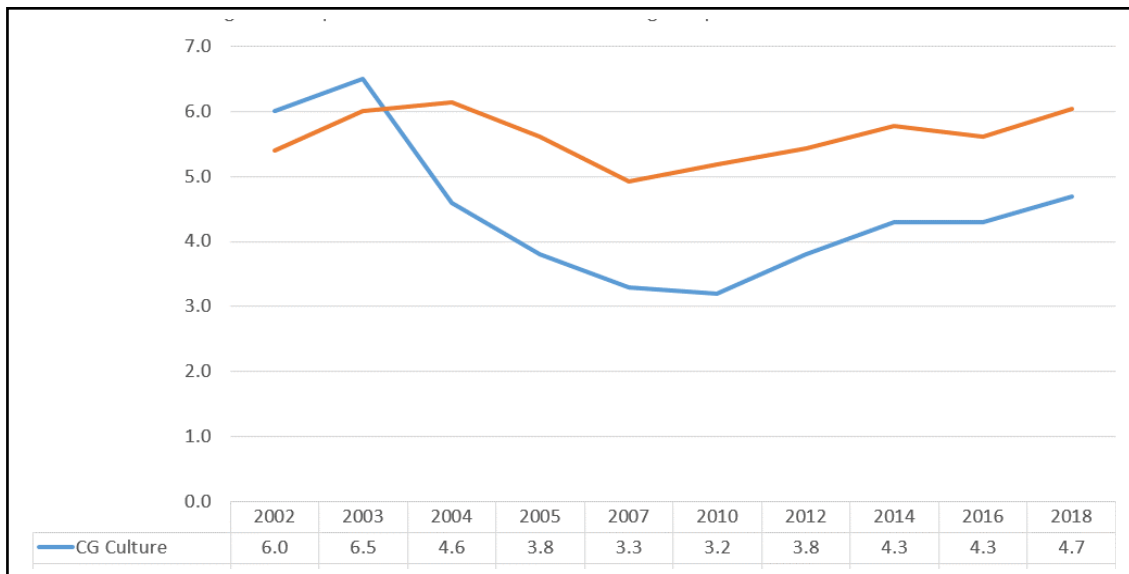
Figure 5: Adoption of IGAAP vs. Average Corporate Governance Score



4.6 Corporate Governance Culture.

As presented in Figure 6, in 2002 and 2003, the score of corporate governance culture is above the average corporate governance score. The *CG Watch Report* stated that many firms over substance among companies and weak involvement of institutional investors. After 2003, the scores of corporate governance culture dropped below-average. The lowered scores are partly due to the low penetration of investors into Malaysian firms. During those years, firms were encouraged to have meaningful dialogues with existing shareholders and potential investors to gain their confidence. Raising awareness among Malaysian firms took time, but succeeded as the score increased again after 2010. This hike is because firms are offering more disclosures, there is a separation of the firm's CEO and Chairman and employing corporate governance good practice.

Figure 6: Corporate Governance Culture vs. Average Corporate Governance Score



5. Discussions

5.1 Corporate Governance Performance in Malaysia

Based on the results presented in the previous section, Malaysia has acquired significant improvement in most categories. According to the CLSA and ACGA, Malaysia is acknowledged as the highest gainer of the top-down survey as well as this year's CLSA's bottom-up one. These achievements show that responsible agencies and regulatory bodies are applying serious enforcement to ensure firms practice decent corporate governance aspects despite the country's financial crisis or political issues. In the context of market ranking based on twelve countries, Malaysia has climbed from seventh place in 2016 to the fourth place during 2018. This accomplishment happened due to an aggressive periodical review of corporate governance code, including the government's serious commitment to tackling corruption issues, enhancing financial regulators, and institutional investors' performance. The citizens have voiced their concern on the government's ability to clear the country from corruption and cronyism. Furthermore, citizens now have the mindset for strong commitment and better practices, and thus, corporate governance practitioners are pressured to be more transparent, accountable, and fair.

Based on the category of government and public performance, Malaysia has performed below the average corporate governance score for approximately a decade. Nonetheless, the score ascended above-average scores in recent years, while other markets underperformed in this category. The rise is due to clear and improved credible strategies for corporate governance reformation, and well-established and independent commission against corruption. One should not neglect the link between corporate governance and financial performance (Iqbal & Nawaz, 2019). Regarding the enforcement category, the country struggled to achieve an above-average corporate governance score. It should be noted that the presence of proper enforcement in handling undesirable behaviours could influence the way firms compete and emerge (Nakpodia & Adegbite, 2018). Over the years, Malaysia performed better because the regulators tend to enhance their enforcement to gain more attraction and new funding. As for the third category that is the political and regulatory environment, Malaysia struggles to perform consistently well as various events occurred. Although markets are doing well on a regulatory basis, however, there is a need to control shareholders, and it is challenging to be independent. As this is a difficult task, Nakpodia & Adegbite (2018) highlighted that intervention by outsiders and stakeholders would reflect the legitimacy and effectiveness of corporate governance practices.

In relation to IGAAP adoption, Malaysia constantly stays above the average corporate governance score. Due to Malaysia's full adoption of MFRS, the country fits into international standards of financial reporting, which is IFRS. The high score achieved by Malaysia compared to other countries confirmed that Malaysia practices independent audit regulators in striving to accomplish the best performance of audit quality. Ensuring that firms comply with the required accounting standards is vital as investors and analysts find the financial reporting useful in predicting a firm's future performance (Pathiranage & Jubb, 2018). Regarding corporate governance rules, Malaysia struggles to catch up with other countries. A study by Omar, Johari, & Hasnan (2015) produced evidence that improvement in corporate culture is essential to overcome the occurrence of accounting manipulations. For instance, Bursa Malaysia plays a big role in changing the culture as the Stock Exchange supports by organising numerous seminars and training courses to the public firms. In addition, Bank Negara Malaysia, the central bank, has been organising a strong director training programme that provides leadership development and corporate governance training. With these hard and consistent efforts from the regulated bodies, it is hoped that the corporate governance culture scores would exceed or reach the same level of the average corporate governance score.

5.2 Corporate Governance in Minimizing Accounting Manipulations

In dealing with financial statement fraud, Hashim, Salleh, Shuhaimi, and Ismail (2020) revealed that fraud can still transpire even when standard operating procedures are performed. The reasons are displayed through the fraud triangle framework that explains the factors that instigate an individual to commit fraud, due to opportunity, incentive, and rationalisation. It was also submitted that fraud is less likely to happen in a firm that conducted higher corporate responsibility, reflecting social responsibility (Li, 2018). Nonetheless, mutual monitoring can provide check and balance on the corporate governance system in handling issues between firms' owners (shareholders) and firms' executives (managers) (Li, 2014).

It was argued that good corporate governance structures could minimise the risk of financial fraud (Iqbal & Nawaz, 2019; Sapena Bolufer et al., 2018; Nor et al., 2010; Smaili & Labelle, 2009). This minimisation is achieved when effective corporate governance enhances the firm's efficiency through financial reporting integrity and quality (Zhai & Wang, 2016; Rezaee, 2002). The practice of creative accounting with the objective of stimulating financial performance may also trigger accounting manipulations (Mihalceo, 2019). The SCM is established in 1993 with investigative and enforcement powers to protect investors. As the issuer of the MCCG, the SCM enabled shareholders and the public to assess and determine corporate governance standards for public firms. The SCM is also responsible for taking regulatory action on firms that are convicted of financial statement fraud. The SCM states that the issuance of the MCCG shows collaborative efforts between the government and the industry.

Moreover, the MCCG ensures that corporate governance structures meet the acceptable quality level. Wahab et al. (2007), in their study on 440 firms in Malaysia, reported that corporate governance structures have strengthened after the establishment of MCCG. Despite that, the SCM periodically ascertains that the MCCG is revised to promote ethical governance further. The first amended version MCCG was released in October 2007 to fulfil global requirements. On top of that, the MCCG's approach is flexible and does not require a firm's strict adherence to the code. However, firms are still within the prescribed MCCG and must report if they fail to meet the code's requirements.

The formation of MCCG by the SCM helps to ensure corporate governance mechanisms assist investors and other stakeholders in seeking reliable and fraud-free financial statement information. Generally, the findings reported in the *CG Watch Report* confirm that firms in Malaysia have benefited from good laws and regulations through corporate governance reforms. Although the survey revealed that Malaysia is ranked number one in Asia for having the most rules and regulations for corporate governance, Malaysia is rated average regarding enforcement. Thus, it should be stressed that having well-written rules and regulations for accounting practices is insufficient in producing strong corporate governance structures. Hence, the presence of strong corporate governance is crucial to reduce financial fraud occurrence further.

6. Conclusion

This paper highlighted the improvement of corporate governance in Malaysia since the beginning of the 21st century. Judging by the figures and charts of corporate governance scores, there is no complete and concrete summary. Nevertheless, the 2018 Malaysian corporate governance scores showed that Malaysia has improved compared to other countries, including Australia, Hong Kong, Singapore, Taiwan, Thailand, India, Japan, Korea, China, Philippines, and Indonesia. Besides, the practice of corporate governance in Malaysia displayed improvement in terms of ranking. Based on five (5) categories of survey questions: rules and regulations, enforcement, political/regulatory environment adoption of

IGAAP, and corporate governance culture, the findings discovered that firms in Malaysia have benefited from good laws and regulations through corporate governance reforms.

This study summarised the findings generated from a periodical CG Watch Report from the year 2003 to 2018. This study also underlined the actions of responsible agencies and regulatory bodies determined to have a decent corporate governance practice in Malaysia, especially in minimising financial fraud occurrence in the country. Therefore, possible endogeneity issues that are usually discussed in corporate governance studies were not discussed in this research.

Furthermore, this research provides performance evaluations on corporate governance practices in Malaysia and the scenario of financial statement fraud and accounting manipulations of the country. This study's findings are relevant to regulators, board members, shareholders, potential investors, analysts, and others to produce more informative timely comparisons. Future research should consider analysing and comparing the corporate governance performance in Malaysia with the corporate governance performance of other countries in Asia.

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The relationship between Responsibility Accounting and Employee's Performance: New evidence from University of Jos Nigeria

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Abstract - The study aims to investigate the relationship between responsibility accounting and employee's performance. It is also one of the few studies to test this relationship in Nigeria public universities and focusing on university of Jos. The study applies regression model and survey for the analysis. The results demonstrate that factors of responsibility accounting such as: management decentralization, division of organization into centre of responsibility, reward and reports were found to be significant on employee's performance. However, factors such as: estimate and reality, cost and income allocation, University Autonomy and estimate were found not significant on employee's performance. The practical implication of this study is that the university management should consider responsibility accounting when management decision so as to improve employee's performance and more accountability. The originality of this study is that it is one of the few studies on responsibility accounting on employee's performance in Nigeria public universities with focus on university of Jos.

Keywords: Responsibility Accounting, Employees performance, financial accounting, Jos

1. Introduction

The relationship between responsibility accounting and employees performance is notable in management accounting literature. Demski(1976),Baiman and Noel (1985), Choudhury (1986) and Antile and Demski (1988) are considered to be the earliest scholars to address this issue. In addition, there empirical evidence of the relationship between responsibility accounting and employees performance. Recently, Tuan (2017), Nguyen, Nguyen and pharm (2019), Nguyen (2020) and Tran, Dinh (2020) are among those who recognize such relationship has been fairly neglected in the West African region, especially, in Nigeria universities.

Literature Review

2.1 Employee's Performance

There are diverse definitions of Employee's Performance in literature, however in this study few definitions will be look at. In the study of Shields, Rooney, Brown and Kaine, (2020) define employees performance as the degree to which an employee executes the duties and responsibilities. Thus, in the words of Cardy (2004) employee performance has been related to outcomes. The study done by Ferris, Lian, Brown, Pang and Keeping (2010) describe Employee's performance as a system of behaviors related to the organizational objectives or

organizational departments' goals for which everyone has been assigned with a task to be fulfilled. The relationship between ethical leadership and performance of employees in Guilan University of medical sciences has shown an indirectly significant relationship as posited by (Kelidbari, Fadaei, & Ebrahimi 2016). In another similar study, Kia, Halvorsen, and Bartram (2019) demonstrated that the relationship between ethical leadership and job performance with mixed relationship. Based on this, there is the need to raise a hypothesis to test the relationship between responsibility accounting and job performance.

2.2 Responsibility Accounting

Horngreen, Datar, and Foster (2004) define responsibility accounting as a system of accounting that identifies various responsibility centres through the organization and reproduces the plans and action of these centres by allocating particular revenues and costs to the one having the relevant responsibility. In Islamic perspective the following quotation in Nawaiseh, Zeidan, Falahat, and Qtish, (2014) state that responsibility accounting "the noble Qur'an and the noble Suna, refer to responsibility accounting, where the Qur'an cleared that the individual is responsible in front of Allah about his deeds and behaviours in this life in what the things are tiny or not, Allah says in holy Qur'an: "So whosoever does good equal to the weight of an atom (or a small ant) shall see it, And whosoever does evil equal to the weight of an atom (or a small ant) shall see it", Zalzala (The earth quake, one of our messenger prophet Mohammad's sayings (Hadith) (Peace be upon him) about responsibility basis is: "All of you are responsible and guardians for his subjects, the ruler is guardian of his subjects, the man is guardian of his family, the woman is guardian and is responsible for her husband's home and his offspring, and so, all of you are guardian and are responsible for his subjects, "The following quotation from Mohammad, the God's messenger (PBUH) must be considered in the general way: (Audit yourself (discharge your accountability) before being audited) contrary to a complete transparency which might be inferred from the appearance of the quotation." Al-Bukhari and Muslim. In another similar way, Arya, Glover, and Radhakrishnan, (2007) Describe responsibility accounting as a system where managers should be held accountable for variables they control. They further argue that in the definition of responsibility accounting there is ambiguity on the word control and suggested that controllability is the relative word to explain it (Arya et al., 2007). However, one major issue of concern has been the question of what is the appropriate cost to be charged to a particular cost centre? Callen and Livnat (1989) cited AAA, (1956) suggested some guidelines deciding the suitable cost to be charged to a person (responsibility center) are as follows: (a) If the person has authority over both the acquisition and the use of services, he should be charged with the cost of such services. (b) If the person can significantly influence the amount of cost through his own action, he may be charged with such costs. (c) Even if the person cannot significantly influence the amount of cost through his own direct action, he may be charged with those elements with which the management desires him to be concerned so that he will help to influence those who are responsible. Rowe, Birnberg, and Shields (2008) stressed that responsibility accounting is a mechanism in which group of responsibility Centre managers are held accountable for their actions. Lin and Yu (2002) observed that companies operate in diverse socio-economic environments and require different procedures of cost control system, target costs, static cost estimation, flexible cost estimation, performance evaluation, internal pricing and gap analysis. The study showed the effect of responsibility accounting on improving the system of cost control, minimizing production costs, inspiring employees and aiding businesses to achieve the set objectives. The factors affecting responsibility accounting in the university as enumerated by Nguyen, (2020) are: Management Decentralization Division of the organization into

responsibility centers, Estimation and Reality, Cost and income allocation, University autonomy, Management decentralization, Estimation, Reward, and Report.

2.2.1 Management Decentralization

Decentralization of management refers to the process of delegating decision making powers by superior managers to divisional managers so as to evaluate the performance and effectiveness of the divisional managers (Nguyen 2020). Several scholars have studied the relationship between decentralization of management and responsibility accounting and found out there is a positive relationship (Nguyen, 2020; Nguyen et al. 2019; Hanini 2013; Fowzia 2011).

H1: there is a positive relationship between decentralization of management and employee performance.

2.2.2 Division of the organization into responsibility centers

It is the process of assigning each manager to a responsibility centre. This gives management the opportunity to hold a manager of a responsibility centre to be held accountable to cost centre he or she controls. Researchers have tested the relationship between divisions of the organization into responsibility centers and responsibility accounting (Nguyen, 2020; Nguyen et al. 2019; Hanini 2013; Fowzia 2011). Therefore, the following hypothesis is postulated:

H2: There is a positive relationship between divisions of the organization into responsibility centers and employees performance.

2.2.3 Estimation and Reality

This is the process of comparing budget and actual results so that the difference can be identified. The result can be can be favorable or adverse. Again, numerous scholars have tested the impact of estimation and reality on responsibility accounting units.

H3: Estimation and reality have positive relationship on employee's performance.

2.2.4 Cost and income allocation

This is the record of income generated by each centre of responsibility and matching it with the cost of that centre. Budget and policies of the organization are used as instrument for regulating cost incurred by each centre of responsibility. The research carried out of Nguyen et al. (2019), Nguyen (2014), Hanini (2013), Nguyen (2013), Gharayba et al. (2011), Pham (2010), and Lin and Yu (2002) all show that the cost and income allocation have positive impact on Responsibility accounting activities of units.

H4: There is a significant relationship between Cost and income allocation to employees performance.

2.2.5 University autonomy

University autonomy means the non-interference or influence on the administration of university. Some of major advantages of university autonomy include: creation of innovation, effective administration and improve competition. However, in Nigerian universities government interference is eminent. Government intervene in area quota for minority groups, introduction of new teaching fields, control of governing councils, standards of academic disciplines and accreditation of courses. Indeed, from time to time, the government exercises a lot of influence on many issues bordering on administration and

finance, such as the number of students, closure or amalgamation of courses, length of courses, duration of academic years, financial audits, budgets and major capital expenditure. Self-responsibility in accordance with the law on the planning, school development plans, organization of training and scientific activities as well as technology, finance, international relations, organization, and personnel.(Ekundayo & Adedokun 2009 ; Arikewuyo & Ilusanya 2010).Based on this later scholars university autonomy has effect on the administration. This provides the need for a further look at the relationship.

H5: there is a positive relationship between universities Autonomy to employee's performance

2.2.6 Estimation

Estimation refers to the process of making annual operational budget for each centre of responsibility. The following scholars have shown that estimation has impact on responsibility accounting.Nguyen et al. (2019), Hanini (2013), Nguyen (2013), Pham (2010), and Lin and Yu (2002) .

H6: there is a significant relationship between estimation to employee's performance

2.2.7 Reward

Reward refers to the bonus given to an employee for extra effort. An efficient reward system requires timely, transparent and effective reward system. In support, many researchers have tested the impact of estimation on responsibility accounting such as Nguyen et al. (2019), Nguyen (2014), Hanini (2013), Nyakuwwanika et al. (2012), Gharayba et al. (2011), and Pham (2010)

H7: There is a significant relationship between rewards to employee's performance

2.2.8 Report

Report refers to the process where managers of each responsibility centre gives financial and non-financial reports of each responsibility centre to the superior manager for harmonization of the reports. In the study of Nguyen et al. (2019), Tran (2015), Hanini (2013), and Hoang (2010) all have shown that the report affects the Responsibility accounting activities of the units.

H8: There is a significant relationship between reports to employee's performance

2.3 Empirical Review

Wahdan and Emam (2017) indicated that there has been significant effect of supply chain management on financial performance through increased productivity, reducing cost and improving profitability. They stated that the application of efficient supply chain management would improve the use of responsibility accounting through the efficient usage of the budget. Subsequently, Okoye, Ekwezia, and Ngozi (2009) postulated that there have been positively significant relationship between Responsibility Accounting and achievement of manufacturing companies. They therefore recommend that the application of Responsibility Accounting will enhance control costs and thereby improve profits. In support of their findings, Nguyen (2013) evaluated the efficiency of management responsibilities centres of the dairy firms in Vietnam, Which showed partial results. However, he suggested for the application of balanced scorecard or economic value added to measure performance of dairy firms in Vietnam. Nguyen (2014) examined the application of responsibility accounting in Construction Company on performance and found out an in conclusive results. He further recommend orientations, establishment of operational organizational structure of

Responsibility Accounting. Pham (2010) established that listed firms on the stock market benefit from many influence of shareholders. In management settings of daily activities of the firms' shareholders usually tasks assigned to Board of Directors of the enterprise. Thereby, pave way for the senior managers to monitor and evaluate the responsibilities of subordinate managers for the assigned work. He found out that decentralization of management has positive effect on performance. Factors affecting the application of Responsibility Accounting. Belkaoui (1981) found that the division of responsibilities centres and remuneration of responsibility centre managers have significantly positive effect on responsibility Accounting. Thus, Fowzia (2011) indicated that the effective division of responsibilities centre and reward have significant impact on responsibility accounting. Nyakuwanika et al. (2012). Li, Liao and Albitar (2019) described the relationship between corporate environmental responsibility (CER) and firm value as well as explore the mediating influence of corporate innovation. They used a sample of 496 China's A-share listed companies from 2008 to 2016. The results showed that CER had negative effect on firm value; however, at a specific level, CER had positive relationship on firm value. In addition to this, corporate innovation had positive mediating role in the relationship between CER and firm value. Afifa and Mahmoud (2018) identified that two component of responsibility accounting i.e. chad significant positive impact on the financial performance of the financial institutions while the other four components of responsibility accounting practice i.e. identification of responsibility centers, authorization of responsibility centers' managers, performance evaluation and the incentive system had been found to have significant indirect effect on financial performance through risk management practice as a mediator. Furthermore, only one component of responsibility accounting practice i.e. identification of responsibility centers had significant positive impact on the non-financial performance of the financial institutions. Nykyforak Duhanets and Kobrusieva, (2018) identified state regulation of the industry, peculiarities in relations with customers, the specific nature of the services provided and technological features of structural units as some of the features affecting responsibility accounting. Afifa and Mahmoud (2018) suggested that preparation of responsibility centers' budget, distribution of actual costs and revenues information, identification of responsibility centers, authorization of responsibility centers' managers, performance evaluation and the incentive system were some of the features of responsibility accounting. Mahmud, Anitsal and Anitsal (2018) extended some of the features of responsibility accounting with decentralization and accurate information. Nguyen, Nguyen and Cao (2018) studied the Vietnam enterprise focused on factors measuring responsibility accounting intension. The study was based on behavioral theories to investigate the effect of Perceived benefit, Perceived Ease of Use, Subjective Norm on the intention of the application of Responsibility Accounting. The results showed that Perceived benefit, Perceived Ease of Use and Subjective Norm have positive relationship on the intention of the application of Responsibility Accounting. Again, in the study of Maimako, Kwatmen, and Ishaya (2018) have shown that responsibility accounting have significant relationship on bank management performance in Nigeria.

2.4 Theoretical Review

2.4.1 Stewardship theory

Stewardship theory was propounded by (Davis, Schoorman & Donaldson 1997). Stewardship theory starts from the assumption that as managers were left alone to manage and act as responsible steward. The theory holds that the interest of managers were associated with interest of the principal (shareholders). This means that collective interest superseded

individual interest. This theory imposes a responsibility to management of an organization to take care of firm and produce a reliable information rendering of account to shareholders. This theory stressed the need for managers to always harmonize the interest of stakeholders and interest group. Steward theory also pointed of the qualities of mangers as to act collectively and proactively. One major importance of this theory it help organization whose goal is to preserve, protect, Maintain culture and financial asset for the benefit of shareholders and communities (Contraffo, 2014). In addition, Duppati, Rao, Matlani, Seringeour and Patnaik (2020) asserted that stewardship theory support management decision.

Methodology

The study used correlational research design to establish the relationship between responsibility accounting and employee`s performance. The population of the study is made up of 300 staff of bursary department university of Jos Nigeria. This is the department that is practicing responsibility accounting by assigning departmental finance officers to each department in the university. The probability simple random technique was used and the sample size utilized 168 sample which was determined using Gill, Johnson, and clark (2010) table cited in Taherdoost, (2016). A total of 161 surveys were returned, representing a response rate of 95.8%. Five surveys were returned unusable, resulting in a final sample of 156. The questionnaire for the study comprises of two segment the demographic segment were tabulated and analyzed using percentages and second segment of the questionnaire were tested using multiple regression.

3.1 Measurement of Variables

The dependent variable employees performance was assessed using a 20-items scale which had been extracted from the study conducted by Williams and Anderson (1991); Halvorsen, and Bartram (2019). The Cronbach`s α value of the scale was 0.94. The independent variable responsibility accounting was assessed using the questionnaire items adopted from Nguyen, (2020). The questionnaire contains a group of nine factors with Cronbach`s alpha of 0.8

H1: there is a positive relationship between decentralization of management and employee performance

N	Item
1	The administrative officer at the responsibility center (faculty / department /institute) is informed of his or her duties
2	The administrative officer in the responsibility center (faculty / department / institute) has the appropriate authority to carry out his work
3	Each job in unit (faculty / department / institute) is described as well as clearly defined responsibilities and powers
4	Officials / employees of the responsibility center (faculty / department / institute) have appropriate qualifications to carry out their work

5

Accountability of officials / employees is appropriate to their responsibilities

H2: There is a positive relationship between divisions of the organization into responsibility centers and employees performance

N	Item
Q6	The university divides the organizational structure into units (faculty / department / institute) according to the activities nature of each unit
Q7	The university clearly divides work in units (faculty / department / institute
Q8	There is a clear description of responsibility centers (faculty / department / institute) in the University
Q9	The responsibility centers (faculty / department / institute) in the University are coordinated and clear in the relationship
Q10	Each responsibility center (faculty / department / institute) has a specific type of activity

H3: Estimation and reality have positive relationship on employee's performance.

N	Item
Q11	Comparison of the actual performance with the planned performance of the responsibility centers facilitates communication between administrative levels.
12	Comparison of the actual and planned implementation of officials / employees in the responsibility centers (faculty / department / institute) helps assess the performance of officials / employees
Q13	Comparison of the actual and planned implementation of officials / employees in the responsibility centers (faculty / department / institute) to provide appropriate information at appropriate times
Q14	Comparison of the actual and planned implementation of officials / employees in

the responsibility centers (faculty / department / institute) to determine the difference, the results and determine who is responsible

H4: There is a significant relationship between Cost and income allocation to employees performance.

N	Item
Q15	All income related to the responsibility center (faculty / department / institute) are identified and recorded
Q16	All cost related to the responsibility center (faculty / department / institute) are identified and recorded
Q17	There is a clear system for comparing incomes and costs at responsibility centers (faculty / department / institute) throughout the University
Q18	There is a clear policy on indirect cost distribution / management costs for responsibility centers (faculty / department / institute)
Q19	There is a clear system for identifying and allocating costs and incomes in the university

H5: there is a positive relationship between universities Autonomy to employee's performance University Autonomy

N	Item
Q20	The University has the right to decide on issues related to conditions of employment, salaries, use of human resources, appointment and dismissal of titles of lecturers and staff.
Q21	The University is autonomous in issues related to management and finance, management and use of the school's budget and financial sources.
Q22	The University is autonomous in issues related to enrollment and student management
Q23	The University has autonomy in academic activities and educational programs such as teaching methods, testing and assessing students' academic results, curriculum content and instructional materials, etc.
Q24	The University is autonomous in academic standards, such as standards of diploma, issues related to testing and quality accreditation
Q25	The University has autonomy in research and publishing, teaching and guiding graduate students, research priorities and freedom of publication.

H6: there is a significant relationship between estimation to employee's performance

N	Item
Q26	The operational budget estimation is made in relation to all responsibility centers (faculty / department / institute) separately.
Q27	The operational budget estimation at the responsibility centers (faculty / department / institute) is made annually for activities.
Q28	The university organizes training of officials / employees in responsibility centers (faculty / department / institute) and encourages them to achieve operational goals at responsibility centers (faculty / department / institute)
Q29	All officers / employees in responsibility centers (faculty / department / institute) are involved in making the center's cost estimation according to their work.

H7: There is a significant relationship between rewards to employee's performance

N	Item
Q30	Reward is done regularly
Q31	The level of reward is appropriate to the responsibilities of officials / employees in responsibility centers (faculty / department / institute)
Q32	Officials / employees are satisfied with the University's reward policy
Q33	The University relies on objective grounds and performance to reward and motivate officials / employees
Q34	There is a periodic review of the reward policy in the University

H8: There is a significant relationship between reports to employee's performance

N	Item
Q35	Reports of responsibility centers (faculty / department / institute) are prepared to measure the performance of the responsibility center.

Q36	Managers and officers / employees of responsibility centers (faculty / department / institute) are involved in designing the report pattern of unit for performance evaluation
Q37	The report related to the responsibility center (faculty / department / institute) is interested in financial aspects
Q38	Reports related to the center of responsibility (faculty / department / institute) are designed on both financial and non-financial aspects such as: internal processes, students, finance, study and development, etc.
Q39	Reports measure the performance of each responsibility center (faculty / department / institute) separately
Q40	The information of the report is connected to the officers / employees that are responsible for that information

Performance item

N	Item
PERF1	Adequately complete assigned duties
PERF2	Fulfills responsibilities specified in the job description
PERF3	Perform task that are expected of him/her
PERF4	Meet formal performance requirement of the job
PERF5	Engage in activities that directly affects his/her performance evaluation

3.3 Demographics

Item	Frequency	Percentage (%)	
Job Title	Senior Deputy Bursar	2	1.3
	Deputy Bursar	3	1.9
	Chief Accountant	10	5.8
	Principal Accountant	13	8.3
	Senior Accountant	15	9.6
	Accountant 1	10	6.4
	Accountant 11	15	9.6
	Junior Staff	89	57.1
	Total	156	100
	Age	30-39years	69

	40-49 years	41	26.3
	More than 50 years	46	30.1
	Total	156	100
Working Experience	5-10 years	70	44.2
	11-20 years	64	41.0
	More than 20 years	22	14.7
	Total	156	100

In the table above, junior staff constitute majority of responders with 57.1%. On Age, 30-39 years are the majority in the university with 43.6%, while the most experience in the work force spent 5-10 years in the university.

Results

We examined the data for the presence of outliers, and found none in the data. All the measures were scored on a five point likert scale, with 1 being strongly disagree and 5 being strongly agree.

4.2 Testing the reliability of the scale.

The research result showed that Cronbach alpha:

Variable	Cronbach alpha	No. of item
Decentralization	0.756	5
Division	0.783	5
Estimation and reality	0.749	5
Cost and income allocation	0.785	5
University Autonomy	0.900	6
Estimation	0.894	4
Reward	0.904	5
Report	0.879	6
Employees performance	0.849	5

KMO and Barlett's Test

Measures	Outcome
Kaiser-meyer-olkin measure of adequacy	0.949
Approx. chi-square	5182.562
Barlett's test of sphericity	Df
	Sig.
	990
	0.000

the table above showed the KMO coefficient results =0.949> 0.5. It shows that KMO result is greater than the minimum. It means that exploratory factor analysis is appropriate and the significant level of Barlett's test is 0.000<0.05 showing that the variable correlated. Thus, the Exploratory factor analysis is meaningful.

Factor rotation matrix

factors	Component				
	1	2	3	4	5
Q7	0.756				
Q8	0.582				
Q9	0.537				
Q21	0.678				
Q22	0.729				
Q23	0.763				
Q24	0.795				
Q25	0.671				
Q26	0.773				
Q27	0.791				
Q28	0.771				
Q29	0.801				
Q30	0.757				
Q31	0.761				
Q32	0.821				
Q33	0.811				
Q34	0.54				
Q35	0.829				
Q36	0.771				
Q37	0.741				
Q38	0.586				
Q39	0.618				
Q40	0.612				
Q3		0.531			
Q4		0.569			
Q5		0.689			
Q11		0.690			
Q12		0.756			
Q13		0.593			
Q14		0.666			
Q15		0.667			
Q16		0.647			
Q17		0.718			
Q18		0.625			
Q19		0.535			
Q20		0.566			
Q6			0.600		
Q10			0.593		
Q1				0.649	

Q2	0.546	
Perf1		0.574
Perf 2		0.583
Perf3		0.601
Perf4		0.590
Perf5		0.601

The table above was tested to determine the significance of the exploratory factor analysis. In agreement with Hair et. al.(2010) factor loading > 0.3 is regarded as minimum, factor loading > 0.4 is regarded important, and factor loading ≥0.5 is considered significant. Varimax was used to obtain the factors and total of five factors were generated.

4.3 Regression Analysis

The results showed that four out of eight independent variable affect the dependent variable Y(this is arrived at through the significant level less than 0.05). However, estimation and reality, cost and income allocation, University Autonomy, estimate are not significant. It means these variables are not related to Y.

Multicollinearity does not appear in this model because the variance inflator model (VIF) are less than. Again, the ANOVA test results of the suitability of the regression function through F statistic: F=66.685 shows that the model is really suitable and significant at 0.000. Therefore, based on the results obtained the responsibility accounting variables that affects Employee's performance in Nigeria are as follows:

$$Y=0.384 +0.174*DE + 0.243 DV +0.179 RD+0.633RT$$

Thus, the standardized beta column in the table also showed that RT has the strongest impact on employee's performance with 0.684 followed by DV with 0.238.

Table

Model	Unstandardized coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics		Yes/No
	B	Stad. Error	Beta			Tolerance	VIF	
Constant	0.348	0.179		1.952	0.053			
Decentralization	-0.174	0.069	-0.160	-2.522	0.013	0.363	2.752	Sig
Division	0.243	0.078	0.238	3.103	0.002	0.250	3.996	Sig
Estimation and Reality	0.025	0.070	0.026	0.359	0.720	0.281	3.564	Not
Cost and income allocation	0.122	0.085	0.115	1.436	0.153	0.229	4.363	Not
University autonomy	0.131	0.093	0.150	1.414	0.159	0.130	7.689	Not
Estimate	0.063	0.084	0.079	0.745	0.458	0.130	7.683	Not
Reward	-0.179	0.090	0.028	-1.993	0.048	0.112	8.941	Sig

Report	0.633	0.104	0.684	6.102	0.000	0.117	8.5	Sig
							54	

Discussion

The results of the analysis showed that the following variables have effect on employee's performance in Nigeria: decentralization, division, reward and report, but estimation and reality, cost and income allocation, university autonomy and estimate showed no impact on employee's performance.

5.1 *Management Decentralization*

The positive relationship between management decentralization and employee's performance is in conformity with the findings of (Nguyen, Nguyen & Pham 2019) This is a call for more decentralization of management structure. Centralization of management authority should be minimized. This will result in more accountability and responsibility.

5.2 *Divide organization into centre of responsibility*

The division of organization in to centre of responsibility has been found to positive with employee's performance. This findings has been supported with the study of (Nguyen, Nguyen, & Pham 2019). Nigerian universities should strictly create more responsibility centres so that it will increase efficiency and better management of responsibility centres. Management should identify and appoint responsibility managers to those cost and revenue centres that do have responsibility managers.

5.3 *Reward*

This study has shown a positive relationship between reward and employee's performance which is in line with the study of (Nguyen 2020). Universities should roll out good compensation programme so as to enhance employee performance. One major consequence of non-proper incentive package can lead to brain drain. There is the need for regular reevaluation of incentives package in the universities.

Report

Al Hanini (2013); Diena, Le Doan Minh Ducb, Thuyc, Tiend, and Date (2020) studied the relationship between reports and employees performance and found out that there is a significant relationship. Their study is in connection with the findings of this study. This reason the for the university management to encourage report of all activities in various responsibility centres.

Conclusion

The study has shown that responsibility accounting influence employees performance through the following variables Management Decentralization, Divide organization into centre of responsibility, Reward and report all have significant relationship on employee's performance. Although, estimation and reality, estimates, university autonomy, cost and income allocation were found to be negative.

6.1 *Suggestion for further research*

This study limit its scope on the bursary department University of Jos Nigeria, there is the need to include more context of study so as to give more representation. In addition, there the to use secondary data for future research in order to test its significant on employee`s performance.

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Do earnings management have any relationship with firm performance? Empirical evidence from listed Nigerian Deposit Money Banks

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Abstract - Over the years, earnings management has been an issue of global concern due to superfluous corporate catastrophes that occasioned from manipulations of earnings by company managers. For this reason, the current study observes the effect of earnings management on firm performance, with a specific concentration of listed banks in Nigeria. For this study, fifteen (15) Deposit Money Banks (DMBs) listed on the Nigerian Stock Exchange were considered as samples. Data were extracted from the annual accounts of the sampled banks covering the year 2012 to 2017. In analyzing the data collected, Panel Corrected Standard Error (PCSE) Regression is used, where the result shows that the three measures of intensity of earnings management (total accruals balance sheet approach, total accruals operating cash flow approach, and discretionary accruals) have a significant negative effect on firm performance (represented by return on asset-ROA). The study recommends that managers of listed banks in Nigeria should do away with the culture (if any) of earnings manipulation as it is unwholesome to the present and future performance of their firms which is an imperative yardstick in measuring perpetual succession of a business enterprise.

Keywords: Earnings management, firm performance, Deposit Money Banks, Panel Corrected Standard Errors, Nigerian Stock Exchange.

1. Introduction

The primary objective of every business is to make a profit, followed by growth and expansion of operations, and to gain a significant market share that can sustain the business to unforeseeable future period. But the attainment of these objectives is seriously hindered in most organizations due to scandalous acts of some corporate managers. Case in point, Abubakar, Ishak, and Chandren (2017) and Roy and Debnath (2015) report that the high profile of global financial scandals over the years involved some giant companies like WorldCom in the United States, Parmalat in Italy, and HIH insurance in Australia have raised serious concerns of their performance and the credibility of their financial reporting.

Besides, most of the world financial scandals especially the aforementioned ones are committed through deliberate manipulations of earnings, which has over the years, been a serious issue of concern to regulators, practitioners, and researchers, for the reason that corporate scandals corrode the value of financial reporting and results to corporate fiasco (Garg, 2007). Important to mention, companies in Nigeria are not let off from similar corporate scandals that occur around the globe. In essence, the issue of earnings management appears to be rapidly increasing in Nigeria especially in the financial institutions and specifically banks (Abubakar *et al.*, 2017). Chiejina (2009) reports that in the Nigerian

banking industry, corporate managers incline to divagate from the crucial elements of corporate principles of integrity and honesty, common respect, and dedication to the firm for their narrow-minded interest.

At this point, it is important to note that Earnings Management (EM) is the practice of managerial actions that are reflected in a company's financial reports either to give the impression of smooth periodic or annual earnings, to show high profits in a given year at the 'expense' of lowering reported earnings in the future or to show a low profit in a given year so that in future years reported profits will be higher (Gill, Biger, Mand, & Mathur, 2013; Ronen & Yaari, 2008). In some cases, management uses various accounting methods to convey private information to financial report readers. Management of earnings may mislead stakeholders about the true financial performance of the company. If management gains anything from managing earnings, one must ask whether such gains are at the expense of anybody.

Hence, earnings management is the deliberate altering of financial information reported in the annual financial report in order either to mislead the users on the underlying economic condition of the firm or to gain some contractual benefits, which depend on the reported accounting numbers in the financial statement (Bergstresser & Phillippon, 2006). It is the modification of a firm reported economic performance by corporate managers to either mislead all or some stakeholders or to influence contractual outcomes. The modification can be done by altering transactions involving ending inventory and employee wages accruals in month-ends to mention but a few (Healy & Walden, 1999).

Therefore, the objective of this study is to examine the effect of earnings management on firm performance, with a specific concentration of listed banks in Nigeria.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

To investigate the relationship between earnings management and the performance of firms, numerous relevant have been conducted across the globe, but their findings are still inconclusive and fragmented. Yet, most of the studies in this area were conducted in developed economies and mostly not in the banking industry. For instance, Gill *et al.* (2013) examined the relationship between earnings management and the value of the firm (return on asset and Tobin's Q) of manufacturing firms in India. The study used the accrual model by Jones and others to measure earnings management while the firm's performance and firm value of Indian manufacturing firms were measured using total assets to measure market value, debt to asset to measure leverage, current ratio to measure liquidity and Tobin Q to measure market value. The results show that the practice of earnings management is so greater and has a diverse effect on the corporate rate of return on assets. The study also found that, when the market recognizes the manager's behavior on managing earnings or acting on their motives, the market responds by lowering the price of the shares.

Moreover, the study conducted by Alhadab and Al-Own (2017) utilizes a sample of 477 bank-year observations representing 55 European banks from 2001 to 2015. The study makes use of discretionary loan loss provision as a measure of earnings management while the dependent variable is proxied by return on asset (ROA) and return on equity (ROE). By employing multiple regression as a technique of analysis, the result shows that European banks with high levels of earnings management that occurs via discretionary loan loss

provision experience inferior performance (measured via ROA and ROE) in the current and subsequent year. Their findings also reveal that the negative impact of earnings management (which takes place in a specific year) feeds through the following years.

Likewise, the study by Sayari, Mraïhi, Finet, and Omri (2013) on the impact of earnings management on firm performance (proxied by stock returns) in Tunisia firms also reported similar findings to the above studies. The results of the study show that earnings management based on discretionary accruals (higher and lower levels) have a significant impact on firm value. The study uses 33 firms listed on the Stock Exchange of Tunis (BVMT) between 1999 and 2008. In analyzing the data for the study, multiple regression is utilized. Furthermore, the study by Chiraz and Anis (2013) examined the relationship between earnings management and performance of French IPO (Initial Public Offerings) companies. Using the sample of 139 French IPOs throughout 1999 to 2007 and employing multiple regression as the technique of analysis, the study documents that companies with aggressive earnings management in the IPO process, tend to suffer from subsequently poor returns and to delist for performance. The study also reported that no evidence was found to suggest that the level of initial return is negatively related to discretionary current accruals.

Additionally, other studies on earnings management include, the study conducted by Raoli, (2013) in Italy examined whether managers do engage in earnings management to support a firm's market valuation in the country's financial market. The study used total accrual as the proxy measure of earnings management while the firm value was measured using the change in the market to book ratio. The findings of the study show that the firm's market value in Italy market is positively associated with earnings management. Similarly, the study by Gong, Louis, and Sun (2008) assessed earning management and the firm's performance after open market repurchases in the USA. The study used abnormal accruals as a measure for earning management as per the Jones modified model of 1991. The study used return on asset (ROA) as the measure of a firm's performance. The findings of the study show that during the pre- repurchase, the abnormal accruals which are the measure of earnings management is negatively associated with the future performance of the firm.

More so, Bornemann, Kick, Memmel, and Pfingsten (2012) examine earning management using a sample of German banks. Their study discusses whether banks increase net income by excluding loan loss provisions concerning the previous period to achieve lower outcome variability. Also, they investigate whether banks seek to increase net income by excluding loan loss provisions concerning their peer group. They find that banks use earning management to avoid a negative net income, avoid a fall in net income compared to the previous year, avoid a decrease in net income compared to a peer group, and to achieve stable net income over time. They also find that banks avoided a drop in net income relative to the peer group during the financial crisis period.

In the same vein, Tabassum, Kaleem, and Nazir (2015) use a sample of 119 firms listed in Karachi Stock Exchange (KSE) from 2004 to 2011 to investigate the relationship between earnings management and firm's future performance. the authors employ a panel data analysis technique Generalized Least Square (GLS) method for analysis purposes. The analysis shows that firms that used earnings management activities through sales manipulation to increase reported earnings have worse financial performance in the future.

Concurrently, Okafor, Ezeagba, and Innocent (2018) examine the effect of earnings management on the performance of corporate organizations in Nigeria. Specifically, the study uses the sample of 17 consumer goods companies listed in the Nigerian Stock Exchange (NSE) covering the period of 2010 to 2014. Earnings management as the independent variable is measured by Non-discretionary accruals obtained from modified Jone's model (1990), while the dependent variable (firm performance) is represented by return on shareholder's fund (ROSF), return on capital employed (ROCE), net profit after tax (PAT), and return on asset (ROA). For analysis purposes, the study utilizes simple regression and executed using SPSS version 20. The result obtained shows that earnings management has a negative but insignificant effect on performance (all the dependent variables) of the sampled firms.

Hence, in line with the foregoing review of relevant literature, this study hypothesized that:

Earnings management has no significant effect on the return on asset (ROA) of listed
Deposit Money Banks in Nigeria.

1. *Total accruals balance sheet approach has no significant effect on the return on assets of listed Deposit Banks in Nigeria.*
2. *Total accruals operating cashflow approach has no significant effect on the return on asset of listed Deposit Money Banks in Nigeria*
3. *Discretionary accruals have no significant effect on the return on assets of listed Deposit Money Banks in Nigeria.*

MATERIALS AND METHODS

For this study, data were mined from the annual accounts and reports of fifteen Deposit Money Banks listed on the Nigerian Stock Exchange that is used as a sample in this study. The period covered is seven years spanning from the year 2012 to 2017. Nevertheless, to empirically test the hypotheses developed in this study, the following multivariate model is used which was analyzed using STATA₁₄:

$$ROA_{it} = \beta_0 + \beta_1 TACCB_{it} + \beta_2 TACCO_{it} + \beta_3 DACC_{it} + \beta_4 FSIZ_{it} + \beta_5 FLEV_{it} + \beta_6 ASTAN_{it} + \beta_7 FAGE_{it} + \varepsilon$$

Where;

ROA_{it} = Return on asset of firm i at period t

$TACCB_{it}$ = Total accruals under the balance-sheet approach for firm i in year t

$TACCO_{it}$ = Total accruals under operating cash-flow approach for firm i in year t

$DACC_{it}$ = Discretionary accruals of firm i in period t

$FSIZ_{it}$ = Firm size for firm i at period t

$FLEV_{it}$ = Firm leverage for firm i at period t

$ASTN_{it}$ = Asset tangibility for firm i at period t

$FAGE_{it}$ = Firm age for firm i at period t

β_0, \dots, β_7 = Regression coefficients

ε = Error term

From the above stated multivariate regression model, the dependent variable in this study is the firm performance which is proxied by return on asset (ROA). This is measured as profit after tax divided by a total asset which is in line with Yermack (1996), and Zeitun and Tian

(2007). Whereas the independent variable is earnings management represented by total accruals (TACCB and TACCO) and discretionary accruals. While the control variables are firm size (FSIZ), firm leverage (FLEV), asset tangibility (ASTN), and firm age (FAGE). For the measurements of the independent variable which is earnings management which is represented by two alternative measures of intensity of earnings management which are; total accruals (balance sheet approach and cashflow approach) and discretionary accruals. This is in line with Gills *et al.* (2013), Healy (1985), and Jones (1991). Therefore, for total accruals measure, the modified Jones's (1991) model will be utilized. The model uses a balance-sheet approach, the cash flow approach, and the difference between earnings before extraordinary items and cash flow from operations. The total accruals under the balance-sheet approach are provided in the following equation:

$$TACCB_{i,t} = \Delta CA_{i,t} - \Delta Cash_{i,t} - \Delta CL_{i,t} + \Delta DC_{i,t} - DEP_{i,t}$$

Where;

TACCB_{*i,t*} = Total accruals under the balance-sheet approach for firm *i* in year *t*

ΔCA_{*i,t*} = Change in current assets for firm *i* in year *t*

ΔCash_{*i,t*} = Change in cash and cash equivalents for firm *i* in year *t*

ΔCL_{*i,t*} = Change in current liabilities for firm *i* in year *t*

ΔDC_{*i,t*} = Change in debt included in current liabilities for firm *i* in year *t*

DEP_{*i,t*} = Depreciation and amortization expense for firm *i* in year *t*

Contrastingly, regarding total accruals under the cash flow approach, the total accruals are calculated as the difference between earnings before extraordinary items and cash flow from operations as shown in the following equation:

$$TACCO_{i,t} = EARN_{i,t} - CFO_{i,t}$$

Where;

TACCO_{*i,t*} = Total accruals under operating cash-flow approach for firm *i* in year *t*

EARN_{*i,t*} = Earnings before extraordinary items for firm *i* in year *t*

CFO_{*i,t*} = Cash flows from operations for firm *i* in year *t*

However, regarding discretionary accruals as a measure of earnings management, the Healy (1985) model is employed. the model presumed that the non-discretionary follow the regression white noise, whose average is zero (Gill *et al.*, 2013). The author further buttresses that the model holds that the values of expected non-discretionary accruals are zero. If the value of total accruals (TACC), which is the sum of discretionary accruals (DACC), and non-discretionary accruals (NDACC) is non-zero, then, it is the result of earnings management. The measure of the discretionary accruals (DACC) is presented in a formula thus:

$$DACC_{i,t} = TACC_{i,t} / TA_{i,t-1}$$

Where;

DACC_{*i,t*} = Discretionary accruals of firm *i* in period *t*

TACC_{*i,t*} = Total accruals of firm *i* in period *t*

TA_{*i,t*} = Total assets of firm *i* in period *t*

Regarding the control variables in this study, firm size (FSIZ) is measured as the natural logarithm of the total asset (Kakanda, Salim, & Chandren, 2017), firm leverage (FLEV) is measured as the ratio of total debts to corporate total assets at the end of a given accounting

period (TD/TA) (Afrifa & Tauringana, 2015). However, asset tangibility, which is the composition of tangible assets in the total assets structure of a company is measured as the book value of fixed assets (FA) divided by total assets (TA) of a company (Akintoye, 2008). As the fourth control variable, firm size (the number of years a company is being in existence) is measured as the number of years between incorporation and the calendar year-end of each firm (Afrifa & Tauringana, 2015; Kakanda, *et al.*, 2017).

RESULTS

4.1 Descriptive Statistics

The result of descriptive statistics involving mean, standard deviation, minimum, and maximum as well as skewness and kurtosis (for normality test) of the study variables is presented in Table 1 thus:

Table 1
Descriptive Statistics

Variables	Mean	Std. Dev.	Min.	Max.	Skewness	Kurtosis
ROA	0.1612	0.1745	0.0141	0.7565	1.5284	4.4850
TACCB	513.01	1.0392	-4.2637	3.7867	-0.5038	2.3509
TACCO	3.0087	1.0382	-4.3883	3.7056	-0.6638	3.1824
DACC	0.0155	0.0731	-0.2003	0.1246	-0.9261	4.0034
FSZE	27.4650	1.0756	25.0070	20.1774	-0.8067	2.9300
FLEV	0.7377	0.2929	0.0012	0.9948	-1.8614	4.7175
ASTAN	0.0313	0.0134	0.0001	0.0528	-0.5626	2.8708
FAGE	33.7667	14.8036	11	72	1.0769	3.2019

Note: ROA= Return on Asset; TACCB=Total Accruals Balance sheet approach; TACCO=Total Accruals operating Cashflow approach; DACC=Discretionary Accruals; FSZE=Firm size; FLEV=Firm Leverage; ASTAN=Asset Tangibility; FAGE=Firm Age.

From the result of the descriptive statistics in Table 1, it is crystal clear that the mean value for return on asset (ROA) is 0.1612 within the listed Deposit Money Banks (DMBs) in Nigeria. The ROA has a minimum value of 0.141, a maximum value of 0.7565, and a standard deviation of 0.1745 indicating that there is a narrow variation between the sampled firms. On the other hand, the mean value for the total accruals balance sheet (TACCB) approach is 3.0151, a minimum of -4.2637, a maximum of 3.7867, and a standard deviation of 1.0392. Considering the total accruals operating cashflow (TACCO) approach, the mean value is 3.0087, the minimum is -4.3883, the maximum is 3.7056, and the standard deviation stood at 1.0382. However, the average value for discretionary accruals (DACC) is 0.0155, minimum and maximum values are -0.2003 and 0.1246 respectively, while the standard deviation is 0.0731.

Considering the control variables, the descriptive statistics show that firm size (FSZE) has a mean value of 27.465, a minimum of 25.0070, a maximum of 29.1774, and a standard deviation of 1.0756. For leverage (FLEV), the mean value is 0.7377, the minimum value is 0.0012, the maximum value is 0.9948, while the standard deviation is 0.2929. The next control variable which is asset tangibility (ASTAN) has a mean value of 0.0313, a minimum of 0.0001, a maximum of 0.0528, and a standard deviation of 0.0134. For firm age (FAGE),

the average is 33.7667 years, a minimum of 11 years, a maximum of 72 years, and a standard deviation of 14.8036.

Equally important, the statistics for Skewness and Kurtosis which is for testing normality of the data distribution, portrays that the data in this study are assumed to be normally distributed since the value of skewness ranges between -1.8614 to 1.5284, while kurtosis value ranges from 2.3509 to 4.7175. Following West, Finch, and Curran (1995), skewness and kurtosis values should be less than two (2) and less than seven (7) respectively. Hence, the data in this study are normally distributed.

4.2 Result of Correlation Analysis

Table 2 presents the result of correlation analysis where it shows that firm size (FSZE) is significant and positively related to ROA at the 0.01 level of significance. However, total accruals balance sheet (TACCB) have a significant negative association with ROA, discretionary accruals (DACC) is significant and negatively associated with ROA, while total accruals operating cashflow (TACCO) firm leverage (FLEV) and asset tangibility (ASTAN) are insignificant and negatively related to ROA, whereas firm age (FAGE) is insignificant and positively associated with ROA. Moreover, none of the correlation coefficients of the explanatory variables is above 0.80, as such that data is free from the multicollinearity problem (Gujarati, 2009). The result of the correlation is presented in Table 2 thus:

Table 2
Result of Correlation Analysis (n = 90)

Variables	1	2	3	4	5	6	7	8
1 ROA	1							
2 TACCB	-0.271***	1						
3 TACCO	-0.129	-0.023	1					
4 DACC	-0.218**	-0.068	-0.004	1				
5 FSZE	0.279***	-0.188	-0.091	-0.393***	1			
6 FLEV	-0.005	-0.204	-0.068	0.714***	0.020	1		
7 ASTAN	-0.076	0.108	0.041	0.126	-0.065	-0.003	1	
8 FAGE	0.017	0.026	0.293***	0.213**	-0.216**	0.093	-0.072	1

Note: ***, **, and * represent correlation significant at 0.01, 0.05, and 0.10 levels respectively. ROA= Return on Asset; TACCB=Total Accruals Balance sheet approach; TACCO=Total Accruals operating Cashflow approach; DACC=Discretionary Accruals; FSZE=Firm size; FLEV=Firm Leverage; ASTAN=Asset Tangibility; FAGE=Firm Age.

4.3 Discussion of Multivariate Regression Result

To achieve the objective of this study and as well, to test the developed hypotheses, the Panel Corrected Standard Errors (PCSEs) regression model is used. Although before arriving at the use of PCSEs regression, several multivariate diagnostics tests were conducted including multicollinearity, normality, heteroscedasticity, linktest, and auto (serial) correlation. Among these tests, only heteroscedasticity and serial correlation were found to be present among the variables in this study. For this reason, PCSEs regression was utilized to resolve

the recognized problems as suggested by Beck and Katz (1995) and Reed and Ye (2011) among others. The result of PCSEs regression alongside diagnostic tests is presented in Table 3 as follows:

Table 3
PCSEs Regression Result

Variable	Coef.	t-stats (p-value)	Collinearity Stats	
			VIF	1/VIF
Constant	-0.0718	-0.27(0.784)	-	-
TACCB	-0.0467	-1.92(0.055) *	1.10	0.91
TACCO	-0.0121	-2.39(0.017) **	1.12	0.89
DACC	-0.0124	-2.68(0.007) ***	3.23	0.31
FSZE	0.0685	0.88(0.0378)	1.58	0.63
FLEV	0.072	1.16(0.239)	2.70	0.37
ASTAN	0.0136	0.18(0.858)	1.07	0.94
FAGE	0.0080	1.60(0.109)	1.19	0.84
Mean VIF			1.71	
Observations (n)		90		
No. of groups		15		
R ²		0.1948		
Wald chi2 (7)		38.66***		
Hetest χ^2 (p-value)		10.54(0.0012)		
Wooldridge Test -- F (p-value)		6.21(0.019)		
Linktest (_hatsq)		-0.61(0.545)		

Note: ***, **, and * represent correlation significant at 0.01, 0.05, and 0.10 levels respectively. TACCB=Total Accruals Balance sheet approach; TACCO=Total Accruals operating Cashflow approach; DACC=Discretionary Accruals; FSZE=Firm size; FLEV=Firm Leverage; ASTAN=Asset Tangibility; FAGE=Firm Age. VIF=Variance Inflation Factor; 1/VIF=Tolerance; Hetest=Heteroscedasticity Test; RAMSEY Reset test=A test for omitted variables; Wooldridge Test=A test for serial correlation; and Linktest (test for model specification)

From the regression result in Table 3, it is crystal clear that the result of hettest has a p-value less than 0.05 ($\chi^2=10.54$; $p=.0012$) which indicates that there is a presence of heteroscedasticity (Tabachnick & Fidell, 2007). Moreover, the result of the Wooldridge test, which is a test for serial (auto) correlation ($F=6.21$; $p=0.019$) portrays that there is autocorrelation problem. However, under the collinearity statistics column, it shows that the explanatory variables in this study are free from multicollinearity problem since all the variance inflation factor (VIF) values and mean VIF is less than the threshold value of 10 (Hair, Black, Babin, & Anderson, 2014). While regarding the test of model specification, the result from Table 3 signifies that the model utilized in this study is correctly specified because the result of the *linktest* under *_hatsq* has a p-value greater than 0.05. this is based on the idea of Tukey (1949) as suggested by Pregibon (1980).

Specifically, the result of Panel Corrected Standard Errors (PCSEs) regression presented in Table 3 shows that the return on asset has an R^2 value of 0.1948. This indicates that all the explanatory variables in the model accounted for 19.48% of variations in the dependent variable (ROA). Moreover, the model as a whole is also found to be significant ($Wald\ chi^2(7) = 38.66, p < 0.01$), indicating goodness of fit and validity of the model.

Furthermore, the regression result from Table 3 shows that the total accruals balance sheet (TACCB) approach has a significant negative effect on return on asset (ROA) at a 10% level of significance ($\beta = -0.0467; p < 0.10$). This indicates that as a measure of the intensity of earnings management, an increase in the total accruals (balance sheet approach) may result in a decrease in the performance (return on asset) of the listed Deposit Money Banks in Nigeria. This result rejects hypothesis one (1) and is in line with that of Gill *et al.* (2013) and Gong *et al.* (2008) but contradicts that of Raoli (2013).

Besides, the result of PCSEs regression from Table 3 portrays that the total accruals operating cashflow (TACCO) approach also has a significant negative effect on return on asset (ROA) at a 1% level of significance ($\beta = -0.0121; p < 0.01$). Meaning that an increase in the measure of earnings management intensity represented by total accruals (operating cashflow approach) may result in a decrease in return on asset (ROA). This result does not support hypothesis two (2) which states that the total accruals operating cashflow approach has no significant effect on the return on asset. More so, the result contradicts that of Gill *et al.* (2013) who found that the total accruals balance sheet approach has a significant positive effect on firm performance.

For the third explanatory variable which is discretionary accruals (DACC), the result from Table 3 shows that it also has a significant negative effect on return on asset at a 1% level of significance ($\beta = -0.0124; p < 0.01$). This specifies that an increase in earnings management intensity as represented by discretionary accruals by 1, may result in a decrease in return on assets by 0.0124. This result does not support hypothesis three (3) of this study but corroborates with the finding of Gill *et al.* (2013) and that of Ardekani, Younesi, and Hashemijoo (2012).

In consideration to the control variables in this study, the result portrays that they all have a positive, but insignificant effect on firm performance (represented by return on assets). The PCSEs regression result from Table 3 shows that firm size (FSZE), firm leverage (FLEV), asset tangibility (ASTAN), and firm age (FAGE) have ($\beta = 0.0685; p > 0.10$) ($\beta = 0.0072; p > 0.10$), ($\beta = 0.0136; p > 0.10$), and ($\beta = 0.0080; p > 0.10$) respectively.

CONCLUSION

This study examines the relationship between earnings management and firm performance of listed Deposit Money Banks in Nigeria. The study found that the intensities of earnings management represented by the total accruals balance sheet approach, total accruals cashflow approach, and discretionary accruals have a negative effect on performance (ROA) of listed Deposit Money Banks in Nigeria. Hence, the finding of this study is vital to both government, managers of DMBs in Nigeria, investors as well as researchers.

However, despite the contribution made by this study in empirically examining the relationship between earnings management and firm performance, still, it has flaws associated with it. First, the study considers only Deposit Money Banks out of the total listed financial service firms in Nigeria. Moreover, only one accounting-based performance measure is considered (that is return on asset), and the period of study stops in 2017. Therefore, future studies can undertake similar research in a different domain than banks, consider other measures of firm performance like return on equity, net profit margin, and market-based measures of firm performance like Tobin's Q. The period can also be extended to the most current.

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External Connectedness of Female Directors and Earnings Quality

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Abstract - Earnings quality is the most important information needed by users, but at the same time earnings management activities can seriously damage earnings quality. During 2019-2020, more than 10 major cases of accounting scandals occurred in Indonesia, interestingly it was done by male directors. This condition reinforces the hypothesis that the presence of women on the board of directors is needed. Many studies have shown that the presence of women can reduce the likelihood of corporate fraud, improve earnings quality, and reduce the likelihood of financial reporting restatement. The purpose of this study is to determine empirically the effect of interlocked female director and kinship with other board of directors (BoD), board of commissioners, and/or majority shareholders on earnings quality in public companies in Indonesia Stock Exchange 2015-2018 period. Test equipment of this study is multiple linear regression test with the classic assumption test to test the data. The results find that interlocked female directors are positively associated with earnings quality and kinship female directors with other board of directors, board of commissioners, and/or majority shareholders also positively associated with earnings quality.

Keywords: Female Directors, External Connectedness, Interlocking directorship, Kinship with BoD/BoC/Majority Shareholders, Quality of Earnings

1. Introduction

Earnings information presented by the company's financial statements is a parameter for stakeholders and helps them make to good decisions regarding company performance (Sarun, 2015). However, information and reports by the managers to stakeholders may not have been accurate. Accounting scandals such as Enron, WorldCom, and cases in Indonesia (i.e., Garuda, Toyota, Telkom, Toshiba, Inovisi, and Saratoga) indicate the opportunistic behavior among managers in earnings management. Reason being, managers want to maximize their interests and wealth (Rubin & Segal, 2019).

As part of the supervisory mechanism, the board of directors (including women directors) plays an important role in controlling the quality level of the financial reporting process (Waweru & Riro, 2013). If the board of directors is not properly formed, the company is vulnerable to profit malpractice (Siam et al., 2014). Therefore, accounting earnings are more realistic and have better quality when the opportunistic behavior of managers is examined and reduced using a monitoring system through the board (Kim & Yang, 2014).

Many factors are suspected of influencing the quality of company earnings, either positively or negatively. One of which is board interlock. Researchers have found that board interlocks around the world produce different effects on an organization. In a Malaysian study, it was found that the presence of interlocked directors provides an incentive for diligent monitoring as they have the knowledge, expertise, skill, and incentive to actively monitor the actions of management, which results in higher earnings quality (Hashim & Rahman, 2011). Similarly, a Taiwan study found the interlocking director can detect and reduce the level of earnings management of the companies they lead (Shu et al., 2015). In contrast, Chiu et al. (2013) find that interlocking directorship is positively correlated with earnings management. Geletkanycz & Boyd (2011) also found that companies that have directors with the same position in other companies, tend to concentrate less on company growth and do not have company diversification. In summary, board interlocks have developed in varying ways internationally, with the research showing positive and negative effects among jurisdictions.

Another variable examined in this study was the kinship of female directors with board of directors, board of commissioners, and/or majority shareholders. In Indonesia, most of the companies are owned by family or individual. Several researchers in several countries found that family business has the ability to sustain crisis and perform better than non-family business. In Asian Market, it was found that the family companies exhibit lower earnings informativeness and abnormal return (Nguyen et al., 2017). Similarly, an Indonesia study found the family companies tend to disclose less of voluntary information (Darmadi & Sodikin, 2013). Taras et al. (2018) found that company run by founding family members tend to show superior performance and are vulnerable to expropriation of the wealth of minority shareholders. Also, internal controls increase and the quality of accounting information is better (Wu, 2019).

Based on that, this research intended to find the effect of interlocking directorships and kinship of female directors with other board of directors/board of commissioners/majority of shareholders on earnings quality. The paper is organized as follows. Section 2 reviews earnings quality, the external connectedness; especially interlocking directorship and kinship with other board of director/ board of commissioners, and/or majority shareholder in the Indonesian cases, and derives the hypotheses to test. Section 3 presents the methodology and data. Results are discussed in Section 4. Meanwhile, Section 5 presents the conclusion of the study.

2. Literature Review and Hypothesis

2.1. Earnings Quality

Earnings quality cannot be defined in a single conclusion, because "quality" depends on the context of the decision: given the context-specific nature of earnings quality. It is not surprising that earnings quality is not defined or measured in a uniform manner. An analyst tends to view high-quality earnings when it can accurately reflect the company's current operating performance, as well as being an indicator for future operating performance (Dechow et al., 2010; 2002). In terms of creditors and compensation committees, earnings are declared of quality if income can be easily converted into cash flow and that reflects the real performance of managers (Kamarudin & Ismail, 2014).

However, earnings quality are often damaged by earnings management activities carried out by management (Lo, 2008; Liu et al., 2014; Chi et al., 2015), which results in inappropriate capital allocation and results in unstable financial markets. Earnings management activities can be carried out on an accrual basis or real activities manipulation. Accrual-based earnings management occurs when a series of accounting policies is chosen by managers in pursuit of profit targets (Pappas et al., 2019; Cyril et al., 2020), while real earnings management is carried out by managers by taking concrete actions to change the conditions of a transaction. such as changing the transaction date, manipulating nominal sales, reducing the cost of goods sold, with the main objective of changing the level of profits that arise (Francis et al., 2016).

With the negative connotation of earnings management, it can be concluded, when the earnings presented are engineered, of course the quality is lower because earnings do not reflect the real situation.

2.2 External Connectedness

External connectedness has been pointed out as the “root of many evils” by Brandeis (1914). According to the principle that “no man can serve two master,” like a director of a company who is also a director of another company. External connectednesses were seen as a tool to decrease competition, therefore damaging the market.

The company's behavior changes due to connectivity, this is indicated by previous studies, especially related to decisions in investment, business entity development, determination of compensation, and earnings management (Drago et al., 2015; Fracassi & Tate, 2012; Cai & Sevilir, 2012; Ishii & Xuan, 2014).

2.2.1. Interlocking Directorship

Interlocking directorship is a membership on the boards of directors of two or more firms by the same individual (Shu et al., 2015). It is normally legal except where the firms are mutual competitors, but is usually considered undesirable because it allows firms to exchange non-public (privileged) information and, therefore, may hinder fair competition.

Several studies have found that the presence of interlocked directors is indicative of weak governance and that inadequately comprised boards can have negative consequences such as groupthink and bullying. Chiu et al. (2013) found that interlocking directorship is positively correlated with earnings management (Chiu et al., 2013). Geletkanycz & Boyd (2011) also found that companies that have directors with the same position in other companies tend to concentrate less on company growth and do not experience company diversification.

The practice of interlocking directorship in Indonesia must be linked to regulations that govern this implementation. Indonesian Law No. 5 of 1999 concerning "Prohibition of Monopolistic Practices and Unfair Business Competition" article 26 states that "a person who holds a position as director or commissioner of a company, at the same time is prohibited from concurrently serving as a director or commissioner in another company". Several studies have found a positive correlation between interlocking directorship and earnings management. However, in the Regulation of the Business Competition Supervisory Commission (KPPU) Number 7 of 2010 concerning Guidelines for

Implementation of Multiple Positions, there is no prohibition against serving as Director and Commissioner in more than one company. The provisions related to the prohibition of concurrent positions only relate to "monopolistic practices and or unfair business competition". So that in practice, in Indonesia a director/commissioner can hold the same or different position in another company as long as the company is not engaged in the same field, to avoid monopolistic practices or unfair business competition.

Although there are many opportunities for collusion through this activity, recent research has found that interlocking directorship has a positive impact on corporate governance, due to the transfer of knowledge, experience and the breadth of the company's network, which in turn has an impact on improving company performance. Connections with other parties will increase their ability to detect and reduce the level of earnings management in the company they lead (Shu et al., 2015); improve the quality of earnings (Hashim & Rahman, 2011); and pursuing a growth strategy (Singh & Delios, 2017).

Therefore, researcher hypothesize that:

Hypothesis 1 (H1): Interlocking directorship of female directors is positively related to earnings quality.

2.2.2. Kindship of Female Directors

In Indonesia, 95% of national businesses are family owned. This figure includes some of which are now publicly traded on the Indonesian capital market. According to data from the Boston Consulting Group (BCG), family-controlled businesses account for around 40% of market capitalization in Indonesia and have a considerable influence in various major industries including property (91% market share), agriculture (74%), energy (65%) and consumer goods (45%). Therefore, many family businesses in Indonesia are led by wives, children or parties who have a kinship with the owner, and based on the 2018 Family Business Survey by PwC, the average total number of women on the board is around 24% and around 27% on the management team.

There are several studies that show conflicting results regarding the role of family ownership on the board of directors of companies. The interest alignment hypothesis states that increasing the number of directors coming from shareholders impacts on the alignment of shareholder interests, and management is making more efforts to maximize shareholder wealth. Conversely, the entrenchment hypothesis suggests that directors who come from shareholders can try to maximize their wealth against the interests of minority shareholders when ownership is considered the dominant or controlling force.

Asian research literature found that family firms tend to have abnormal returns and low earnings quality (Chi et al., 2015); resulting in high risk arising and increasing the cost of equity capital (Dignah et al., 2016); tends to cover a lot of voluntary information so the market has limited information related to the company (Darmadi & Sodikin, 2013).

Apart from agency problems, some researchers found that companies run by founding family members tend to show superior performance and are prone to dispossession of

minority shareholders' wealth (Boonlert-U-Thai & Sen, 2019; Taras et al., 2018). Internal control is increasing and the quality of accounting information is getting better (Wu, 2019).

Therefore, researcher hypothesize that:

Hypothesis 2 (H2): Kinship of female directors with BoC/BoD/majority shareholders is positively related to earnings quality.

3. Research Model

3.1 Sample Selection and Data Source

To explore the impact of interlocking directorship and kinship of female directors on earnings quality of public listed companies in Indonesia from 2015 to 2018, as a sample and filter the data as following: 1) we eliminate financial companies, because such listed companies have a special accounting and reporting system and principles of financial statements and capital structure are also different form those of ordinary listed companies; 2) we exclude listed companies in financially distressed; 3) the company announces its financial statements every December 31 for the entire year under observation; and 4) the companies publishes its financial statement in Bursa Efek Indonesia to facilitate data collection.

3.2 Model Design and Variable Descriptions

This paper uses the following model to test the relationship between external connectedness and earnings quality of listed companies.

$$EQ = \beta_0 + \beta_1 INTERLOCK + \beta_2 KINDSHP + \beta_3 FSIZE + \beta_4 FGROWTH + \varepsilon_{i,t}$$

In empirical analysis, we deal to eliminate the interference of extreme value, and use a significance level of 5%.

1. Earnings Quality

According to existing literatures, earnings quality in this study was measured using measurements introduced by Dechow (2002). This model is based on the extent to which working capital accrual map into cash flow realisations, where a poor match means highly risky (which indicate high information risk and hence low earnings quality). Thus, working capital accrual is regressed on prior, current, and future cash flow from operations. The accrual quality for this model is measured as the standard deviation of residuals ($S_{i,t}$) obtained from the following regression model:

$$WCA_{i,t} = \beta_{0,i} + \beta_{1,i} CFO_{i,(t-1)} + \beta_{2,i} CFO_{i,t} + \beta_{3,i} CFO_{i,(t+1)} + S_{i,t} \quad (1)$$

Where $WCA_{i,t}$ is the working capital accruals for firms i in year t ; $CFO_{i,t}$, $CFO_{i,(t-1)}$, dan $CFO_{i,(t+1)}$ represent the cash flow from operations for firm i in year t (current year), $t-1$ (prior year) and $t+1$ (future year) respectively. All variables are scale by total assets at the beginning of the year. Working capital accruals for year t , $WCA_{i,t}$ is computed using the following equation:

$$WCA_{i,t} = \Delta CA_{i,t} - \Delta CL_{i,t} - \Delta CASH_{i,t} + \Delta DEB_{i,t}^{-} \quad (2)$$

Where $\Delta CA_{i,t}$ is the change in current assets of firm i between year t and $t-1$; $\Delta CL_{i,t}$ is the change in current liabilities of firm i between year t and $t-1$; $\Delta CASH_{i,t}$ is the change in cash of firm i between year t and $t-1$; and $\Delta DEB_{i,t}^{-}$ is the change in debt in current liabilities of firm i between year t and $t-1$.

Cash flow from operations for year t , $CFO_{i,t}$ is computed using the following equation:

$$CFO_{i,t} = NI_{i,t} - (\Delta CA_{i,t} - \Delta CL_{i,t} - \Delta CASH_{i,t} + \Delta DEB_{i,t}^{-} - DE_{i,t}) \quad (3)$$

Where $NI_{i,t}$ is net income before extraordinary items of firm i in year t and $DE_{i,t}$ is depreciation and amortisation expenses of firm i in year t . If the value of high accrual discretionary indicates low earnings quality. Earnings is derived from the amount of accrual and cash flow. The cash flow component is considered objective, not manipulated, while high accruals indicate low earnings quality.

2. External Connectedness

a. Interlocking Directorship

Interlocking directorship is a membership on the boards of directors of two or more firms by the same individual (Shu et al., 2015). Interlocking directorate is defined as the percentage of board members serving more than one firm (Shu et al., 2015).

b. Kindship of Female Directors with BoD/BoC/majority shareholders

In countries where the country's economy is dominantly controlled by family businesses, it is certain that the business will be managed by family members or a small number of families or dominant coalitions (Drago et al., 2015). This kinship has the potential to lead to policies taken by companies that are dominated or controlled by members of "emotional kinship groups" (Huang et al., 2009). Researcher modified the Thai and Sen (2019) measurement, by dividing the sample into two groups and taking measurements with a dummy; a company managed by the founding family/majority shareholders of female directors is 1 and the other is 0.

3. Control variables

a. Firm Size

Firm size is an important control variable as proposed by previous researches (Moslemany & Nathan, 2019; Dang, 2015). In this study firm size will be used as a control factor and will be determined as the natural logarithm of total assets at the end of period.

With regards to high earnings quality, this study predict that company size and earnings quality will be positively related. Harymawan et al. (2017) provide evidence that large Indonesian companies are more likely to have better earnings quality.

b. Firm Growth

Previous studies showed that companies with more growth opportunities have a higher intention to engage in earnings management (Gerayli et al., 2011). In this research firm growth is calculated using market to book ratio (Moslemany & Nathan, 2019).

Data Analysis Technique

This study employed panel data methodology to examine the relationships between external connectedness and earnings quality. Before testing the hypothesis, the researcher will first test the classic assumptions, consisting of normality, multicollinearity, heteroscedasticity, and autocorrelation. This classical assumption test is performed to ensure that the data conditions meet the requirements for statistical techniques.

After confirming that there are no problems in testing classical assumptions, the researcher will test the hypothesis using SPSS version 16.

Research Result

5.1 Sampel and Observations Result

Table 1 respectively provides the summary of 467 final usable data. For each of the four calendar years, there was no full firm observation available. This condition is due to the limited number of women on the board of directors of companies listed on Bursa Efek Indonesia.

Table 1. Derivation of Sample and Observation

Descriptions	n
Total number of firms listed on IDX 2015-2018	448
Financial related firms	(30)
Firms without female directors and data incompleteness	(272)
Selected firm sample	146
Final firm-year observations	467

In table 1, after we remove the missing observations, we obtain 467 observations of 448 listed companies during the sample period. The data comes mainly from the Indonesia Stock Exchange (idx.co.id)

5.2 Statistic Descriptive

Table 2 reports the descriptive statistics of the 467 firm-year observations. The analysis is classified into three broad categories of variables employed for this study, namely: (1) interlocking female directorship and kindship female directors with other board of directors, board of commissioners, and/or majority shareholders as independent variables; (3) firm size and firm growth as control variables; and (4) earnings quality as dependent variable.

Table 2: Descriptive Statistics
 (Source: processed data, 2020)

	N	Minimum	Maximum	Mean	Std. Deviation
InterlockFD (X1)	467	0.00	28.50	1.1190	2.50454
KindshipFD (X2)	467	0.00	1.00	0.3084	0.46231
FSize (X3)	467	24.00	32.00	28.4690	1.78591
FGrowth (X4)	467	-14.72	82.44	3.1160	7.85944
EQ (Y)	467	0.00	0.03	0.0003	0.00315
Valid N (listwise)	467				

Out of the total 467 observations, it can be seen that interlocking directorship of female directors for all years is averaged at 1.1190; with the highest value, lowest value, and standard deviation of 0.00, 28.50, and 2.50454 respectively.

The Kindship of female directors with other board of directors, board of commissioners, and/or majority shareholders for the 467 pooled data shows an average of 0.3084, with a maximum value of 1.00 and a minimum of 0.00. The standard deviation for the data is 0.46231.

Earnings quality (EQ) is measured based on discretionary accruals model developed by Dechow (2002). As observed in Table 2, the mean value of EQ for all the 467 observations is estimated at 0.0003. The maximum value is 0.03 and the minimum is 0.00 of the pooled data, with a standard deviation of 0.00315.

While the control variable: firm size shows an average of 28.4690, with a maximum value of 32.00 and a minimum of 24.00. The standard deviation for the data is 1.78591; dan firm growth shows an average of 3.1160, with a maximum value of 82.44 and a minimum of -14.72, and the standard deviation is 7.85944.

5.3 Hypothesis Result

This paper focus to investigate the following relationships: (1) relationship between interlocking directorship of female directors and earnings quality; (2) relationship between kindship of female directors with other BoD, BoC, and/or majority shareholders.

After ensuring that there were no problems in testing the classic assumptions, the researcher tested the hypothesis and found the result as shown in table 3.

Table 3: Summary of the Result of Hypothesis Testing (Source: processed data, 2020)

	β	t	Sig	cut off (α)	Conclusion
Constant	0.002	1.015	0.311		
InterlockFD (X1)	0.000	2.176	0.030**	5%	Accepted
KindshipFD (X2)	0.000	-2.029	0.043**	5%	Accepted
FSize (X3)	-6.903E-5	-0.832	0.406	5%	Not Accepted
FGrowth (X4)	-1.397E-5	-0.749	0.454	5%	Not Accepted
		R-Square = 1.8%	Adjusted R Square = 0.09%		
		F = 2.085	Sig = 0.082*		

Dependent Variabel: EQ (Y)

Note: (*) corresponds to 10% level of significance; (**) corresponds to 5% level of significance.

The results presented in table 3, using working capital accrual (WCA) as earnings quality measurement, show the R-square value is 1.8%, meaning that interlocking directorship and kinship female directors affect earnings quality by 1.8%; while 98.2% is influenced by other factors.

Meanwhile, seen from the F-test value of 2.085 and a significance of 0.082, it can be interpreted that the independent variables (interlocking directorship and kinship) simultaneously affect earnings quality at alpha 10%.

5.3.1 *Interlocking Directorship of Female Directors*

Hypothesis 1 examines the effect of female directors' interlocking directorship on earnings quality. It shows a positive regression coefficient of 0.00, t value of 2.176; and p value 0.030 (less than 5% alpha). These results conclude that interlocking female directors have an effect on earnings quality (hypothesis 1 is accepted).

We found that more female directors in interrelated director positions improved earnings quality. The experience she gets from concurrent positions will have an impact on her ability to oversee the functioning of the organization. The connections that are built with various parties will have an impact on the strength of the company's network as a whole. Our finding support the results of previous studies, that found connections with other parties will increase its ability to be able to detect and reduce the level of earnings management of the companies they lead (Shu et al., 2015); increase earnings quality (Hashim & Rahman, 2011); and pursue growth strategies (Singh & Delios, 2017).

5.3.2 *Kinship of Female Directors*

Hypothesis 2 examines the effect of kinship of female directors with other director, Board of Commissioners, and/or majority shareholders. It shows a positive regression coefficient of 0.00, t value of -2.029; and p value 0.043 (less than 5% alpha). These results conclude that kinship of female directors have an effect on earnings quality (hypothesis 2 is accepted).

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SOLE PROPRIETORS TAX REPORTING BEHAVIOR : AN ANALYSIS OF THEORY OF PLANNED BEHAVIOR

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Abstract - Recent studies on tax compliance have provided evidence that sole proprietors are more likely to underreport their income than wage earner. Therefore, this research aims to examine the factors that may influence tax compliance behaviour within the framework of Theory of Planned Behaviour (TPB). The paper examines how attitudes, subjective norm and perceived behavioural control can explain an individual's intention to accurately report the income. This study also includes the effect of descriptive norms as an additional variable within the framework of TPB. The results evidenced that attitude was the strongest predictors of intention to report the cash income followed by descriptive norm. Perceived behavioral control was also found to be a significant predictor of tax but subjective norm has no significant influence on an individual's tax reporting decisions. Thus, the results suggest that tax authority have to start focusing on attitude because if taxpayers have favourable attitudes towards tax system, then this will lead to more tax compliance among sole proprietor. The findings of this study contribute to the theoretical and practical aspects of understanding the tax compliance behaviour among sole proprietors. This paper contributes on how the TPB can be used in estimating taxpayers' behaviour in self assessment systems as sole proprietor appears to be the main group less compliant taxpayers. A better understanding of the main determinants for tax compliance will allow revenue authorities to implement more effective approaches toward achieving optimal tax compliance.

Keywords: Tax Compliance, Sole Proprietor, Theory of Planned Behaviour, Descriptive Norms, Self-assessment Systems

1. INTRODUCTION

1.1 Background

Taxation is an essential part of fiscal policy which can be used effectively by government for meeting its public expenditures. In many countries, taxation has been often used as a tool in promoting growth for the development of its nation. Fund collected from tax source has become a major contributor towards the development of the nation for the benefit of its people. Realizing the importance of tax as a main source to sustain economic development, thus it is essential for all citizens of a country to pay their fair share of tax.

Like other developing countries, it was reported that taxes in Malaysia seem to be the major component of government's revenue. In 2017¹, the government has successfully collected total tax revenue of RM191.57 billion, an increase by 2.4 per cent compared to 2016. Of this figure, a total of RM127.71 billion was successfully collected from direct taxes. The

main contributor to direct taxes was company income tax representing 56.7 per cent of the total revenue collection. This followed by individual income tax and petroleum tax, contributing 25.2 per cent and 18.1 per cent respectively (Economic Report 2017/2018).

Based on the statistics, it is evidenced that the government have been strongly depending on direct taxes as a main sources of income. This tax revenue will be used to finance the public expenditures and addressing socioeconomic concern. In the long run, if the revenue cannot support the government expenditures, there is huge possibility that government facing a bad budget deficit. In this regard, the key success for higher revenue collection can be credited to the Inland Revenue Board of Malaysia (IRBM).

According to Carahan (2015), government abilities to collect taxes depend on people's willingness to comply with the tax laws. However, it is difficult to persuade all taxpayers to willingly comply with all of their tax obligations (Luttmer and Singhal, 2014). Although a lot have been done by relevant tax authorities, the problem of non compliance remain unsolved. There are still people who will try to cheat and will do anything just to minimize their tax liabilities.

Studies on tax compliance have documented that compliance level among sole proprietor is likely to be considerable less than those whose main source of income is wages and salaries (Bruckner, 2016; Marron, 2014; Torgler and Valev, 2010; Loo, Mckerchar, & Hansford, 2009; Engström & Holmlund, 2009;). They are also identified as one of the biggest contributors to the income tax gap (Gale and Krupkin, 2019). In UK, Her Majesty's Revenue and Customs (HMRC) statistics indicate that nearly half of the overall tax gap of £35 billion in 2017- 2018 was attributable to small businesses (HMRC, Annual Report and Accounts 2018-19:28). This includes self-employed individuals and entrepreneurs who attempted declaring lower than the actual chargeable income. They tend to pay the least amount of income tax than they really owe. Similarly, research conducted by the US General Accountability Office (GAO) has also found that over 61 per cent of sole proprietors underreported their net income and 9 per cent over reported it (Nelson, 2008). The business owners wilfully attempted to evade taxes by hiding cash receipts from business and declaring lower than the actual chargeable income. This scenario is unfair to compliant taxpayers because the burden of funding nations' commitment falls more on taxpayers who willingly and accurately pay their taxes (Tran-Nam, 2015).

Clearly, the issue of tax compliance is a major concern for all governments. Given the foregoing background, there is a need for more empirical work that focus on sole proprietors' taxpaying behaviour. Through a better understanding of taxpayer behaviour, tax authority can make more efficient use of their limited resources to develop strategies improving taxpayer compliance. Thus, in predicting their motivational factors underlying their tax reporting decisions, this study applied the Theory of Planned Behaviour (TPB) developed by Ajzen (1991) as the underlying theoretical base. The present study is carried out to examine the role of attitude, subjective norm and perceived behavioural control that potentially influence compliance behaviour. These variables have been receiving less attention in predicting tax compliance behaviours and inconsistent results from previous studies may lead to this study. Additionally, this study also includes the effect of descriptive norms as an additional variable within the TPB.

1.2 RESEARCH OBJECTIVES

Specifically, this study has three objectives:

1. to determine whether the Theory of Planned Behavior components can reliably predict sole proprietors' intention to accurately report their income.
2. to identify which components of Theory of Planned Behavior (TPB) that most influence sole proprietor compliance behavior.
3. to examine the effect of descriptive norms after TPB components have been taken into account.

The remainder of this paper is organized as follows. The next section reviews the theoretical framework and literature on tax compliance behavior and followed by the development of hypotheses in Section 3. Section 4 discusses description of the research method while analytical results are reported and discussed in Section 5. The last section summarizes findings of this study.

2. LITERATURE REVIEW

2.1 TAX COMPLIANCE

There are several interpretations of tax compliance available, but one of the earlier definitions of tax compliance which is widely cited in the literature was provided by Roth, Scholz and Witte (1989). They proposed that tax compliance will take place when "all required tax returns are at the proper time and reporting tax liability accurately in accordance with the Internal Revenue Code, regulations and applicable court decisions applicable at the time the return is filed". This definition seems to provide a clear guidelines of tax compliance behavior as it covered reporting and filing responsibilities based on the applicable tax laws. As such, the definition provided by Roth et.al. (1989) is adopted in this study.

Tax noncompliance on the other hand, refers to the failure to meet tax obligations whether intentional or intentional by conceal the true amount of their assessable income (Kinsey, 1985). Meaning that, those who fail to perform at least one of the taxpayer's basic obligations, he or she becomes non-compliant (Bătrâncea & Moldovan, 2013). Kasipillai and Abdul-Jabbar (2006), also suggest that non compliance may consist of (a) annual tax returns are not submitted within the stipulated period, (b) understated of income/overstated of deductions and (c) failure to pay taxes by the due date.

In the current study, the terms "compliance" and "noncompliance" of tax behavior refer to all intentional compliant or noncompliant behavior. In order to measure the behavioral intention of survey respondents, the respondents were given tax reporting scenarios. They were required to indicate whether they intend to report or not to report the hypothetical income.

2.2 NON-COMPLIANCE AMONG SOLE PROPRIETOR

There are two broad theories which have been predominant in individual taxpayer compliance decisions. The first is based on economic theory that discuss on the impact of penalties, sanctions and other enforcement factors. Meanwhile, the second theory is based on social psychological variables that examine the attitudes and beliefs of taxpayers in order to understand and predict human behavior.

Deterrence is based on the concept that the risk of detection and punishment will improve an individual's compliance behavior. This approach concludes that an individual pays taxes because he or she is afraid of getting caught and penalize for not reporting all income (Bătrâncea & Moldovan, 2012).

However, research on the effect of deterrence on tax compliance has yielded inconsistent findings. Some studies show that deterrence and tax compliance are indeed associated. In other studies deterrence has little or no effect on compliance and could even encourage evasion. It have shown inconsistency evidence and it seems that this standard model is not sufficient to explain the level of tax compliance in many situations. Thus instead of relying on economic analysis to encourage tax compliance, it is better to explore other approaches to provide a reasonable explanation of actual tax compliance phenomenon (James, Murphy and Reinhart, 2005; Maciejovsky, Schwarzenberger, & Kirchler, 2011).

Social psychological research suggested that, an individual inherent character like attitudes, norms, fairness, equity, moral and ethical concerns should be taken into account in order to address the issues of tax evasion and non compliance. The most well known model that could explain people's behaviour by way of understanding beliefs and attitudes is the Theory of Planned Behaviour (TPB; Ajzen, 1991). This theory suggests that a person's behaviour is determined by his or her intention to perform behaviour. It is widely accepted that person's intentions are good predictors in deciding whether or not one will engage in the behaviour (Ajzen, 2002; Armitage & Conner, 2001). The stronger the intention, the more likely that he or she will perform the behaviour in question. This intention is, in turn, directly driven by three major constructs namely attitudes, subjective norms and perceived behavioural control related to particular behaviour. Specifically TPB predicts that if there is a more favourable attitudes towards a behaviour, it is accepted socially, and the person has more control over that specific behaviour, they are more likely to perform that behaviour.

The TPB has been widely used in many behavioral researches and shown to have a good predictive power in explaining human intentions and behavior. Concerning tax related behavior, there is some evidence shown that TPB has been used as a framework to examine taxpayers' compliance intention. One of the first studies that used the full model of the TPB was a study undertaken by Bobek & Hatfield, (2003). The results provide support for the theory suggesting that the TPB model provides a good description of tax compliance behavioral intentions. Several beliefs were found to be useful in developing and understanding of tax compliance behavior.

Other studies have also found support for the use of the TPB in predicting intention regarding tax compliance. Coolidge & Hickman, (2012) for example, who examined factors that influence business taxpayers' decision on whether to report income and

deductions correctly in their 2011 income tax return. Their study was based on sample of small and medium enterprises in Australia. The results indicated that the new model (attitudes, norms, perceived behavioral control, taxpayer identity and perceptions of cooperation) able to predict a taxpayer's compliance behavior.

However, in Malaysia limited evidence of empirical works that discusses tax compliance behavior within the framework of TPB. At the time of study, two empirical studies have made an attempt to examine the application (or suitability) of the TPB on tax compliance behavior. In a study conducted by Saad (2009), the TPB was used as the core theory to examine the role of fairness in tax compliance decisions. The results of the study had shown that the attitude and subjective norms components had a positive influence on taxpayers' behavioral tax compliance intention but not the perceived behavioral control. Pertaining to the impact of tax knowledge and tax complexity on perceived behavioral control, the findings on these variables showed insignificant results.

Another study that used TPB model as a framework to explain tax compliance behavior was a study carried out by Ramayah, Yusoff, Jamaludin & Ibrahim (2009). The results showed that all variables are statistically significant and are positively related to intention to use. Perceived behavioral control was found to have the strongest influence on individuals on-line tax filing followed by attitude and subjective norm. The study therefore supports the use of the TPB in examining on- line tax filing behavior.

DESCRIPTIVE NORMS: EXTENDING THE THEORY OF PLANNED BEHAVIOR.

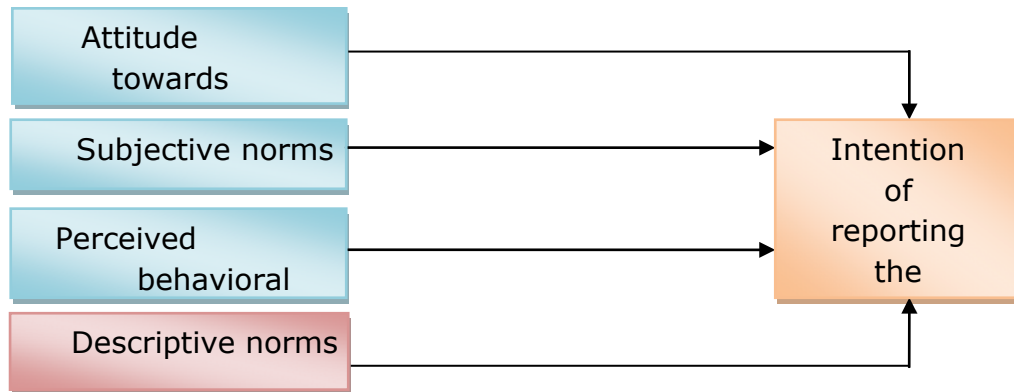
Although the TPB has been used successfully in predicting a wide range of behavioural intentions and behaviour, a number of studies have proposed to include another factors that might improved the predictive power of the model (Armitage & Conner, 2001; Grunert & Ramus, 2005). These factors may not be captured by the traditional TPB model but have proved its impact and relevance in explaining intentions and behaviour.

Several factors have been suggested as additional determinants to the prediction of intention (Moan, 2013). One of the extensions of the original formulation of TPB which may be relevant to explain individual's intention is the inclusion of descriptive norms in the TPB framework. This extension of TPB is also supported by Ajzen (2002) who suggests that since subjective norm is often found to have low variability, the measurement of normative component may also include items that can capture descriptive norm.

Descriptive norm has been found to be an important addition to the TPB (Rivis & Sheeran, 2003; Tuu, Olsen, Thao, & Anh, 2008). It can be described as what most people do in any given situation rather than what should (should not) be done (Bobek et al. 2007; Rivis & Sheeran, 2003). In taxation context, if people believe that tax evasion is wide-spread among their peers or colleagues, they are more likely not to comply with tax laws. In contrast, if they observe that people are obeying the tax laws, then they are likely to follow the norm as well. The study of Morse et al.(2009) reported that the business owners cheated on their taxes because people they know who are in the same position cheat on their taxes. This suggest that their observation of people's attitudes, preferences (descriptive norms) may have more influence than what significant others think a person should engage or not engage in a behavior (subjective norms).

Thus, to further examine the normative component of the theory of planned behavior, the descriptive norm will be added to the current research model. Researchers want to find out whether the perceptions of what most people do (descriptive norm) may be more important in predicting individual compliance behavior towards complying (or not complying) with their tax obligation than believe of what significant others expect them to do (subjective norm).

On the basis of the literature reviewed in preceding section, the theoretical framework of this study is set out below.



Conceptual Framework for Reporting Compliance Behavioral Intentions.

HYPOTHESES DEVELOPMENT

The research model in this study is based on the theory of planned behaviour framework. Three basic components namely attitude, subjective norm and perceived behavioural control are expected to collectively influence taxpayers' intentions to comply (or not comply) with the tax laws. Thus, the aim of this study is to examine whether there is a direct positive relationship between these components and sole proprietors decision on whether to report income correctly in their income tax return.

According to Ajzen (1991) attitude is the individual's positive or negative evaluation of performing the particular behaviour of interest. An individual is likely to perform behaviour when they evaluate it positively. Therefore, in the context of tax compliance an individual taxpayer with a positive attitude towards tax compliance are more likely to develop strong intentions to declare all of their income correctly. On the other hand, if he /she perceived reporting of income as being unfavourable, this could lead an individual to have negative attitude towards compliance, which are normally referred to tax evasion. The relationship between attitudes towards compliance and intention to comply with tax laws has also been examined by a number of studies (for example Bobek & Hatfield ,2003, Saad, 2011). While the existing empirical literatures have established a positive linked between these two variables, it is limited to salaried taxpayers. The results can be different if applied on the current study considering that sole proprietors may have different considerations in making the taxpaying decisions. Thus, the current study proposes the following hypotheses:

H₁ : There is a significant relationship between attitude and taxpayer's behavioural intention to report income correctly.

The predictor of subjective norm would be described as social pressure that an individual feel from others whether he or she should perform that particular behaviour Ajzen (1991). Individuals who believe that important referent think they should perform in the behaviour in question, an individual will hold a positive subjective norm. Conversely, if the individual perceives that people around them think he or she should not engage in the behaviour, then the individual should be less likely to do so, resulting a negative subjective norm. In relation to taxation, there is evidence that subjective norms do impact on taxpaying behaviour (see Bobek & Hatfield, 2003, Bobek, Roberts, & Sweeney, 2007, Saad, 2011). Individuals who believe that they would lose the respect of their peers or referents if they do not comply are more likely to comply with their tax obligations. Hence, this study proposes the following hypotheses:

H₂ : There is a significant relationship between subjective norm and taxpayer's behavioural intention to report income correctly.

Perceived behavioural control specifies the difficulty level of the performance displayed by an individual. It refers to the perception of the ease or difficulty of that individual can successfully execute the behaviour required. This behaviour is influenced by other factors which may facilitate or impede performance of behaviour (Bobek et.al.,2007). In a taxation context, if taxpayers believe that they possess some skills, ability or knowledge to accurately reports all relevant information without any enforcement, the person seems to have a high perceived behavioral control and is more likely to comply with their tax obligations. On the other hand, the person also seems to have a high perceived behavioral control over non-compliance if they think that with the skills and resources that they possess, they have no difficulty for not to declare certain amount in their tax return. Therefore, the next hypothesis is stated as follows:

H₃: There is a significant relationship between perceived behavioural control and taxpayer's behavioural intention to report income correctly.

The literature provides evidence that individuals will comply with their tax obligations as long as they believe that compliance is prevalent among the general population. Cialdini and Trost (1998), defined descriptive norms as values or principles developed from observing how others behave in certain situations.

The influence of descriptive norms is considered to be an important determinant of the tax compliance behaviour of individuals. Empirical evidence provides support that if people believe that tax evasion is wide-spread among their peers or colleagues, they are more likely not to comply with tax laws. In contrast, if they observe that people are obeying the tax laws, then they are likely to follow the norm as well. This leads to the proposition that that taxpayers will comply with their tax obligations as long as they believe that compliance is the society norm. This prediction is reflected in the following hypothesis:

H4: There is a significant relationship between descriptive norms and and taxpayer's behavioural intention to report income correctly.

METHODOLOGY

The population of this study would be small business taxpayers who operating their business located on the both sides of the North-South Expressway. In order to increase the response rate of the study, the researcher opted to hand out questionnaires through a group administered method. This form of surveying is particularly useful when the organization is willing and able to gather the respondents at the workplace for a particular occasion (Sekaran, 2003). In this study, the section managers agreed to apportion 40 minutes of their meeting for the researcher to administer the questionnaire. Before the questionnaire was distributed, the respondents were given a general idea of what the researcher was investigating and what exactly they are being asked to do.

The questionnaire survey consists of two sections namely Section A and Section B. Section A was designed to measure behavioral dimension of respondents to indicate their overall attitude, subjective norms, perceived behavioral control and descriptive norms in relation to hypothetical scenarios under study. They were asked whether they would report the cash income on their tax return if faced with a similar situation.

Section B is designed to obtain demographic background information such as age, gender, marital status, education level and experience. The respondents' profile is presented in Table 1. A total of 225 responses were received and used in the subsequent analysis.

Table 1: Demographic profile of respondents

Particular	Frequency	Percentage
Gender		
Male	106	47.1
Female	119	52.9
Age		
Under 25 years	9	4.0
26 - 35	65	28.9
36 - 45	69	30.7
46 - 55	62	27.6
56 and above	20	8.9
Race		
Malay	194	86.2
Chinese	23	10.2
India	3	1.3
Missing	5	2.2
Types of Business		
Food	101	44.8
Beverages	87	38.6
Fruits	21	9.4
Others	9	4.1
Missing	7	3.1
Education		
Up to SPM	144	64.0
Diploma	38	16.9
Degree	18	8.0
Others	25	11.2
Length in the business		
Less than 10 years	53	23.6
10 - 19 years	101	44.9
More than 20 years	65	28.9
Not mentioned	6	2.7
Tax filing frequencies		
Never	112	49.8
Once	19	8.4
2 - 5 times	53	23.6
More than 5 times	41	18.2

RESULTS

The research model was tested using the SPSS for descriptive, correlation and reliability analysis. Then we proceeded to use AMOS Version 20 to test the hypothesized relationships among observed and latent variables. The research model would then be evaluated by fit statistics to determine the adequacy of its goodness of fit to the sample data.

4.1 Measurement Model.

As shown in Table 2 the assessment of fit (overall fit) demonstrate adequate model fit as it meet the requirements of certain fit indices. The value of $\chi^2 / df = 3.532$, indices of CFI = 0.921 and RMSEA index² of 0.106, indicate that data from sample fit the reporting compliance scenario.

Table 2 : The Fitness Index for Measurement Model (Reporting Compliance)

Name of category	Name of index	Index value
Absolute fit	RMSEA	0.106
Incremental fit	CFI	0.921
Parsimonious fit	Relative χ^2 (CMIN/df).	3.532

Realizing the adequate model fit for the measurement model, further analysis was conducted to assess the discriminant validity. The AVE values for any two constructs were compared against the shared variance (squared correlation) for these two constructs. If the AVE for each construct is greater than its shared variance with any other construct, discriminant validity is supported. Table 3 present the detailed results of discriminant validity test for reporting scenarios.

Table 3: Average Variance Extracted (on the Diagonal) and Squared Correlation Coefficients (on the Off-diagonal) for Study Instruments

Construct	INT	ATT	SN	PBC	DN
Intention (INT)	0.817				
Attitude (ATT)	0.604	0.893			
Subjective Norm (SN)	0.004	0.000	0.704		
Perceived Behavioral Control (PBC)	0.300	0.658	0.020	0.849	
Descriptive Norm (DN)	0.403	0.500	0.019	0.454	0.727

5. DISCUSSION AND CONCLUSION

The main objective of this study was to examine several factors that could potentially influence an individual's compliance behavior in Malaysia. This study involves a limited number of small business owners who operating their business along the expressways. The data was collected through a group administered method which the target respondents are gathered in one place at the different section office.

Considerable amounts of research on taxpayer compliance provide evidence that sole

proprietorships have more opportunity to avoid or evade paying taxes by manipulating the business income and expenses. While acknowledging that there are various factors that might influence compliance, this study focused solely on specific factors within the framework of the Theory of Planned Behavior. the present study

also highlights the importance to include the descriptive norms as additional predictors of intentions among sole proprietors.

Overall, results of the present study provide considerable support for the efficacy of the TPB model in predicting the respondents' compliance behavior. Results for H1 on the relationship between the attitudes and behavioral intention, shows that attitude had a significant influence on respondents' intention to comply with tax laws. This outcome suggests that feelings of guilt and shame may influence taxpayers' reporting behavior. Therefore, those individuals who decide not to pay taxes or underreporting income should feel guilty if the benefits received from government are equitable compared to their tax contributions. In this context, the findings of this research was consistent with that of Coricelli, Rusconi, and Villeval's (2013) studies as they found that tax evaders would feel guilty and shamed for failure to comply with tax law.

Results of this study also revealed that perceived behavioral control had a significant impact on compliance behavior. This implies that the presence of factors that may facilitate or inhibit the performance of behavior will influence the intentions of the taxpayers in declaring the income. In the current study, having a situation that involved a cash sale with no written records and such business incomes was not subject to third-party reporting would provide greater opportunity for being non compliant. Meaning that, such perceived opportunity among respondents motivated them to underreport their true income.

As for subjective norms, the findings revealed that taxpayer compliance behavior was not influenced by other people such as friends or even families members. The finding is in contrast with the argument made by Ajzen (1991) who asserts that referent groups are important source of reference for individuals in carrying out behavior. The findings suggest, when deciding whether to comply or not with the tax laws it would depend entirely on individual's perception without influence from anyone. Perhaps in case involving unfamiliar situations or deal with more complicated tax cases, then the perceptions of important others are important in complying with the tax laws.

Results from SEM analysis also suggest that descriptive norms can be effective tool to influence taxpayers' compliance decisions. If they felt unsure about certain things or unsure whether or not they could comply with tax obligations, they are more likely to imitate others' behavior. It seems like they rely on descriptive norms as a guideline to make tax compliance decisions, especially in situations in which they have little or no own experience. However, the significant findings on the impact of descriptive norms on tax compliance behavior are not consistent with Bobek et al. (2013), who failed to establish such a significant relationships. They found that descriptive norms did not have a direct effect on tax compliance intention. One possible explanation for such insignificant results could be due to cultural differences in tax compliance between respondents that were engaged in the research.

In conclusion, understanding the main determinants of tax compliance would remain a challenging task for tax authorities, policy makers and researchers in the tax behavior field. However, in ensuring the success of the revenue process, the collaboration between the tax authority and tax researchers is important to further understand the taxpayers' compliance behavior. In addition, it is strongly recommended to reinforce descriptive norms in promoting voluntary compliance. As previously discussed people rely on descriptive norms

as a guideline to make compliance decisions especially in uncertain situation. Therefore the tax authority could try to communicate about honest taxpayers rather than saying tax evasion is widespread within the community.

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SUB-SESSION 2

BUSINESS AND MANAGEMENT

Effect of Digital Manufacturing and Consumer Behaviour on firm Sustainability in Malaysia

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Abstract - The organisational perspective on consumer behaviour in the digital manufacturing sector is always seen as a primary concern in the management reality of the company. The purpose of this study was to examine the effect of digital manufacturing and consumer behaviour on firm sustainability in Malaysia. It also investigates the mediating effect of financial structure on the relationship between digital manufacturing and consumer behaviour on firm sustainability. The survey data were received from 102 manufacturing firms in Malaysia and examined using partial least squares structural equation modelling (PLS-SEM) through SmartPLS. The findings of this study have shown that technology has a direct positive relationship with consumer behaviour on firm sustainability in Malaysia. Relatedly, automation has a direct positive relationship with consumer behaviour. However, the findings revealed that there was no direct significant link between the industrial revolution 4.0 and consumer behaviour on firm sustainability. This study also confirmed the direct positive effect of technology on the financial structure. Similarly, the result indicated that automation has a direct relationship with financial structure on firm sustainability, inversely industrial revolution 4.0 did not have a direct relationship with financial structure. In addition, financial structure has a direct positive relationship with consumer behaviour on firm sustainability. The study further reported that financial structure fully mediates between technology and consumer behaviour on firm sustainability. Again, financial structure partially mediated between automation and consumer behaviour on firm sustainability. However, financial structure did not mediate between industrial revolution 4.0 and consumer behaviour on firm sustainability. This current study offer a new theoretical contribution by integrating a novel insight to link the relationship between digital manufacturing components of (technology, automation and industry revolution 4.0), financial structure and consumer behaviour on firm sustainability, also mediating effect of financial structure between technology, automation and industrial revolution 4.0 on consumer behaviour on firm sustainability that has never been studied before in the existing the literature. This study suggests that managers of manufacturing firms should always take consumer behaviour into account when making, strategic planning decisions in the contemporary increase of digital manufacturing business for the firm consumers in Malaysia.

Keywords: Digital manufacturing, technology, automation, industrial revolution 4.0, financial structure, consumer behaviour, firm sustainability.

1. Introduction

The consumer of the late 20th century is a completely new character, one of the strategic variables in terms of consumer behaviour and buying decision (Basile, 2019). The organisational perspective on consumer behaviour in the digital manufacturing sector is always seen as a primary concern in the research and management reality of the company. Managers working in digital manufacturing, with a view to proposing an appropriate system of offerings to clients, would like to understand what motivates consumers to make their day-to-day behaviour towards purchases or which characteristics that influence the process. Improving an eco-friendly image provides an opportunity for companies to attract consumers who influence their buying behaviour on the basis of attitudes and beliefs about their environmentally sustainable technologies, social commitments and firm information (Ameer & Othman 2012; Chen, Tang, Jin, Li, Paillé 2015). In other words, encourages a growing sustainable strategy to characterise their image as sustainable business firms (Nyame-Asiamah & Kawalek, 2020).

Accordingly, consumers are persons who, through their decisions and choices, seek to increase their satisfaction as well as to take on the role of the most powerful driver in the market influence of an enterprise (Migdał-Najman, Najman & Badowska, 2020; Armstrong, 2009). Consumer behaviour is influenced by lifestyle choices, personality traits and economic situations in Malaysia (Pantano, 2011). The internal and external focused sustainable strategies is that a better eco-friendly image presents an opportunity for firms to attract consumers who form their buying behaviours based on their attitudes and beliefs towards firms' environmentally friendly innovations, social commitments and regulatory expectations (Ameer & Othman 2012; Chen, Tang, Jin, Li, Paillé, 2015). In other words lead to an increasing sustainable initiative by companies to register their images as sustainable organizations (Nyame-Asiamah & Kawalek, 2020).

In addition, consumer behaviour is influenced by lifestyle choices, personality traits and economic situations in Malaysia (Pantano, 2011). Smart devices affect consumer behaviour, in terms of the ability to control electronic devices automatically, home automation, internet, hardwired systems and growth in technology (Ordieres-Meré et al., 2020) that was related to digital manufacturing. Other factors affecting consumer behaviour include the integration of electronic interfaces, hardware and information sharing via the internet. Hence, this has resulted in insufficient protection of the promoter, increased inconvenience toward consumer lifestyles, personality, turbulent economic circumstances and financial terms of agreement and the new pandemic influences the consumer behaviour. Mostly with the help of a technology firm, the path of transition from previous methods to digital technology with an amazingly speedy management success will reach consumers of all ages and meet their expectations, connecting whether offline or online (Jose, 2017). "The main drivers of consumer behaviour: information, e-commerce, digitalization, the Internet of Things, e-distribution, technology, digitalization, automation, personalized, performance, artificial intelligence, behaviour intention, e-shopping, and data mining" (Sima, Gheorghe, Subić & Nancu, 2020). Therefore, in an attempt to address this consumer behaviour challenges integrating digital manufacturing components such as technology, automation and industrial 4.0 on the consumer behaviour trends in the current dynamic environment would be necessary. Adoption of digitalization has become a must for consumers, transforming their current behaviour form traditional decisions to online purchase behaviour (Srinivasan, Rutz

& Pauwels, 2016; Wu & Chang, 2016). As the internet has become easily accessible, consumers are relying on the internet for their daily needs and even customizing their needs with the help of digital technology. Thus, to consumers, it has become a core priority to adopt the technological process to meet their demands. Evidence from past studies has confirmed that maintenance of customer strategic partnership is the core business of any firm (Royle & Laing, 2014).

Despite extensive research on different concepts of digital manufacturing and its components like (technology, automation and IR4.0), financial structure and consumer behaviour. Not all of the components mentioned have been examined intensively. Thus, this study is primarily interested in understanding whether digital manufacturing components such as technology, automation and IR4.0 can improve consumer behaviour for firm sustainability, and also investigating the mediating effect of the financial structure between the three components of digital manufacturing (technology, Automation and IR4.0) on consumer behaviour for sustainability. Because of paucity of study in the area, the authors believe that this would provide a novel insight into the consistent shift in consumer behaviour for firm sustainability.

The focus of this study was to investigate whether the effect of digital manufacturing can enhance consumer behaviour for the sustainability of firm in Malaysia, and the main research question was to what extent has digital manufacturing positively increased consumer behaviour for the sustainability of firm in Malaysia? The main objective of this study was to examine the effect of digital manufacturing on consumer behaviour for the sustainability of the firm, with the focus of this study on consumer behaviour for the sustainability of the firm. The following section covers the empirical reviews and hypotheses development, research methods, results and discussion of the findings, the theoretical contribution, the practical implications, the limitations of the study and concluded.

2. Empirical Reviews and Hypotheses Development

2.1 Consumer behaviour

Consumer behaviour can generally be studied at both the individual and the organisational level, which is the practise of consumers to pursue, make choices, utilise and organise products or services, experience and/or belief in satisfying their needs and their influence on consumers and society (Schiffman & Kanuk, 2007). The rudimentary dependence of the owner-oriented firm was that consumers are central to all business circles (Hogg, Askegaard, Bamossy & Solomon, 2006; Nicholls & Lee, 2006). Marketplace itself means consumers all over the place where all strategic market processes are expressed and applied. In addition to achieving competitive advantage in the marketplace, managers use different value-creating approaches to end-products that reach the hands of consumers. This facilitates consumer behaviour towards increasing the level of patronage and satisfaction of needs (Ezie & Nimfa, 2016). Ashraf (2019) argued that market managers should constantly study the behavioural patterns of their consumers before planning to purchase products or services sold to consumers as the variables explored in this study show that they strongly shape consumer buying patterns. Therefore, integrating digital revolution in manufacturing has moved from single technologies to unified systems. The industrial revolution leads the digital manufacturing to an intelligent, connected, more integrated production that can better the consumers' behaviour through the new changes.

Ansari (2019) pointed out that trust, including trust disposition, institutional based trust, and trust-based intentions, can have a significant influence on consumer behaviour.

2.2 Technology and Consumer Behaviour

The technological advancement, consumer behaviour and e-commerce environment are some of influencing factors for the changing patterns of consumer decision making process (Srinivasan et al., 2016; Wu et al., 2016). Digital technology has changed the thinking and expectations of millennial consumers in terms of acting as the creator of technology connoisseurs who have also shaped the heritage of this link and of future generations (Indahingwati et al., 2019). Technology perceptions show a few predictive capabilities, while cultural beliefs have an insignificant direct effect on the use of technology (Cruz-Cárdenas et al., 2019).

Online retailers are facing challenges for this changing pattern in consumer behaviour. Marketers, manufacturers and retailers are focusing to develop strategies considering the influencing factors. Relatedly, Nimfa, Yunus, Latiff, Mahmood and Wahab (2019) found that there was a significant relationship between all the variables involve such as innovation and customer satisfaction, creativity and competitiveness, technology utilisation and value creation for sustainability of the enterprises. Consumer shopping habits have completely changed over the past decades. Technology has changed the entire scenario in the case of consumer behaviour (Indahingwati et al., 2019). People around the world are now more technology oriented. Nimfa and Goyit (2016) advanced that a positive and significant relationship exists between business incubation technology and business opportunities for sustainable development. As a result, marketers and manufacturers are forced to embrace the technological evolution. Over the last few years the use of mobile devices for shopping activities has grown significantly.

Consumers are now more involved in social media, online opinions, mobile devices payments and many more. One of the biggest influencers in consumer behaviour is social media. All consumers are now engaged with social media and this platform affect the consumer decision making processes. It has been observed consumers look over the online reviews before buying any product. Some consumers consider online reviews as a matter of quality assurance. According to Amblee and Naveen, (2011) when customers take a purchase decision, there are positive or negative information available in electric media, in addition to their own evaluation and experience, when it comes to the source of online reviewer often depend on the experiences and recommendations from others. Technology has provided an upper hand to consumers and with it they decide which products to buy. Based on the discussion above the study hypothesize as:

H₁: There is a significant association between technology and consumer behaviour on firm sustainability.

2.3. Automation and Consumer Behaviour

Automation is referred to as the “automatic control of the manufacture of a product through a number of successive stages; the application of automatic control to any branch of industry or science; by extension, the use of electronic or mechanical devices to replace human labor” (Oxfords English Dictionary, 2006, Frohm, Lindström, Stahre & Winroth, 2008). Automation can be described as a progression of manual through to full automatic operational activities (Parasuraman et al., 2000). On the other side, automation in production has brought a significant change in manufacturing industry. With technological evolution where the whole environment in businesses are changing, manufacturing industry

is also getting influenced by it. Basically companies have a big advantage of adopting automation. Automation can be defined as the adoption of automated machines that needs minimal human interaction, robotics logistics and sensors-actuators in production process to have maximum production with minimum level of error (Linner, 2013). As consumer behaviours are changing in this digital era and a big portion of consumers are shifting towards online shopping sites, it becomes essential for manufacturers to adopt automated production process. The automation in production helps to reduce inventory cost for companies, production errors and also labour cost (Linner, 2013).

Additionally, at the manufacturing level, skill diversity and team approaches was considered as complementary to flexible automation interacted positively (Parthasarthy & Sethi, 1993, Adler, 1988). The concept of automation among consumers is perceived differently by scholars. Consumers who are not familiar with technology often resist automation and technology (Reed et al. 2012). For example, people from Generation X are not tech friendly, they resist in automation. But Generation Y, Z and millennials are born in tech era, as a result they are not only familiar but also habituate to automation. Basically the acceptance of automation among consumers can be classified as a generation thing. People often resist new things which is unfamiliar to them. It can be seen in production automation, automation in organization (Erikson 1986; Parasuraman and Riley 1997; Rifkin 1996). Relatedly, workers or employees feel irritated when company brings changes in working or production process. So, before bringing any automation in the process, it must be introduced to people, thus the automation process will be more acceptable. Based on this discussion, the developed hypothesis can be:

H₂: There is a significant association between automation and consumer behaviour on firm sustainability.

2.4 Industrial Revolution (IR 4.0) and Consumer Behaviour

There has been a huge development in communication and information technology after third industrial revolution. In this fourth phase of industrial revolution, the whole world is covered by big data, internet and of course information technology. The E-commerce sector has shown tremendous growth which outpaced the growth of the traditional retail business sector. The worldwide sales of the retail E-commerce sector recorded 2.3 trillion US dollars in 2017, and is expected to rise around 4.88 trillion dollars by 2021 (Statista 2018). Consumers are shifting more towards online consumption rather than going for the malls. A big change can be observed in consumers' buying behaviour. According to N. R. Narayana Murthy, co-Founder, Infosys, "It is a well-known fact that bringing in technologies in the production sector is good for customers."

In IR 4.0 the actual factor which is influencing all the sectors is internet. With the availability of internet most of the customers are now coming internet and it has become a big platform for marketers, retailers to attract consumers. According to P. Usha Vaidehi (2014), males are more interested to buy online compare to female consumers as it saves time and energy. In India, it has been observed that most online consumers are students (Khare & Rakesh, 2011). Comegys and Brennan (2003) conducted a study in US and Ireland and in that study they found that young people spend on an average 7 to 12 hours on the internet and most of them uses smartphones to access the internet. Moeuf, Pellerin, Lamouri, Tamayo-Giraldo & Barbaray (2018) states that the concepts of industry 4.0 had slightly been adopted by SMEs in the industrial operations mainly for monitoring purposes but however, the actual

applications in production planning perspective was lacking. Therefore, some scholars perceive the impact of IR 4.0 positively and some perceive negatively. According to Comegys and Brennan (2003), over use of internet exploit the mental health of humans. On the other side Hermann, Pentek and Otto (2016) explains the advantages of IR 4.0 in human life. Hence, some contradictions can be seen in the relationship between IR 4.0 and consumer behaviour. Thus, the following has been advanced:

H₃: There is a significant association between industrial revolution 4.0 and consumer behaviour on firm sustainability.

2.5 Financial Structure as a Mediating Variable

Lin, Sun & Jiang (2009) define “financial structure” as the composition and relative importance of various financial institutional arrangements in a financial system. Beckett (1998) noted that management problems affecting businesses with knowledge of consumer behaviour recognised that the financial structure of the strategic and operational challenges of businesses depends on the type of consumer behaviour or potential customers. The financial structure is significantly linked to financial access of consumers, enhanced consumer financial planning behaviour is related to improved financial access (Erkol & Coşkun, 2020; Birkenmaier & Fu, 2019; Aghion, Bond, Klemm & Marinescu, 2004).

Likewise, Consistent organisational core values are reflected in the future behaviour of the management team, which will have a high impact on the public dimension and a higher consumer behaviour component (Perez & del Bosque, 2009). Morally acceptable consumer behaviour would lead to improved understanding of the financial structure of consumer-business sustainability and greater satisfaction (Perez & del Bosque, 2009; Oro and Ekpo, 2020). At the end of the day, ethical behaviour of consumers would enhance the company's response, such as increased consumer response time or promotional ideas about the reality of the situation (Murray & Vogel, 1997).

Evidence from prior studies have found that ‘the financial structure of firms belonging to the same industry classification generally have similar financial structures whereas firms from different industry classes generally displayed different financial structures’ (Schwartz & Aronson, 1967; Lin, Sun & Jiang, 2009; Wang & Li, 2020; Chu, 2020; Saraswati, Maski, Kaluge & Sakti, 2020; Salomon & Klaus-Jürgen, 2017). According to Hsieh, Chen and Lin (2019) income inequality increases with financial deepening but decreases with a more market-oriented financial system for sustainability of the enterprises which is related to consumer behaviour and perceptions. Vanhanen (2020) suggested that robotic process automation (RPA) can be used to effectively automate various business operations that are high in volume, manual, repetitive, based on a certain set of clear rules and are in a stable information technology (IT) environment.

The potential for workplace automation gives firms the option to reduce labour-induced operating leverage, allowing them to adopt less conservative financial policies (Bates, Du & Wang, 2020; Chiu, Wang & Vasarhelyi, 2020). Relatedly, sophisticated precedence relationships exist among various sustainability functions of Industry 4.0 (Ghobakhloo, 2020; Pickard, Grecu & Grecu, 2019; Tuffnell, Kral, Durana & Krulicky, 2019; Hayhoe, Podhorska, Siekelova & Stehel, 2019). Relatedly, García-Muiña, Medina-Salgado, Ferrari and Cucchi, (2020) results illustrated the new company’s sustainable value proposition, considered all the three pillars of sustainability such as environment, economy, and society. Results from Dahlin et al. (2020) indicated that a substantial commitment to CSR is

positively linked to a longer-term financial structure. According to Kramer and Porter (2011), firms are reshaping their business processes in terms of both financial structure, firm performance and sustainability actions, in order to focus on the core belief of consumers.

The consumer is more inclined to interact in digital manufacturing activities with a greater tendency to obtain view of the firms' financial structure. Therefore inclusion of financial structure as a mediating variable would bring novel insight into relating the indirect effect of digital manufacturing component such as (technology, automation and IR 4.0) on consumer behaviour for the firm sustainability which was lacking in the extant literature (Ahmed et al., 2019). Based on the assertions above, the financial structure as a mediating variable revealed insufficient empirical research. Therefore, this current research seeks to bridge the knowledge gaps by introducing the financial structure to mediate the effect of digital manufacturing through its three components such as (technology, automation and IR 4.0) and consumer behaviour on firm sustainability, especially in Malaysia. Thus, the following hypotheses were suggested as:

H4a. Financial structure mediates the effect of technology and consumer behaviour on firm sustainability.

H4b. Financial structure mediates the effect of automation on consumer behaviour for sustainability of firm.

H4c. Financial structure mediates the effect of IR 4.0 and consumer behaviour on firm sustainability.

2.6 Diffusion of Innovation (DOI) Theory

The theory (DOI) had been propounded in 1962 by E. M. Rogers, it is one of the earliest theory in strategic management and social science. It was instigated through an interaction to describe how an idea/product is gaining strength over time and diffusing or spreading via a particular population or social system (LaMotte, 2019). The final outcome in this diffusion would be that people, embrace a new idea, behaviour, or product as part of a social system. Adopting implies that a person would do something different from what they had before for instance purchasing or using a new product, adopting and practicing a new behaviour. The best approach for adopting is that the individual must see the idea, behaviour patterns or product as new or innovative. As a result of this diffusion can be accomplished. Digital technology-based autonomous consumers usually control the option of manufacturers (Gasnov, Zubarev, Krasota, (2020). Often throughout the diffusion process a digital software is transmitted via a social system mechanism across the contact medium linked to the consumers of the manufacturing firm.. This in turn promote the effectiveness of manufacturing firms in meeting their sustainability goals with the rapidly growing digital market economy by satisfying the consumer needs. According to previous work of scholars, there are five major factors influencing the adoption of innovation, they include relative advantage, compatibility, complexity, triability and observability (Rogger 1983, 1995; Angelmar, 1990). The use of digital manufacturing technologies (DMTs) is changing the face of the manufacturing landscape and enhancing the competitiveness of firms (Gillani, Chatha, Jajja & Farooq, 2020; Bokrantz, Skoogh, Berlin & Stahre, 2017).

The adoption of a new concept, behaviour or product that is "innovation" never occur simultaneously in the social system; rather, a process in which certain persons are more

capable to adopting innovation than others. Studies have shown that consumers who adopt an innovation at an early stage have different features than those who adopt innovation later on. When promoting an innovation to a target population, it is important to understand the characteristics of the target population that will help or hinder adoption of the innovation. Therefore, any manufacturing firm implementing digital system to serve a target consumers, it is necessary to understand the attributes of the consumers in the market that will influence the adoption of the technological innovation. Based on the focus and context of this research diffusion of innovation theory fits in to explain the convergence of digital manufacturing and its components (technology, automation and IR 4.0), financial structure and consumer behaviour within a single framework to describe the relationship between the selected variables in the study.

2.6 Research Framework

Figure 1 shows the conceptual framework of this study that was derived from the theoretical foundations. This explain the direct relationship between digital manufacturing three components such as technology, automation and IR4.0, financial structure and consumer behaviour on firm sustainability. The framework also connect the indirect effect of financial structure as it mediates the between technology, automation and IR4.0 on consumer behaviour.

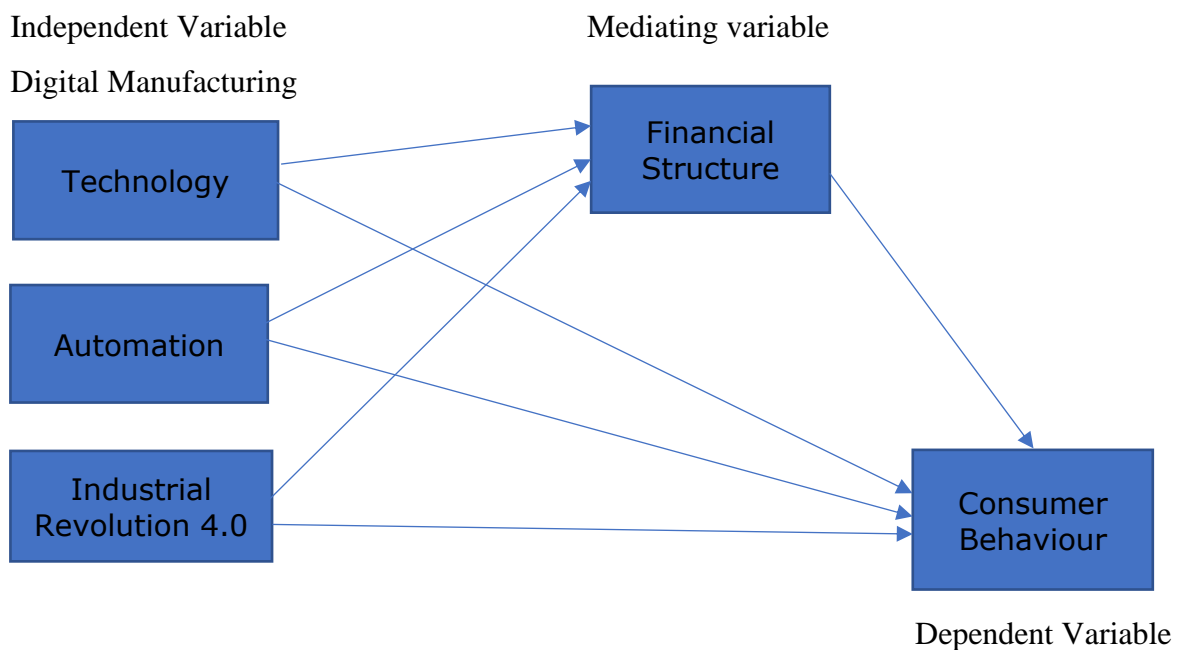


Figure 1 Research Framework of Digital Manufacturing and Consumer Behaviour on firm sustainability.

3. Research Methods

The data for this study were collected through the online survey method. The study was undertaken from March -June, 2020. To improve generalising the finding outcomes, the firms for the study were selected using simple random sample via the firms' repository database in Malaysia, where the firms' profiles with the detail information about the

Malaysian manufacturing enterprises. Among random selected firms', each enterprises website was verified to know whether this firms were associated to digital manufacturing and consumer behaviour for sustainability with the products or services delivered. Out of 866 firms contacted only 203 participated in the survey with the response rate of 23.44%. Out of the survey copies of questionnaire retrieved online survey only 102 was used as the final sample size because 76.56% questionnaires were not returned.

Thus, only 102 manufacturing firms were active and had met the required products/services offered. Based on that it allowed for investigating homogenous set of manufacturing firms that have the criteria regarding the digital manufacturing and consumer behaviour on sustainability of firms (Holmström, Liotta & Chaudhuri, 2017; Niaki, Torabi & Nonino, 2019; Ghobakhloo, 2020). In addition, consumer behaviour is a core strategic focus for digital manufacturing firms. Based on the data obtained 48 manufacturing firms were categorised into small enterprises with 5 - 75 employees, while 54 medium enterprises have 75 - 200 employees in accordance with the SMEs definition in Malaysian (SMEsCorp Malaysia, 2015; Razak, Abdullah & Ersoy, 2018). The participants had on a regular basis not less than 10 years practical experience serving in present post. The survey includes 70 business owners and 32 company chief executives (CCEs) of the enterprises who are the decision makers. Therefore, regarding non-response bias, no reminder was being used, $p < 0.05$ because less problem of earlier and later respondents considered in this paper.

3.1 Measures

All constructs were measured through a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The reflective scales were used for all constructs (Diamantopoulos & Winklhofer, 2001). To study the novelty this paper used the digital manufacturing components (such as technology measurement were adopted from (Gatignon & Xuereb, 1997; Halac, 2015; Nimfa, Latiff & Wahab 2020), automation measurement were adopted from (Ong, Yee, Hui, Kasim & Hizza, 2015) and measurement for industry 4.0 were adopted from (Imran, Hameed & Haque, 2018), financial structure measurement were adopted from (Ugurlu, 1997; Chittenden et al., 1996) and consumer behaviour measurement were adopted from (Sudbury-Riley & Kohlbacher, 2016) Ethically Minded Consumer Behaviour (EMCB Scale). Furthermore, this paper operationalizes independent variable digital manufacturing through its 3 components (technology, automation and IR 4.0); the dependent variable (consumer behaviour) and the mediating variable (financial structure) through 5 items each. Moreover, this study used variables as unidimensional with a few changes to the research instrument to fit the context of this current study. The items used for the questionnaire design are presented in Table 1.

Table 1 Items used for questionnaire Design.

Construct	Code No.	Item	Authors
Technology	TECHN1	Our enterprise is very proactive in the development of new technologies.	Gatignon & Xuereb, 1997;
	TECHN2	Our firm has the capacity to build technological breakthrough	Halac, 2015;
	TECHN3	Our firm has built a strong network of collaboration with suppliers of technological equipment to serve our consumers better.	Nimfa, Latiff & Wahab 2020
	TECHN4	Our firm has an aggressive technological patent strategy	
	TECHN5	Our firm is always the first one to use new technology for its new product to consumers	

Automation	AUTM1	Our automation provides different range of services.	Ong, Yee, Hui, Kasim & Hizza (2015)
	AUTM2	Our automation processes is accurate	
	AUTM3	Our automation delivery is consistent	
	AUTM4	Our automation conducts is dependable.	
	AUTM5	Our automated service is accessible.	
Industrial Revolution 4.0	IR1	It enables the firm to avoid operational downtime and other productivity challenges.	Imran, Hameed, Haque, 2018
	IR2	It relates with responsive, proactive, and predictive practices which enhance the accuracy.	
	IR3	It provides the ability to work in real time.	
	IR4	It offers ways that can successfully address the issues.	
	IR5	It provides the ability to adjust and learn from data.	
Financial Structure	FS1	Our firm financial policy is sensitive to prevailing market.	Ugurlu, 1997; Chittenden et al., 1996; Ferri & Jones, 1979.
	FS2	Our firm possessed propensity for internal/external growth and meet market demand	
	FS3	Our firm has the liquidity to provide market demand	
	FS4	Our firm is sensitive to long-term debt ratio.	
	FS5	Our firm is sensitive to short-term debt ratio.	
Consumer Behaviour	CB1	We often use shopping sites to serve our consumers.	Ansri, 2019 Sudbury-Riley & Kohlbacher, 2016
	CB2	We rely on shopping sites to offer our consumers the best products	
	CB3	We believe internet has made the shopping easier to our consumers	
	CB4	We believe shopping sites provide more facilities to our consumers.	
	CB5	We trust our shopping sites in terms of price and quality to the consumers.	

4. Discussion and Conclusion

4.1 Common Method Bias (CMB)

Common method Bias (CMB) in data analysis is a threat of biased to outcomes of analysis. Common method bias in partial least squares structural equation modelling (PLS-SEM) is spotted through a complete collinearity assessment approach (Kock, 2015). The VIF values must be below the target level of 3.3 (Hair et al., 2019; Hair et al., 2017; Kock, 2015). This would reflect the freedom of the model from the common method Bias (. Higher value over 3.3 indicates that the common method bias has harmed the model. This study evaluates CMB by fulfilling the variance inflation factor (VIF) criteria (Kock 2017; Hair el al., 2019) see Table 5 VIF values of the indicators. Hence, bias from common method Bias was deemed non-existent in this study and was not a major concern.

4.2 Measurement Model Assessment

To investigate the study model, the partial least square structural equation model (PLS-SEM) approach that uses SmartPLS 3.2.9 software was chosen (Hair et al., 2020). This approach was used because, with a vast number of constructs and a non-normal data distribution, partial least squares (PLS) can manage multiple structural equation models (Akter, Wamba & Dewan, 2017; Nor-Aishah et al., 2020). To perform PLS-SEM analysis, the measurement

model was first assessed to ensure the validity and reliability of the study model. This included analyses of composite reliability, convergent validity, and discriminant validity. The measurement model is illustrated in figure 2. Reliability was measured using Cronbach's alpha and composite reliability (CR), which should be above 0.7 and 0.8, respectively (Hair et al., 2014). Meanwhile, convergent validity was measured based on average variance extracted (AVE) values, which should be above 0.5 (Hair et al., 2014, Hair et al., 2019). As shown in Table 2, all the constructs in the study met these criteria and thus displayed satisfactory reliability and convergent validity. Next, discriminant validity for the model was assessed using the heterotrait-monotrait (HTMT) ratio of correlations, which should be less than 0.85 (Voorshees et al. 2016). Based on Table 3, the study constructs met the discriminant validity criteria as well. Finally, the study model was tested for multicollinearity based on the items' variance inflation factor (VIF). Table 4 indicates that all items had VIF values which met the criteria between $3 \geq 5$ (Hair et al. 2017, Hair et al., 2019), which proves the non-existence of multicollinearity issues in this study. As the study model exhibited sufficient reliability and validity, the structural model was subsequently analysed to test the hypotheses.

Table 2 Convergent Validity, Cronbach's Alpha, Composite Reliability (CR) AVE

Construct	Items	Loadings	Cronbach's Alpha	CR	Ave
Technology	TECHN1	0.747	0.743	0.829	0.596
	TECHN2	0.797			
	TECHN 3	0.749			
	TECHN 4	0.532			
	TECHN 5	0.667			
Automation	AUTMN1	0.761	0.754	0.836	0.510
	AUTMN2	0.705			
	AUTMN3	0.829			
	AUTMN4	0.698			
	AUTMN5	0.543			
Industrial revolution 4.0	IR1	0.919	0.838	0.847	0.674
	IR2	0.881			
	IR3	0.791			
	IR4	0.730			
	IR5	0.870			
Financial Structure	FS1	0.864	0.910	0.933	0.735
	FS2	0.891			
	FS3	0.827			
	FS4	0.850			
	FS5	0.853			
Consumer Behaviour	CB1	0.806	0.876	0.910	0.669
	CB2	0.841			
	CB3	0.746			
	CB4	0.859			
	CB5	0.834			

Table 3 Heterotrait- Montriat Ratio

	Automation	Consumer Behaviour	Financial structure	Industrial Revolution 4.0	Technology
Automation					
Consumer Behaviour	0.040	0.445			
Financial structure	0.475	0.409			
Industrial Revolution 4.0	0.498	0.461	0.389		
Technology	0.051	0.561	0.459	0.477	

Table 4 Inner VIF

	Consumer Behaviour	Financial Structure
Automation	3.732	3.298
Consumer Behaviour		
Financial Structure	2.445	
Industrial Revolution 4.0	1.166	1.156
Technology	3.612	3.307

4.3 Structural Model Assessment

Table 5 shows the results for the path coefficient analysis for the direct hypotheses (H1 to H7). Overall, all the direct hypotheses were supported.

5. Direct Effect

Table 5.1 There is a significant relationship between technology and consumer behaviour for firm sustainability.

Hypotheses	Relationship	Std. Beta	SE	T Value	P Values	Decision
H1	Technology -> consumer behaviour	0.569	0.116	2.933	0.004	Supported

Table 6.1 revealed that technology has a direct positive relationship with consumer behaviour ($\beta = 0.559$, $t = 2.933$, $p < 0.05$). Therefore, H1 was supported. The connection between technology and consumer behaviour was supported by diffusion of innovation theory. The theory view that technology relates positively with consumer behaviour for firm sustainability in Malaysia. This finding was consistent with the related study in other settings (Fain & Roberts, 1997; Sue, 2015; Jose, 2017; Basile, 2019).

Table 5.2 There is a significant relationship between automation and consumer behaviour for firm sustainability.

Hypotheses	Relationship	Std. Beta	SE	T Value	P Values	Decision
H2	Automation -> consumer behaviour	6.051	0.127	6.904	0.000	supported

Table 5.2 indicated that automation has a direct positive relationship with consumer behaviour $\beta = 6.051$, $t = 6.904$, $p < 0.05$, therefore, hypothesis four (2) was supported. Theory suggested that automation relates positively and was significant with consumer behaviour in Malaysia Nigeria. The connection between automation and consumer behaviour was also supported by the diffusion of innovation theory described in the theoretical framework. The effort to acknowledge the effect of automation has regularly received keen attention by prior researches (Ong et al., 2015; Martiskova & Svec, 2019). Likewise, Paddeu & Parkhurst (2020) supported that changing consumer behaviour is urging firms to produce small quantities in a relatively large number of varieties in a flexible manner and to save a lot of time. The need to better serve consumers can be influenced by automated processes, and this would only be achieved if an increased level of automation is implemented in manufacturing processes.

Table 5.3 There is a significant relationship between industrial revolution 4.0 and consumer behaviour on firm sustainability.

Hypothesis	Relationship	Std. Beta	SE	T Value	P Values	Decision
H3	Industrial revolution 4.0 -> consumer behaviour	0.431	0.058	0.687	0.492	Not supported

Table 5.3 indicated that industrial revolution 4.0 did not have a direct positive relationship with consumer behaviour $\beta = 0.431$, $t = 0.687$, $p > 0.05$, therefore, hypothesis three was not supported. These results support the view (Tupa, Steiner & Simota, 2017) who stated that industry revolution 4.0 is a relatively new approach, manufacturing processes as a result of new initiatives, reconfigured structures, more sophisticated information technology facilities and associated new risks. Consequently, industrial revolution 4.0 did not have a significant effect with consumer behaviour on firm sustainability.

Table 5.4 There is a significant relationship between technology and financial structure on firm sustainability.

Hypothesis	Relationship	Std. Beta	SE	T-Value	P Values	Decision
H4	Technology -> financial structure	2.772	0.118	3.214	0.001	Supported

Table 5.4 indicated that technology has a direct positive relationship with financial structure $\beta = 2772$, $t = 3.214$, $p < 0.05$, therefore, hypothesis four was supported. The relationship between technology and financial structure was also supported by the diffusion of innovation theory. Theory suggested that technology has a direct significant relationship with financial structure on firm sustainability in Malaysia. This findings was consistent with a related research by (Chakraborty & Ray, 2007; Hoffmann, Laeven & Ratnovski, 2020 and Da Silva, Kovalski & Pagani, 2018) who stated that the level of financial expansion is determined by the initial inequality, the size of the investment and the market structure, whereas the financial structure is influenced by investment technologies, legal and financial enterprises.

Table 5.5 There is a significant relationship between automation and financial structure on firm sustainability.

Hypothesis	Relationship	Std. Beta	SE	T-Value	P Values	Decision
H5	Automation -> financial structure	3.603	0.126	3.060	0.002	Supported

Table 5.5 indicated that technology has a direct positive relationship with financial structure $\beta = 3.603$, $t = 3.060$, $p < 0.05$, therefore, hypothesis five was supported. The relationship

between automation and financial structure was also supported by the diffusion of innovation theory. Theory suggested that automation has a direct significant relationship with financial structure on firm sustainability in Malaysia. These findings support the view of (Lawless, O’Connell & O’Toole, 2015; Bates, Du & Wang, 2020).

Table 5.6 There is a significant relationship between industrial revolution 4.0 and financial structure on firm sustainability.

Hypothesis	Relationship	Std. Beta	SE	T Value	P Values	Decision
H6	Industrial revolution structure -> financial structure	0.973	0.067	0.852	0.395	Not Supported

Table 5.6 indicated that industrial revolution did not have a direct positive relationship with financial structure $\beta = 0.973$, $t = 0.852$, $p > 0.05$, therefore, hypothesis six was not supported. The relationship between industrial revolution and financial structure was also supported by the diffusion of innovation theory. Theory suggested that industrial revolution was not significant with financial structure in Malaysia. These findings was backed by the views of (Corò & Volpe (2020) and Horák (2016) confirming that because of firm failure to acquire new technologies or SMART technologies which required substantial initial investment, and also depend on a robust financial structure and management. Firms cannot interact properly with their consumers, suppliers and customers without capable financial decisions. This, in turn, affects the strong link between the industrial revolution and the financial structure. Cirillo et al. (2020) supported the vital element of the ongoing transition to so-called smart manufacturing in the Industrial Revolution 4.0 and the new generation of emerging technologies.

Table 5.7 There is a significant relationship between financial structure and consumer behaviour on firm sustainability.

Hypothesis	Relationship	Std. Beta	SE	T- Value	P Values	Decision
H7	Financial structure -> consumer behaviour	3.462	0.083	4.201	0.000	Supported

Table 5.7 revealed that financial structure has a direct positive relationship with consumer behaviour and significant with $\beta = 3.462$, $t = 4.201$, $p < 0.05$, hence, hypothesis 7 was supported. Financial structure and consumer behaviour has widely been discussed in past studies by (Davis, 1996; Echeboba & Ananwude, 2016; do Paco et al., 2019). Birkenmaier & Fu, (2019). The findings of this study was consistent with the views of (Lee, Ahn & Shin, 2004; Lee, Kim & Ahn, 2019; Heyman, Deloof & Ooghe (2008) who believed that the financial structure of high-growth companies and those with less tangible assets had a lower percentage of liability, which in turn influenced consumer buying decisions. The firm financial structure involves an interaction between the ability of external financial firms to provide financial resources and consumers with investor expectations for other forms of investment that help in shaping their behaviour (Huyghebaert & Van de Gucht, 2007). The financial structure relates to the level of debt used by a business to finance its activities, this structure directly affects the uncertainty and valuation of the technology firm. The financial managers of the company are committed to establishing the best combination of debt and equity to optimise the financial structure. For both private and public firms, the economic indicators for the analysis of the financial structure are essentially the same. This study was consistent with the vies of (Hamilton et al., 2019; Anuja, 1999).

The study model displayed satisfactory coefficients of determination (R^2), where 79.8 percent of consumer behaviour and 59.1 percent of financial structure was explained by their respective predictors (Table 6). Next, in terms of effect size, Table 7 shows that technology had a small effect on both consumer behaviour and financial structure. Meanwhile, automation and financial structure both had larger effect on consumer behaviour. Finally, industrial revolution 4.0 has no effect on both consumer behaviour and financial structure.

However, Chin et al. (2003) explained that a small effect size does not always reflect the insignificance of the construct, especially when the beta coefficient result is substantial. Thus, all the predictor variables in this study had meaningful effects on consumer behaviour and financial. The final step in the structural model assessment was the test for predictive relevance (Q^2), the results of which are shown in Table 8. According to Hair et al. (2017) and Hair et al., (2019), a value of 0.02 shows small relevance, 0.15 shows medium relevance and 0.35 shows large relevance for endogenous constructs. Based on this criteria, this study's endogenous variables, Automation, financial structure and consumer behaviour, exhibited large predictive relevance values in the model. Figure 3 illustrates the structural model of the study.

Table 6 R square

	R Square	R square Adjusted
Consumer behaviour	0.798	0.790
Financial Structure	0.591	0.590

Table 7 F Square

	Consumer Behaviour	Financial Structure	Effect Size on Consumer Behaviour	Effect Size on Financial Structure
Technology	0.040	0.092	Small	Small
Automation	0.317	0.132	Large	Medium
Industrial revolution 4.0	0.005	0.009	-	-
Financial structure	0.176		medium	-

Table 8 Predictive Relevance (Q^2)

	SSO	SSE	Q^2 (=1-SSE/SSO)
Technology	510.000	510.000	
Automation	510.000	510.000	
Industrial Revolution 4.0	510.000	510.000	
Financial Structure	510.000	295.506	0.421
Consumer Behaviour	510.000	246.255	0.517

4.4 Mediation Effect Assessment

In evaluating the effect of mediator using partial least square structural equation model (PLS-SEM). This study used the approach of (Ramayah et al., 2018 and Hair et al., 2017; Sarstedt et al.; 2020). The mediating effect of financial structure on the relationship between digital manufacturing (technology, automation, and industrial revolution 4.0) and consumer behaviour was analysed using the Hair et al (2019) bootstrapping method 5000 re-sampling. The analysis results, shows in Table 10, indicated that financials structure significantly mediates the influence of technology automation model on consumer behaviour. While, financial structure did not mediate between industrial revolution 4.0 and consumer behaviour. In addition, the mediation effect was evident because technology through

financial structure has an indirect effect on consumer. Also, automation through financial structure has an indirect effect on consumer behaviour. However, industrial revolution 4.0 through financial structure did not have any indirect effect on consumer behaviour. The analysis was confirmed the value of confidence interval bias corrected the lower interval (2.50 percent) and upper intervals (97.50 percent) (Hair et al., 2019). Therefore, hypotheses 8 and 9 were supported, while hypothesis 10 was not supported.

Table 9 Indirect Effect Mediation

Hypotheses	Relationship	Std. Beta	SE	T Value	P Value	BCI 2.50%	BCI 97.50%	Decision
8.	Technology -> financial structure -> consumer behaviour	0.110	0.043	2.050	0.041	0.028	0.198	Supported
9.	Automation -> financial structure -> consumer behaviour	0.019	0.045	2.446	0.015	0.046	0.235	Supported
10.	Industrial revolution 4.0 -> financial structure-> consumer behaviour	0.088	0.019	0.995	0.338	-0.023	0.053	Not Supported

4.5. Discussion

This study has provided valuable insights on consumer behaviour in Malaysia. It contributes to the body of knowledge by investigating the direct effect of three components of digital manufacturing (technology, automation and industrial revolution 4.0) on consumer behaviour, as well as the indirect mediating effect of financial structure on digital manufacturing on consumer behaviour that has never been studied in the extant literature. These findings have both theoretical and practical implications. First, the results demonstrate the importance of digital manufacturing in the context of technology, automation and industrial revolution 4.0 on consumer behaviour for sustainability of firm in Malaysia. Specifically, it implies that all construct have direct and indirect effect on consumer behaviour. It also contributes to the strategic management and consumer behaviour literature by examining the unresolved issue concerning the context in another perspective. This study further confirms and strengthens the theoretical view that digital manufacturing and consumer behaviour are important for an enterprises to achieve efficiency in manufacturing sector.

The theoretical framework of this study was also supported by the diffusion innovation theory of the firm, positing the technology advantage as essential tool for manufacturing firm sustainability and addressing issues of consumer behaviour in a global competitive market. This research findings was consistent with the prior study by Gillani, Chatha, Jajja & Farooq (2020) found that the integration of digital technology had a significant effect on the firm performance related to flexibility, design, delivery and quality. Evidence from previous studies further supported that sophisticated design and emerging technology provide new possibilities for manufacturing that is more sensitive, versatile and potentially distributed and situated closer to the consumers (Srai, 2019; Zaki, Theodoulidis, Shapira, Neely & Surekli, 2017). The study also few implications for manufacturers, consumers and financial expert in the manufacturing sectors toward decision making for sustainability of the firm. Managers of manufacturing companies are encouraged to introduce digital manufacturing and create awareness to strengthen consumer behaviour for sustainability and competitive

advantage. In addition, they would strengthen financial structure within their firms to enhance financial flexibility approaches that promote sustainability of the firm.

4.6 Theoretical contribution

In the digital world, related to digital manufacturing, consumers focus on monitoring, once the technology is accepted whether the integration still makes sense to the consumers' behaviour. In other words, the consumer's traits would provide an assessment of the likelihood of the adoption in a specific circumstance and social networks influence the adoption decision of the consumers. The main theoretical contribution of this study is vested in its evaluation upon the correlation of digital manufacturing components such as (technology, automation and industrial revolution 4.0) on consumer behaviour and mediating upon financial structure.

The current issue of consumer behaviour for sustainability of firm has stimulated managers from firms all over the world to react immediately, especially those in the manufacturing firms that are the greatest contributors in the Malaysian economy. While digital manufacturing consists of driving and leading the clusters of consumer behaviour for sustainability of firm towards achieving organizational targets, the relationship between digital manufacturing and consumer behaviour for sustainability of firm is yet to be sustainable performance is yet to be investigated. The current study has drawn novel and insightful conclusions associated with the findings.

The findings verified that technology and consumer behaviour has a significant relationship. This finding was supported by the view of (Wright, 2020), who contributed that the technology, is shifting consumer behaviour and various business activities, making it essential for most firms to transform their business into a new collaborative system due to inter-business functions tailored to their decision-makers. The findings also revealed that automation has a direct positive and significant relationship with consumer behaviour. This result agrees with the findings of previous study investigated by (Martiskova & Svec, 2019). Nevertheless, the findings show that industrial revolution 4.0 did not have a direct significant relationship with consumer behaviour. This finding is consistent with the view of (Tupa et al., 2017). The study, also confirmed that technology has a direct connection with financial structure. In like manner, the result indicated that automation has a direct positive relationship with financial structure. Inversely the study reported that industrial revolution 4.0 did not have a direct positive relationship with financial structure. Moreover, findings revealed that financial structure has a direct positive relationship with consumer behaviour. The study further reported that financial structure fully mediates between technology and consumer behaviour. Again, financial structure partially mediates between automation and consumer behaviour. However, financial structure did not mediate between industrial revolution 4.0 and consumer behaviour. Additionally, this research provides several theoretical contributions with respect to the Diffusion of Innovation Theory (DOI). This result supported DOI, which posits that the digital structure of the new technology decision outlines the key steps that shape consumer behaviour when rethinking the adoption of digital technologies after gaining awareness as well. The consumer behaviour after that form, a perception on the progress could enable the consumer to decide whether to embrace it or not, the use of digital manufacturing thus, allows consumers to continue using the latest technological innovation of their unpredictable nature for sustainability in the firm (Castelo-Branco et al., 2019). Increased digital technology, automation and interconnectivity (Brynjolfsson & McAfee 2014) define new manufacturing technologies.

Beside the results, this present study assisted in filling the gap in the context of consumer behaviour for firm sustainability in the emerging nation such as Malaysia. This is because most prior studies focused on developed economy consumer market. Consequently, it is vital to link the existing research gaps between digital manufacturing and consumer behaviour which are necessary for firm sustainability in the current economic situation. There was no joint study on digital manufacturing on consumer behaviour, the mediating influence of the financial structure between technology, automation, industrial revolution and consumer behaviour in Malaysia. Hence, this study contributed to the existing body of literature through investigating the effect of digital manufacturing through its components (technology, automation and industrial revolution 4.0) on consumer behaviour for firm sustainability.

5. Limitations and Future Directions

The scope of this current study was restricted to Malaysia in terms of geographical areas. This study was a cross-sectional survey research. The study only considered the data obtained from manufacturing managers to assess their ability toward handling consumer behaviour to their business practices digital manufacturing was adopted. As such, future studies may consider including other service sectors and manufacturing firms as respondents to gain better ways of its operation. In addition, this study used one mediating variable, “financial structure”, which provides a new direction for future research in digital manufacturing and consumer behaviour. Future researcher can advanced new studies in digital manufacturing which need to be explored in upcoming research. Finally, this study was conducted in a developing country, the research framework can be replicated in other emerging economy to observe its sustainability.

Conclusion

The main aim of this study was to investigate the effect of digital manufacturing on consumer behaviour for sustainability of firm and the mediating role of financial structure. This study has found that the first component of digital manufacturing, technology, automation and industrial revolution 4.0, have significant relationship on consumer behaviour; similarly, it technology, automation and IR 4.0 have significant and positive relationship with financial structure. Further, technology, automation and IR 4.0 were found to have indirect effect on consumer behaviour via the full mediation of financial structure. In summary, technology, automation and industrial revolution 4.0 has relation with consumer behaviour through full mediation of financial structure. This study has revealed that there was a positive links between digital manufacturing through its three components (technology, automation and IR 4.0) and consumer behaviour on firm sustainability in Malaysia. Digital manufacturing is a viable strategic planning mechanism which digital manufacturing managers need to scheme by recognising consumer behaviour on firm sustainability in Malaysia.

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Business Resilience During Covid-19: Analysis on Small Business Finance

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Abstract - Business resilience relates to the ability to recover from stretching, bending and compression from economic or business turmoil. The Covid-19 pandemic outbreak is the critical challenges affecting small business activities and finance. While there is no sign of reduction on the affected peoples worldwide and the setback to small business are still on, this study investigates the impact of Covid-19 on business and how the entrepreneurs overcome the problems for the purpose of business survival. We employed the qualitative approach, where five selected small business owners were interviewed through phone calls within 1 April 2020 until 30 April 2020 during the second phase of Movement Control Order in Malaysia. Thematic analysis were used to identify and analyze the data. The study has identified three indicators of financial distress and two measures on quick financial related strategy for business survival. The identified resilience measures are prudent short-term cash flow management and capital control. Owner's perspective on the future direction of their business and other impacts are not clearly visible at the time of the study where various agencies are in the midst of charting relevant measures and programs to support business communities. The article concluded with suggestions for future research, policy maker and small business development.

Keywords: Covid-19; Finance; Resilience; Small Business; Strategy

1. Introduction

The latest tragedy in world history is related to the outburst of Covid-19 pandemic in almost all countries in this world. The pandemic which began in Wuhan, China in 2019 has brought negative impacts on global economy, corporations and small and medium enterprises (SMEs). Economists predict the declining of economic activity momentum from 2020 onwards (Segal & Gerstel, 2020). As at August 2020, the pandemic has infected more than two million peoples. Therefore, many countries are implementing lockdown or Movement Control Order (MCO) to break its rapid escalation. Preventive action, physical distancing and standard procedures are among measures that peoples must follows to hinder the virus. While, governments agencies are seriously promotes the safety measures, the impact of the preventive measurements are also affected business entities and economy at the tremendous size as the World Trade Organization estimates that global merchandise trade could fall sharply by 13% to 32% in year 2020 (International Trade Centre, 2020).

At the micro level, the Covid-19 preventive measures have also affected corporation and small and medium enterprises (SMEs) performance (Omar et al., 2020). Specifically, for small businesses, the most affected areas relates to the cash flows imbalance and debt management due to the interruption of business operations and process. Business lockdown has led the cash flows problems while they are still required to pay all the financial commitments, salaries, rental costs, loans and overhead. Therefore, the current situation has forced the small sector to implement resilience measures to recover from the problems and navigating the company to survive in the turbulence period. Business resilience concept at both the individual (business owner) and company is determines by the quality of individuals, organizations, and systems, as a whole, to respond productively to a meaningful change without waiting for a prolonged period of time (Sanchis et al., 2020).

The objective of this study is to investigate the impact of Covid-19 on small business finance and how the businesses resilience overcome the problems for the purpose of short-term business continuity. The following section highlights some theoretical background and review of the literatures. The third section will discuss about the methodology. The fourth section is presenting the results and findings. Final section will concludes with some suggestions for business owners, policy maker and future research in financial related development.

2. Literature Review

The Covid-19 is the health crisis that lead toward unexpected business crisis. Since March 2020, economists had predicted the downturn of business activity until an unknown ending date (Smith-Bingham & Hariharan, 2020). The world economic situation is drastically changed whereas the economic sectors are hardly hit by the health control and preventive measures by government's worldwide (Craven et al., 2020). The supply chain and transportation sector are also affected where millions of workers was forced under confinement or lockdown. Therefore world businesses was in short supply of raw materials or finished goods and struggling to get back on normal business track (Sneader & Singhal, 2020). The most affected industry are aviation, tourism and travel-related, hotels, restaurants and non-essentials manufacturing companies. (OECD, 2020; Segal & Gerstel, 2020). Travel and tourism are the forefront and most affected sectors when 113 countries had banned travel to contain the spread of the disease in May 2020 (International Trade Centre, 2020). Exports of merchandise products from China and European countries have fallen at about 20% since early 2020 (International Trade Centre, 2020).

The Malaysian small and medium enterprises (SMEs) contributes about 98.5% of total business establishments across all economic sectors (907,065 entities), 36.6% of gross domestic product (GDP) and 65.3% employment (Small and Medium Enterprise Corporation, 2019). Small business is define as firms with sales turnover from RM300 000 to RM15 million or employed of 5 to 75 workers for the manufacturing sector. While, for the services and other sectors, small business are firms with sales turnover RM300 000 to RM3 million or employed 5 to 30 workers (Small and Medium Enterprise Corporation, 2019). With the large number of SMEs, economic crisis will incredibly affect various small business sectors and progress. Stress on cash flow and zero sales has been a challenge for small business during current economic situation (Omar et al., 2020). In fact, there are cases

where cash flow imbalance has led to collapse of many young business establishment within the first five years (Syed, 2019; Wedesango et al, 2019).

The PRIHATIN Economic Stimulus Package 2020 has allocate RM3.3billion to assist small and medium enterprises (SMEs) in sustaining business operations, employment and domestic investment (Prime Minister's Office of Malaysia, 2020). Another package had been announce on 6 April 2020 as the Additional PRIHATIN SME Economic Stimulus Package (PRIHATIN SME+) amounting RM10 billion (Prime Minister's Office of Malaysia, 2020). The soft-loan will be channel through local financial institutions and banks to ease the financial burden of local SMEs during the Covid-19 crisis and MCO. As an example, the Special Relief Facility (SRF) from Bank Negara Malaysia amounting RM3.0 billion are allocate in term of short-term cash flows and working capital loans. The loan packages comes with 3.75% financing rate per annum with maximum amount of financing at RM1 million. Official announcement on the availability of the loans will start from March 6, 2020 to December 31, 2020. During the first phase, it will be dedicated to those SMEs with the maximum shareholder funds of RM5 million (Prime Minister's Office of Malaysia, 2020). The stimulus package will induce additional capital for some small business entities to covers their cash flow requirements and short-term business commitments.

Running out of cash is a result of poor cash flow management, but it might be different during the crisis period where strong relationship exists between financial management and sustainability of small business (Wadesango et al, 2019). Financial management is the business strategy in optimizing cash flow and liquidity. Therefore, the process of cash flows management involves three specific stages, i.e. managing cash in and out of the company, managing cash flows within the company and handling cash balances at any point of time (Ahmad, 2017);. The first stage is the most important process since SMEs need to have proper cash flow synchronization to pay all of current business commitments (Omar et al, 2008). Good cash flow management enables business to achieve short-term objective and expansion plan. Small business are sometimes being place under misinterpretation that high revenues will derive high profits. However, they fail to appreciate that if substantial cash is not procure from those revenues, firm will have insufficient cash to pay off current expenses, liabilities and commitments (Svatošová, 2019). Thus, managing cash flow problem, changes of business tactics and financial strategies during this turbulence period are crucial for business continuity (Cassia & Minola, 2012).

Business resilience is the ability of firms or entrepreneurs to recover from the setback of business bending, compression or stretching (Hedner et al., 2011). While entrepreneurs are known with the underlying capabilities on business resilience measures, small businesses are accepting that characteristic as part of the quick recovery and continuity strategy during business turbulence period. Resiliency helped business owner coping with certain strategies that protected their firms from business failure. While there are various measures of business resilience characteristics are discussed by past researchers, the most relevant characteristics in this latest Covid-19 phenomena was very much difficult to determine. Sanchis et al. (2020) posited that business networking, support, trust and encouragement are the external factors that inspired business owners to make a realistic plan for business recovery. From the internal perspective, Neimimaa et al. (2019) integrated the three model factors underpinning the business resilience features of the personal characteristics of the business owner, the company structure and strategies, and the process (access to material resources, control and sense of cohesion amongst staffs).

3. Methodology

Non-probability purposive sampling was used to identify the respondents from the alumni of the Faculty of Economics and Management, Universiti Kebangsaan Malaysia. Data collection was done through telephone interviews with five business owners during April 2020. Phone interview is the easiest and safest communication channel during the Covid-19 control period. A set of six open-ended questions was used to seek appropriate responses and evidences on financial distress, while eight questions on business resilience strategies were asked according to the adopted model of Sanchis et al. (2020).

All questions was e-mail to all respondents one day before the interview session for them to get some preparation and ideas on the answers or responses. The interview took about 40-50 minutes and was audio recorded. Through content analysis, researchers were able to analyze the conversation transcripts. Eventually, the data was coded, classified, and interpreted to gather meaningful themes as suggested by Austin & Sutton (2015).

4. Results

4.1 Demography of Respondents and Business Background

The profiles of the respondents who are the business owner (ENT) of the firms and their company is shown in Table 1.

Table 1: Respondents and Business Background

Respondent	Experience in business	Industry / Business activity	Office location	Paid-up capital	Annual turnover	No. of staff
ENT-1	21 years	Service: Telecommunication support systems provider	Kuala Lumpur	RM500k	RM2.5million	10
ENT-2	12 years	Service: Restaurants and bakery	Selangor	RM150k	RM350k	8
ENT-3	11 years	Manufacture: Healthcare and beauty products	Selangor	RM1million	RM9million	40
ENT-4	7 years	Service: Printing	Selangor	RM900k	RM1million	8
ENT-5	8 years	Service: Travel agency	Kuala Lumpur	RM200k	RM3million	5

4.2 Impacts on Business Finance

The Covid-19 and Movement Control Order (MCO) in Malaysia has brought serious impact on business finance among all business sector. The specific impacts on the financial distress among firms are categorized into three themes as shown in Table 2. The most affected area

was the loss or drastic reduction of business income as mentioned by four informants (ENT-1, 2, 3 and 4). The phenomena occurs due to the shutdown of business during MCO as their business is not categorized under the basic goods and services that still allowed to operate by the government. The affected sector was travel service agency as they had to fully stop their operation (ENT-5).

Table 2: Impacts on Business Finance

No	Theme of Impact	Transcription
1	Loss or reduction of income	<p><i>“We don’t have new business and our existing customers are forced to close their premises. We lost a lot of income”.</i> [ENT-1]</p> <p><i>“We run our restaurant in a university. Due to the campus closure, we lost totally... No income”.</i> [ENT-2]</p> <p><i>“My business totally stop after the MCO starts. We have no income at all.”</i> [ENT-4]</p> <p><i>“Since the first day of MCO, we are 100% closed down. No customers want to travel overseas in this period”.</i> [ENT-5]</p>
2	Cash flow imbalance	<p><i>“I pay staffs salaries as usual, even without incoming income this month. I am still looking for details information on types of government incentives and soft-loan offers”.</i> [ENT-2]</p> <p><i>“Six-month loan moratorium by banks is not including financial lease. I still have to pay our RM20,000 monthly leasing for our machines”.</i> [ENT-4]</p> <p><i>“In March, we still pay full salary for all staff. Without incoming income, how would company bear RM30,000 overhead cost every month?”.</i> [ENT-5]</p>
3	Bankruptcy risk	<p><i>“We can’t really predict future direction of this business at this moment. For the time being, we just grab whatever opportunities that come to us”.</i> [ENT-3]</p> <p><i>“I believe, we can’t survive for more than two months without any income”.</i>[ENT-4]</p> <p><i>“I hope to sustain for at least three to four months with our existing savings. I can’t predict what is going to happen then”.</i> [ENT-5]</p>

The second problem arises from the MCO and Covid-19 outbreak is related to the issue of cash flow imbalance where the businesses are still in position to pay all of their fixed expenses, loans and staffs salary. The respondent who used the leasing facilities in their business is the most affected where leasing is not considered as loans and have not included under the bank’s moratorium scheme (ENT-4). The third theme identified through this study is arises of bankruptcy risk. Business owners (ENT-4, ENT-5) claimed that they might go insolvent within next two to four months if the current situation remain unresolved. As per information from respondent (ENT-3), business owner was unclear about the future direction of business and economy in 2020.

4.3 Business Resilience Measurement

The reflection of small business measures in adapting basic survival strategies during the crisis was measured along the line with the Conceptual Reference Framework (CRF) model adopted from Sanchis et al. (2020). The modified model in this study focuses on the value creation and value preservation of existing financial measures of the firms in term of recovery capabilities in combating the impact of the crisis. The measurements are then organized into identified themes from respondent's information and responses. The identified themes are then classified as the financial strategy of small business in achieving immediate prevention and recovery measures of Covid-19 crisis as presented in Table 3.

Table 3: Financial Strategy and Business Resilience Measures

Financial Strategy Theme	Resilience Measures	ENT-1	ENT-2	ENT-3	ENT-4	ENT-5
Prudent short-term cash flow management	Study of the prospective forecast of sales.	√		√	√	√
	Definition and implementation of the costs range that the enterprise would like to bear.	√	√	√	√	√
	Implementation of marketing and sales practices that minimize changes in demand.	√		√	√	
	Definition and implementation of a protocol to negotiate prices of finished products/ services and expenses.			√		√
Capital control	Create a reserve fund and define policies that maintain a percentage of the monetary reserve.	√		√	√	√
	Study on the viability of turning to financing instruments.		√		√	
	Outsourcing and change of strategy to focus on those activities that provide added value.	√		√		√
	Request for credit through reciprocal guarantee companies that act as guarantors of financing, assuming credit risks.			√		

The business resilience framework addresses the identical themes of two financial strategy: (i) the prudent short-term cash flow management, and (ii) the capital control actions that perceived to re-establish the enterprises into its normal operation. Business resilience measurement shows strong emphasis of business owners on managing costs range of enterprise consist of payment of staff salaries, rental, loans repayment and other monthly fixed cost as stated by all respondents. The second resilience measures is the quick action by the respondent to study the prospective sales forecast in the near term during the crisis period (ENT-1, ENT-3, ENT-4 and ENT-5). Under the capital control category, small business are particularly emphasis on creating sufficient reserve fund and creating internal policy to

maintain the business capabilities to serve their monetary commitment (ENT-1, ENT-3, ENT-4 and ENT-5). The second measure is identified as the implementation of outsourcing strategy and focus on certain business activities that will provide financial value added to the company (ENT-1, ENT-2, and ENT-5). As a consequence of the newly announced financial assistance programme and support from government agencies on small business, the resilience measurement through the request or application of additional credit of small business owners from the financing institutions are still in the early stage. Thus it becomes the least popular measure during the study period where ENT-3 is the only respondent that is looking for that approach.

5. Discussion

This study aims to explore the impacts of Covid-19 on small business finance and understand suitable business resilience strategy in preserving their business position in short-term period. Several selected small business owners from different business segments were involved in this study. Their fresh inputs were very important for policy makers to plan appropriate actions for future small business development during and after the crisis. The results have shown negative financial impacts from Covid-19 outbreak and MCO on business income, cash flow stability and bankruptcy risk. All respondents have reported total or partial loss of business income when their business were forced to suspend operation under the MCO order. The issue occurred since their business activity was classified under non-essentials sector or affected following the closure of the location where they are operated. In other side, small businesses are reported poor cash flow position due to the imbalance of their current business income and existing payments and financial commitments that they must fulfil consistently. The study revealed that business with high loans commitment and leasing payment commitment are hardly affected during the study period as certain financing contracts are excluded from the list of loans moratorium incentive from local banks. Critically, certain type of business was highly exposed to the bankruptcy risk on conventional travel and printing sector as identified in the study.

The study found that there are two identified financial strategy themes. From the owner's preparedness perspective, prudent short-term cash flow management and capital control strategy perceived to re-establish the enterprises into its normal operation. In details, business owner's emphasis more on managing costs range and expenses of their enterprise. It's identified as the payment of staff salaries, rental, loans repayment and other monthly fixed cost. The other measure is related to the quick action to forecast new sales target in the nearest future and implementing new sales and marketing strategy. Meanwhile, capital control strategy had derive small business owners to quickly creating sufficient reserve fund and internal policy on ways to serve their monthly monetary commitment, outsourcing strategy and immediately put extra effort on certain niche activities that will provide extra financial value to the firm, as the government financial assistance programme and repayment moratorium of small business loans from financial institutions are still in the early stage to implement.

Small business capabilities to absorb business changes and to design effective short term financial strategy without affecting its existing financial position through processes of rapid adaptation may induce the enterprise to obtain extra benefits. Unforeseen future direction is critical for the sustainability of the firms. Thus, small business are encouraged to implement the pecking order technique in their current business activities and expansion. Effective cash

management discipline in daily operations and prudent financial management practices. Besides, the resilience framework amongst business owner contributes on the decision-making process by proposing sets of anticipatory actions about what they can do to be prepared for the unexpected if the crisis prolonged.

6. Conclusion and Recommendation

In this preliminary study, we have proposed an adaptation and extension of business resilience model by Sanchis et al. (2020) that aim to increase the scope of business resilience in financial strategy of small firms during the Covid-19 crisis. The current approach of small business and the recovery measures on their financial capacity shown that right financial strategy is a prerequisite to support the financial position during unexpected business turbulence. From the preparedness viewpoint, this definition should involve selecting the optimal preventive actions based on some strategic financial criteria, identified as prudent cash flow management strategy and strong capital control measures.

It is worth mentioning that business resilience is not a static initiative. The study recommends two strategic options for small business firms in absorbing financial distress after Covid-19 as follows; (1) The strategic business diversification and (2) the effortless measures in strengthening enterprise's dynamic capabilities to enhance better business prospects. Given that most firms under study are still focusing their business activities in single sector, there is a pressing need for the owners to manage their cash flow and capital position through the innovating business model as well as implementing of the pecking order technique. Enterprises should always strengthen their short-term cash flow management by concentrating on accumulating retain earnings for their future operations and selective expansion. Broadening the range of business conduct through alternative marketing channels such as online, digital and social media marketing will help small business gain better income and market coverage. Future business investments should be sensitive and made significant improvements on the choice of financing and fixed costs exposure.

Similarly, government and financial institutions should quickly disseminate the information and distribution procedures of all financial supports or stimulus package to all relevant business entities as it will help them recover quickly. Small and medium enterprises (SMEs) development agencies should also venture into one-to-one business advisory services, business counselling services or coaching session to those adversely affected firms during the crisis. The method might include the deployment of business experts in particular sector and online based program. As for future research approach, it would be useful for other researcher to further empirically investigate and generalize the study on a larger scale as the Covid-19 outbreak has affected all types of business organizations. Thus the future research design has to be inclusive.

7. Acknowledgements

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TAHAP KEPUASAN PELAJAR TERHADAP KEMUDAHAN DAN PERKHIDMATAN DI POLITEKNIK MERLIMAU

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Abstrak - Tahap kepuasan pelanggan dalam institusi pendidikan adalah penting dan memberikan kredit imej yang tinggi serta membolehkan penambahbaikan dilakukan oleh institusi pengajian tinggi. Sehubungan dengan itu, satu kajian kepuasan pelanggan berkaitan kemudahan dan perkhidmatan dilaksanakan secara rawak berlapis ke atas pelajar sepenuh masa di Politeknik Merlimau sesi Disember 2019. Seramai 472 responden dari sejumlah 4920 pelajar peringkat Diploma dari lima jabatan akademik dan satu jabatan sokongan akademik telah menjawab borang kaji selidik secara dalam talian. Kajian deskriptif ini menggunakan kaedah kuantitatif melalui tinjauan dengan menggunakan instrumen soal selidik yang meliputi 5 bahagian penilaian iaitu jabatan akademik, Unit Peperiksaan, perpustakaan, Jabatan Pembangunan dan Hal Ehwal Pelajar serta Unit Sukan, Kokurikulum & Kebudayaan. Secara keseluruhannya tahap kepuasan diperolehi adalah pada tahap tinggi melebihi skor min 4.00 pada setiap item. Namun proses penambahbaikan dan penyelenggaraan secara berkala perlu dilaksanakan untuk menjamin dan meningkatkan lagi kualiti kemudahan dan perkhidmatan yang sedia ada serta mengelakkan aduan yang sama berulang. Antara cadangan penambahbaikan adalah pihak pengurusan perlu melakukan kajian, pemerhatian, pemantauan dan penyelenggaraan yang berterusan dari masa ke semasa. Kajian perlu melibatkan semua pelanggan yang menggunakan kemudahan dan perkhidmatan secara langsung atau tidak langsung. Elemen lain seperti kemudahan OKU, sokongan perkhidmatan kesihatan mental dan perubatan juga perlu dititikberatkan sebagai bukti komitmen kepimpinan organisasi selain penghargaan sebagai dorongan motivasi kepada penyampai dan pelaksana untuk mewujudkan hubungan yang mampan pelbagai pihak.

Kata kunci: Kemudahan dan Perkhidmatan, Kepuasan Pelanggan

1. Pengenalan

Kualiti perkhidmatan atau produk boleh ditentukan melalui maklumbalas dan kepuasan yang diperolehi oleh pelanggan. Adalah menjadi satu keperluan setiap organisasi atau institusi menentukan tahap kepuasan pelanggan ke atas perkhidmatan yang diberikan. Pelbagai kaedah atau instrumen pengukuran boleh dilaksanakan untuk menentukan tahap kepuasan yang diterima oleh pelanggan yang seterusnya memberikan input keberkesanan kualiti penyampaian perkhidmatan (Ariyani, 2015). Dalam dunia pendidikan, penilaian oleh pelanggan adalah antara elemen yang penting untuk menilai kualiti pengurusan dalam sesebuah institusi (Haque, 2004). Kepuasan pelanggan penting sebagai faktor tarikan dan pilihan ke institusi tersebut (Mohd Faiz, 2011). Ia dapat menambah baik proses penyampaian pembelajaran dan pengajaran. Politeknik sebagai institusi TVET harus menyediakan kemudahan prasarana atau fizikal yang memuaskan pelanggan sesuai dengan visinya menjadi Institusi TVET Terunggul (Syarifah Atifah, Normaslina, & Mohd Zulfazli Raub, 2013). Antara elemen yang menentukan kualiti pendidikan boleh diukur melalui kepuasan pelanggan terhadap kemudahan bilik kuliah, kampus, kemudahan penyelidikan selain

kelayakan fakulti atau jabatan (Mohammad A. Ashraf and Yusnidah Ibrahim College, 2009). Kepuasan yang diterima oleh pelanggan akan mempengaruhi pelanggan terhadap kualiti perkhidmatan secara keseluruhan terhadap sesebuah institusi atau organisasi.

1.1 Latar Belakang Masalah

Setiap institusi mempunyai peranan dan tanggungjawab untuk memenuhi kepuasan pelanggan sebagai suatu proses penambahbaikan secara berterusan dan meningkatkan kualiti dan imej. Institusi pendidikan terutama Institusi Pengajian Tinggi (IPT) adalah penting kerana institusi ini bakal melahirkan golongan penggerak ekonomi negara merentas bidang, inovasi, kreativiti dan teknik. Cabaran dan persaingan antara IPT menjadi antara elemen yang menjadikan sesebuah IPT perlu semaksimum memenuhi kepuasan pelanggan. Kepuasan adalah elemen yang berkeupayaan dan dapat memenuhi kehendak atau keinginan seseorang individu dalam perkhidmatan yang diberikan (Saif, 2014). Memenuhi kepuasan pelanggan adalah pencapaian yang penting dan bernilai untuk sesebuah IPT. Selain berkeupayaan menarik lebih ramai pelajar memilih IPT tersebut sebagai institusi pilihan, ia telah menjadi satu fungsi perbandingan persepsi individu (Mukhtar, 2015) terhadap IPT di Malaysia. Dalam pada itu, tidak dinafikan maklumbalas mempunyai peranan sebagai saluran rasmi (Ling Y. L., 2015) untuk bertindak menyampaikan maksud, aduan, penghargaan, idea penambahbaikan secara berterusan tanpa perlu bersemuka bagi meningkatkan kualiti persekitaran, menilai dan menentukan keberkesanan prestasi sesebuah organisasi.

1.2 Penyataan Masalah

Tidak dapat dinafikan persaingan yang sengit antara IPT berlaku disebabkan globalisasi dan kecekapan strategi pemasaran. Maka, setiap IPT berusaha untuk memberikan perkhidmatan yang dapat memenuhi keperluan pelanggan iaitu pelajar, untuk terus memilih IPT tersebut sebagai pilihan utama (IM Salinda Weerasinghe, 2017). Kepuasan pelanggan adalah sesuatu nilai yang subjektif kerana ia melibatkan pengalaman seseorang ketika menggunakan perkhidmatan tersebut dipengaruhi oleh dimensi faktor yang pelbagai (Marzo-Navarro, 2005). Untuk mempertingkatkan kualiti perkhidmatan, PMM sebagai institusi TVET bertanggungjawab untuk menilai tahap kepuasan yang disediakan untuk pelanggannya iaitu pelajar.

PMM telah ditubuhkan pada tahun 2002 dengan menyediakan pelbagai kemudahan dan perkhidmatan kepada pelajar semasa proses pengajaran dan pembelajaran dilaksanakan. Kini setelah hampir 2 dekad beroperasi, Politeknik Merlimau Melaka (PMM) sebagai organisasi yang menawarkan perkhidmatan sentiasa komited untuk memenuhi kepuasan pelanggannya. Keperluan memenuhi kepuasan pemegang taruh dijadikan sebagai salah satu indikator petunjuk prestasi dalam sistem kualiti organisasi sebagai satu bukti komitmen yang tidak boleh diragui. Kepuasan yang ditunjukkan oleh pelajar terutamanya mampu bertindak sebagai medium pengukuran keberkesanan kepimpinan organisasi.

Sehubungan dengan itu, pada setiap semester satu kajian dikenali sebagai Kajian Kepuasan Pelanggan dilaksanakan di PMM untuk memenuhi Standard MS ISO 9001:2015 selari dengan Klausa 9.1.2. untuk mengenalpasti perkara yang perlu ditambahbaik, dikekalkan atau sebagai makluman kepada organisasi dan seluruh warganya. Terdapat pelbagai dapatan yang diperolehi oleh Jawatankuasa Maklumbalas Pelanggan meliputi pelbagai perkara melibatkan kemudahan, proses PdP, kakitangan dan sebagainya. Ada di antaranya adalah aduan

berulang dan masih terdapat trend yang tidak konsisten bagi sesetengah isu (Nurol Aleyzan, 2020).

Kemudahan fizikal meliputi kemudahan seperti bilik kuliah, dewan kuliah, peralatan sukan dan kokurikulum, makmal, kantin yang digunapakai di PMM sekarang telah berusia lebih 17 tahun. Dalam pada itu, kemudahan lain yang menyokong prestasi organisasi yang diukur melalui maklumbalas yang disampaikan meliputi kemudahan perkhidmatan sokongan seperti perpustakaan, Jabatan Pembangunan dan Hal Ehwal Pelajar (JHEP), Unit Sukan mahupun pihak yang bertanggungjawab secara langsung dengan penilaian dan pengukuran pelajar iaitu Unit Peperiksaan. Maka, terdapat keperluan dan salah satu petunjuk prestasi kecemerlangan organisasi untuk mengenalpasti tahap kepuasan pelanggan terhadap kemudahan dan perkhidmatan yang disediakan oleh PMM. Ini kerana kemudahan dan perkhidmatan berkait dengan kualiti perkhidmatan kepada pelanggan selain kemudahan sumber rujukan. Oleh yang demikian, kajian ini akan terarah kepada kemudahan dan perkhidmatan di jabatan akademik, Unit Peperiksaan, perpustakaan, Jabatan Pembangunan dan Hal Ehwal Pelajar serta Unit Sukan, Kokurikulum & Kebudayaan.

1.3 Objektif Kajian

Objektif kajian ini adalah untuk:

- i. Menentukan tahap kepuasan pelajar terhadap kemudahan fizikal di jabatan akademik di Politeknik Merlimau.
- ii. Menentukan tahap kepuasan pelajar terhadap perkhidmatan sokongan akademik di Politeknik Merlimau.

1.4 Persoalan Kajian

Persoalan kajian ialah:

- i. Apakah tahap kepuasan pelajar terhadap terhadap kemudahan fizikal di jabatan akademik di Politeknik Merlimau?
- ii. Apakah tahap kepuasan pelajar terhadap perkhidmatan sokongan akademik di Politeknik Merlimau?

1.5 Limitasi Kajian

Terdapat beberapa kekangan yang dihadapi semasa menjalankan kajiselidik ini, antaranya adalah :

- i. Maklum balas daripada sampel pelajar melebihi tempoh masa yang telah ditetapkan.
- ii. Urusetia Maklumbalas Pelanggan menghadapi kekangan masa dalam menyiapkan analisis kaji selidik ini.
- iii. Responden mengisi bahagian cadangan atau komen secara umum dan tidak menyatakan secara khusus.
- iv. Terdapat item-item tertentu dalam soal selidik yang tiada kaitan dengan pelajar.

1.6 Kepentingan Kajian

Kajian ini dilaksanakan untuk mengenalpasti tahap kepuasan pelajar terhadap kemudahan dan perkhidmatan yang ditawarkan di Politeknik Merlimau. Dapatan diperolehi akan memberikan input kepada pihak pengurusan untuk melaksanakan tindakan penambahbaikan yang berterusan dan penyelenggaraan berkala bagi meningkatkan kualiti dan tahap kepuasan pelanggan yang merupakan aspek penting dalam meningkatkan imej PMM. Dalam pada itu adalah diharapkan dapatan ini meningkatkan kualiti keselesaan kepada pelajar seterusnya melahirkan graduan yang berkualiti hasil persekitaran yang kondusif terutama kemudahan dan perkhidmatan melibatkan tempat kuliah, koleksi buku, hubungan dan maklumbalas dengan petugas yang sangat membantu dan pengalaman pembelajaran (Yusoff, 2015).

2. Sorotan Literatur

Kepuasan pelanggan adalah ukuran atau penanda aras terhadap produk dan perkhidmatan yang ditawarkan oleh organisasi samada memenuhi atau melebihi harapan pelanggan. Menurut Iry, (2018), kepuasan pelanggan adalah perasaan keseronokan atau kekecewaan seseorang yang muncul setelah membandingkan prestasi atau hasil sesuatu produk dengan persepsi seperti mana yang diinginkan. Sekiranya prestasi di bawah jangkaan, maka pelanggan tidak berpuas hati, jika memenuhi jangkaan maka pelanggan akan berpuas hati dan jika prestasi melebihi jangkaan maka pelanggan akan sangat puas hati dan kembali lagi untuk membeli produk yang dihasilkan oleh organisasi.

Di dalam bidang pendidikan, pengukuran kepuasan pelajar sebagai pelanggan merupakan elemen penting dalam menyediakan perkhidmatan yang lebih baik, lebih efisien dan lebih berkesan. Sekiranya pelanggan tidak berpuas hati dengan perkhidmatan yang diberikan, maka perkhidmatan tersebut mungkin tidak berkesan dan tidak cekap yang akan menjurus kepada pemberhentian operasi di dalam jangka masa panjang (Iry, 2018).

Antara aspek yang perlu diambil kira dalam bidang pendidikan adalah dari aspek kemudahan dan perkhidmatan pengajaran dan pembelajaran (PdP) yang disediakan oleh institusi kepada pelajar sebagai pelanggan (W. Jaffar. W. N. et. al., (2005) dalam Nurul 'Ain, (2016)). Antaranya adalah seperti bilik kuliah/dewan kuliah/makmal/bengkel, perpustakaan, kafeteria, bahagian peperiksaan, pejabat antarabangsa, sukan serta institusi itu sendiri.

Agensi Kelayakan Malaysia (MQA) (2010) telah menetapkan bahawa sesebuah Pemberi Pendidikan Tinggi (PPT) perlu menyediakan sumber pendidikan yang secukupnya untuk menyokong segala kegiatan pengajaran-pembelajaran sesuatu program. Sumber ini termasuklah infrastruktur fizikal seperti ruang dan kelengkapan pembelajaran kumpulan besar mahupun kecil (perpustakaan atau pusat sumber, dewan kuliah, auditorium dan bilik tutorial); kelas-kelas praktikal (makmal sains dan komputer, bengkel dan studio), pembelajaran klinikal (seperti hospital dan klinik), khidmat sokongan pelajar dan kegiatan kokurikulum.

Antara standard asas bagi kemudahan fizikal yang ditetapkan oleh MQA (2010) adalah setiap program wajib mempunyai kemudahan fizikal dan sumber pendidikan yang mencukupi dan sesuai, mematuhi undang-undang serta peraturan kesihatan dan keselamatan. Perpustakaan pula diwajibkan mempunyai staf yang berkelayakan dan menyimpan bahan rujukan terkini yang mencukupi. Manakala untuk peralatan serta kemudahan latihan, ia wajib disediakan secukupnya bagi program yang berteraskan amali. Selain itu, khidmat sokongan pelajar dan

kegiatan kokurikulum pula memudah cara pembelajaran dan perkembangan peribadi pelajar secara menyeluruh di samping menyumbang dalam pencapaian hasil pembelajaran

Mok S. S. (2008), juga ada menyatakan bahawa bilik darjah yang kondusif, mestilah mempunyai peralatan asas iaitu papan hitam, papan kenyataan, ruang yang selesa, meja dan kerusi untuk tenaga pengajar dan pelajar, almari, penyediaan bahan-bahan bacaan dan bahan bantuan mengajar serta peralatan sokongan serta dihiasi dengan keceriaan dan kebersihan.

Dapatan kajian Syarifah Atifah Tuan Mat Zin (2013) terhadap kemudahan dan perkhidmatan prasarana yang disediakan di Politeknik Banting Selangor (PBS), secara keseluruhan mendapati kemudahan prasarana di PBS berada pada tahap sederhana. Namun begitu, pelajar berpuas hati dengan kemudahan perpustakaan serta berpuas hati dengan persekitaran di bilik kuliah, dewan dan bengkel.

Dari dapatan yang diperolehi oleh Noremy Che Azemi (2010) tahap kepuasan pelajar Politeknik Port Dickson (PPD) terhadap bilik kuliah/dewan kuliah/makmal atau bengkel, perpustakaan serta kemudahan dan perkhidmatan yang disediakan berada pada tahap sederhana. Namun begitu, secara keseluruhannya pelajar-pelajar PPD berpuas hati dengan kemudahan dan perkhidmatan yang disediakan.

Daripada lapan persolan kajian yang dikaji Abd Rahman (2016) terhadap Pusat Sumber Politeknik Tuanku Syed Sirajuddin (PTSS) didapati bahawa tandas, koleksi bahan, sistem peminjaman buku dan Internet berada pada tahap sederhana. Manakala peralatan, loker penyimpanan barang berkunci, perkhidmatan pelanggan dan waktu operasi berada pada tahap yang baik.

Daripada kajian Noorbeha dan Muziah (2020) terhadap kemudahan dan perkhidmatan di Kolej Komuniti Jasin, mendapati bahawa pelajar berpuashati dengan perkhidmatan dan kemudahan perpustakaan serta bilik kuliah di kolej dan kakitangan di Unit Hal-Hal Pelajar serta pejabat pentadbiran memberi layanan yang cepat dan lancar.

Roslinawati (2016) daripada kajiannya mendapati staf sokongan dalam institusi bersedia memberi kerjasama kepada pelajar, mempunyai sikap yang peramah dan mesra serta maklumat yang diperlukan mudah diperolehi dari staf sokongan. Namun begitu, penilaian terhadap kecekapan staf sokongan mendapat skor yang terendah.

3. Metodologi Kajian

Rekabentuk kajian dilaksanakan adalah kajian deskriptif. Pengumpulan data adalah secara kuantitatif melalui kaedah tinjauan dengan menggunakan borang soal selidik sebagai alat untuk mendapatkan maklumat yang diperlukan. Ia lebih berstruktur berbanding kaedah pemerhatian sahaja (Mukesh Kumar, 2013). Pengumpulan data adalah melalui data primer dan sekunder. Populasi kajian adalah terdiri daripada pelajar PMM, sepenuh masa sesi Disember 2019 seramai 4920. Berdasarkan jadual penentuan sampel dalam aktiviti penyelidikan (Robert V. Krejcie, 1970) seramai 357 pelajar telah dipilih secara rawak berlapis sebagai sampel yang terdiri daripada pelajar semester 1 hingga 5 daripada Jabatan Kejuruteraan Awam, Kejuruteraan Elektrik, Kejuruteraan Mekanikal, Perdagangan serta Pelancongan dan Hospitaliti dari jumlah populasi tersebut. Walaubagaimanapun seramai 472 pelajar telah memberikan maklumbalas terhadap kajian ini. Borang soal selidik yang

diedarkan melalui talian ini ditadbir dan diproses dengan menggunakan perisian *Statistical Package for the Social Science (SPSS)* versi 23.0.

Kajian ini menggunakan pemilihan sampel secara rawak berlapis. Persampelan mengikut kaedah ini digunakan kerana penyelidik ingin memastikan bahawa setiap subkumpulan bagi sesuatu populasi kajian terpilih akan diwakili mengikut kadar yang sama atau kadar tertentu (Idris, 2010). Bilangan sampel yang disediakan adalah berdasarkan bilangan pelajar bagi setiap program pengajian yang terdapat di dalam sebuah jabatan akademik di PMM. Populasi ini merujuk kepada bilangan pelajar yang aktif dalam sesi pengajian semasa iaitu Disember 2019.

Item yang dibentuk telah diuji nilai kebolehpercayaannya. Nilai alpha cronbach yang diperolehi melalui kajian rintis ialah 0.98. Ini menunjukkan tahap kebolehpercayaan item adalah baik. Item yang digunapakai telah dibangunkan oleh unit kualiti PMM dan didokumenkan dalam Proses Kerja Maklumbalas Pelanggan PMM (S)-PRO-01. Pengkaji menggunakan pengiraan skor min bagi menganalisis data yang dikumpul. Bagi penentuan tahap dan pengkelasan, tiga skala telah dilakukan iaitu tinggi, sederhana dan rendah seperti dalam Jadual 1 (Abdull Sukor Shaari, 2008).

Jadual 1: Tahap Pengukuran Min dan Penyertaan

Pernyataan	Markat
Rendah	1.00 – 2.00
Sederhana	2.01 -3.00
Tinggi	3.01 – 4.00

Sumber: (Abdull Sukor Shaari, 2008)

4. Analisis Data

Bahagian ini akan membincangkan tentang hasil data yang diperolehi melalui soal selidik yang telah diedarkan kepada responden yang telah dipilih secara rawak berlapis berdasarkan 472 maklumbalas yang diterima dan diproses. Sampel yang diterima melebihi keperluan minimum. Ini menunjukkan bahawa semua pelajar dan pihak pengurusan jabatan akademik sangat memberikan kerjasama yang sangat baik dalam maklum balas terhadap soal selidik yang dijalankan. Bahagian A adalah terdiri dari demografi responden, manakala Bahagian B mewakili aspek kemudahan dan perkhidmatan di jabatan akademik terdiri 8 item utama, unit peperiksaan 5 item, unit perpustakaan 16 item, Jabatan Pembangunan dan Hal Ehwal Pelajar 5 item dan Unit Sukan, Kokurikulum & Kebudayaan 5 item.

4.1 Latar Belakang Responden /Demografi Responden

Responden dalam kajian ini adalah terdiri daripada pelajar sepenuh masa yang aktif bagi sesi Disember 2019. Seramai 472 orang pelajar PMM peringkat Diploma telah memberikan maklum balas terhadap kajian yang dijalankan. Pelajar diberikan satu set soal selidik yang mengandungi 5 aspek yang dikaji iaitu kemudahan dan perkhidmatan jabatan akademik seperti bilik kuliah/dewan kuliah/bengkel/makmal, perkhidmatan unit peperiksaan, perpustakaan, jabatan pembangunan & hal ehwal pelajar dan unit sukan, kokurikulum & kebudayaan. Pecahan responden adalah seperti rajah di bawah.



Rajah 1: Pecahan Responden Mengikut Jabatan

Berdasarkan Rajah 1, menunjukkan Jabatan Perdagangan (JP) dan Jabatan Pelancongan dan Hospitaliti (JPH) mewakili 24 peratus dari keseluruhan responden dengan jumlah pelajar masing-masing 115 dan 112 orang. 23 peratus diwakili oleh responden dari Jabatan Kejuruteraan Awam (JKA) iaitu seramai 109 orang, manakala responden dari Jabatan kejuruteraan Elektrik (JKE) seramai 60 orang, Jabatan Kejuruteraan Mekanikal (JKM), 65 orang dan Jabatan Matematik, Sains dan Komputer (JMSK) hanya 11 orang. Ini kerana JMSK hanya mewakili pelajar Pra Diploma sahaja.

4.2 Analisis Dapatan Kajian

Bahagian ini akan menjelaskan hasil dapatan kajian yang meliputi ketersediaan kemudahan fizikal di jabatan akademik dan perkhidmatan sokongan akademik dalam melancarkan pelaksanaan proses PdP dilaksanakan.

4.2.1 Bilik Kuliah/ Dewan Kuliah/ Makmal/ Bengkel di Jabatan Akademik

Dapatan kepuasan pelanggan terhadap ketersediaan kemudahan dan perkhidmatan di jabatan akademik untuk sesi pengajaran dan pembelajaran adalah ditunjukkan seperti Jadual 2 di bawah.

Jadual 2: Dapatan Kepuasan Pelanggan bagi Bilik Kuliah/ Dewan Kuliah/ Makmal/ Bengkel di Jabatan Akademik

Bil	JABATAN AKADEMIK	Skor Min Dis 2019		Tafsiran
		Skor	Min	
1	Peralatan asas di bilik kuliah/dewan kuliah mencukupi untuk keperluan pembelajaran			
	1.1 Kerusi	4.25	Tinggi	
	1.2 Meja	4.25	Tinggi	
2	1.3 Papan putih	4.34	Tinggi	
	Peralatan Asas di makmal/bengkel mencukupi untuk keperluan pembelajaran			
	2.1 Kerusi	4.15	Tinggi	
	2.2 Meja	4.24	Tinggi	
3	2.3 Keperluan Amali	4.03	Tinggi	
	Peralatan asas di bilik kuliah/dewan kuliah beroperasi sepenuhnya untuk keperluan pembelajaran			
	3.1 Kerusi	4.22	Tinggi	
	3.2 Meja	4.22	Tinggi	
	3.3 Papan putih	4.27	Tinggi	
4	Peralatan asas di makmal / bengkel beroperasi sepenuhnya untuk keperluan pembelajaran			
	4.1 Kerusi	4.16	Tinggi	
	4.2 Meja	4.25	Tinggi	
5	4.3 Keperluan Amali	4.07	Tinggi	
	Persekitaran tempat pembelajaran kondusif			
	5.1 Bilik Kuliah	4.18	Tinggi	
	5.2 Dewan Kuliah	4.11	Tinggi	
6	5.3 Makmal/ Bengkel	4.15	Tinggi	
	Jadual Waktu Jabatan dipamerkan di papan kenyataan			

	6.1 Bilik Kuliah	4.11	Tinggi
	6.2 Dewan Kuliah	4.10	Tinggi
	6.3 Makmal / Bengkel	4.07	Tinggi
7	Peraturan keselamatan penggunaan makmal bengkel Dipamerkan	4.28	Tinggi
8	Keseluruhan tahap perkhidmatan yang telah diberikan Memuaskan	4.12	Tinggi

Berdasarkan Jadual 2 di atas, menunjukkan bahawa secara keseluruhannya semua item yang dinilai menunjukkan skor min yang tinggi iaitu melebihi 4.03 dan ke atas. Namun, tidak ada item yang mencapai 5.0 yang menunjukkan kepuasan secara total. Skor min tertinggi ditunjukkan oleh item 1.3 iaitu peralatan papan putih mencukupi di bilik kuliah/dewan kuliah semasa proses PdP. Skor min kedua tertinggi ialah item peraturan keselamatan penggunaan makmal bengkel dipamerkan dengan skor min 4.28. Item papan putih dapat digunakan di bilik kuliah/dewan kuliah menunjukkan skor yang tinggi juga iaitu 4.27. Manakala item 1.1, 1.2 dan 4.2 menunjukkan skor min 4.25 antara yang tertinggi. Dapatan kepuasan pelanggan bagi item 5, persekitaran tempat pembelajaran kondusif juga berbeza untuk bilik kuliah (4.18), dewan kuliah (4.11) dan makmal/bengkel (4.15). Skor min yang rendah di bawah 4.10 ditunjukkan pada item 2.3, 4.3 dan 6.3 iaitu antara 4.03 hingga 4.07. Item 2.3, peralatan asas untuk keperluan amali di makmal/bengkel mencukupi untuk keperluan pembelajaran mencapai skor min kepuasan pelanggan yang paling rendah iaitu 4.03.

4.2.2 Unit Peperiksaan

Keseluruhan terdapat 5 item yang dinilai untuk mengenalpasti tahap kepuasan pelanggan di PMM. Ini ditunjukkan oleh Jadual 3 di bawah.

Jadual 3: Dapatan Kepuasan Pelanggan bagi Unit Peperiksaan

		Skor Min Dis 2019	Tafsiran
Bil	UNIT PEPERIKSAAN		
1	Staf yang bertugas di kaunter menunjukkan sikap mesra	4.01	Tinggi
2	Tempoh masa bagi urusan di kaunter cepat	4.02	Tinggi
3	Staf sentiasa bersedia membantu pelanggan sepanjang berurusan	4.12	Tinggi
4	Maklumat berkaitan peperiksaan mudah diperolehi	4.22	Tinggi
5	Keseluruhan tahap perkhidmatan yang telah diberikan memuaskan	4.14	Tinggi

Dapatan dari Jadual 3 di atas menunjukkan bahawa skor keseluruhan adalah pada tahap tinggi. Nilai skor min tertinggi ditunjukkan pada item 4 iaitu maklumat berkaitan peperiksaan mudah diperolehi dengan nilai skor min 4.22. Skor min kedua tertinggi ialah pada item 5 tentang keseluruhan tahap perkhidmatan yang telah diberikan memuaskan iaitu 4.14. Ini disusuli dengan item 3 dengan nilai skor 4.12. Tempoh masa bagi urusan di kaunter cepat iaitu item 2 mencapai skor min 4.02. Skor min yang paling rendah ditunjukkan oleh

item 1 iaitu nilai skor min 4.01 bagi elemen staf yang bertugas di kaunter menunjukkan sikap mesra.

4.2.3 Perpustakaan

Ketersediaan dan kemudahan unit perpustakaan juga tidak terkecuali amat penting untuk memenuhi kepuasan pelanggan kerana unit ini terlibat secara langsung dalam menyediakan perkhidmatan semasa proses pengajaran dan pembelajaran berlangsung terutama penggunaan bahan rujukan. Terdapat 16 item yang diukur untuk menilai tahap kepuasan pelanggan di PMM. Ini ditunjukkan seperti Jadual 4 di bawah.

Jadual 4: Dapatan Kepuasan Pelanggan bagi Perpustakaan

		Skor Min Dis 2019	Tafsiran
Bil	UNIT PERPUSTAKAAN		
1	Staf yang bertugas di kaunter menunjukkan sikap mesra	4.06	Tinggi
2	Tempoh masa bagi urusan di kaunter cepat	4.19	Tinggi
3	Kakitangan perpustakaan cekap ketika menjalankan tugas	4.16	Tinggi
4	<i>Online Public Access Catalog</i> (OPAC) mudah digunakan	4.10	Tinggi
5	Maklumat yang ada dalam OPAC dapat membantu pencarian bahan yang diperlukan	4.15	Tinggi
6	Makluman dan pandu arah mengenai perkhidmatan jelas	4.19	Tinggi
7	Makluman dan pandu arah mengenai perkhidmatan mencukupi	4.21	Tinggi
8	Waktu operasi perpustakaan bersesuaian	4.11	Tinggi
9	Koleksi di perpustakaan mencukupi untuk rujukan	4.15	Tinggi
10	Buku di rak disusun secara teratur	4.17	Tinggi
11	Buku yang berada di rak mudah dicari	4.13	Tinggi
12	Proses pinjaman dan pemulangan dapat dilakukan dengan mudah	4.24	Tinggi
13	Persekitaran di perpustakaan adalah kondusif	4.25	Tinggi
14	Keseluruhan tahap perkhidmatan yang telah diberikan memuaskan	4.18	Tinggi
15	Layanan yang diberikan di kaunter adalah mesra pelanggan	4.14	Tinggi
16	Tempoh masa bagi urusan di kaunter cepat	4.24	Tinggi

Secara keseluruhannya, dari Jadual 4 menunjukkan bahawa tahap kepuasan pelanggan berkaitan perkhidmatan oleh unit perpustakaan adalah pada tahap tinggi. Berdasarkan 16 item dalam soal selidik skor min tertinggi adalah bagi item 13 iaitu 4.25 yang menyatakan persekitaran di perpustakaan adalah kondusif. Skor min kedua tertinggi bagi unit perpustakaan adalah dengan skor min 4.24 adalah bagi item 12, proses pinjaman dan pemulangan dapat dilakukan dengan mudah dan item 16, tempoh masa bagi urusan di kaunter cepat. Item 7, makluman dan pandu arah mengenai perkhidmatan mencukupi memberikan skor min pada 4.21. Item lain menunjukkan skor di bawah 4.21, namun masih pada tahap tinggi. Skor min antara yang terendah adalah bagi item 1, staf yang bertugas di kaunter menunjukkan sikap mesra iaitu pada nilai min 4.06. Item kedua terendah ialah pada item 4, *Online Public Access Catalog* (OPAC) mudah digunakan iaitu 4.10. Penggunaan OPAC adalah aplikasi carian buku secara dalam talian.

4.2.4 Jabatan Pembangunan dan Hal Ehwal Pelajar

Jadual 5 di bawah menunjukkan tahap kepuasan pelanggan terhadap Jabatan Pembangunan dan Hal Ehwal Pelajar.

Jadual 5: Dapatan Kepuasan Pelanggan bagi Jabatan Pembangunan dan Hal Ehwal Pelajar

		Skor Min Dis 2019	Tafsiran
Bil	JABATAN PEMBANGUNAN DAN HAL EHWAL PELAJAR		
1.	Layanan yang diberikan di kaunter adalah mesra pelanggan	4.23	Tinggi
2.	Tempoh masa bagi urusan di kaunter cepat	4.21	Tinggi
3.	Maklumat berkaitan hal-hal pelajar mudah diperolehi	4.15	Tinggi
4.	Maklumat yang diterima dari hal-hal pelajar adalah tepat	4.18	Tinggi
5.	Keseluruhan tahap perkhidmatan yang telah diberikan memuaskan	4.11	Tinggi

Secara keseluruhan, catatan skor min atas paras 3.01 untuk setiap item. Ini menunjukkan layanan yang diberikan di kaunter adalah mesra pelanggan dan maklumat yang diterima dari hal-hal pelajar adalah tepat.

4.2.5 Unit Sukan, Kokurikulum & Kebudayaan

Jadual 6 menunjukkan nilai skor min unit sukan, kokurikulum dan kebudayaan bagi 5 item yang ditanya.

Jadual 6: Dapatan Kepuasan Pelanggan bagi Unit Sukan, Kokurikulum & Kebudayaan

		Skor Min Dis 2019	Tafsiran
Bil	UNIT SUKAN, KOKURIKULUM DAN KEBUDAYAAN		
1.	Tempoh masa bagi urusan di kaunter cepat	4.16	Tinggi

2.	Peralatan sukan dan rekreasi adalah mencukupi	4.21	Tinggi
3.	Kemudahan peralatan sukan dan rekreasi adalah mencukupi	4.17	Tinggi
4.	Pegawai berkaitan mudah ditemui	4.09	Tinggi
5.	Keseluruhan tahap perkhidmatan yang telah diberikan memuaskan	4.03	Tinggi

Secara keseluruhannya, 5 item mencatatkan nilai skor min yang tinggi. Walaupun skor min masih menunjukkan pada tahap yang tinggi iaitu 4.00 ke atas, 2 item yang perlu diambil perhatian iaitu pegawai berkaitan sukar ditemui dan tahap keseluruhan perkhidmatan perlu dipertingkatkan

5. Perbincangan Dapatan Dan Rumusan

Daripada hasil analisis yang telah dijalankan menunjukkan keseluruhannya tahap kepuasan pelajar terhadap kemudahan dan perkhidmatan dalam kalangan pelajar PMM adalah pada tahap yang tinggi. Kemudahan fizikal akademik seperti kerusi, meja, papan putih di bilik kuliah/dewan kuliah/makmal dan bengkel adalah mencukupi, beroperasi sepenuhnya dan memuaskan. Selain itu, perkhidmatan di unit-unit dan persekitaran tempat pembelajaran yang ditawarkan adalah memuaskan dan kondusif. Dapatan ini kurang menyamai kajian yang diperolehi oleh Noremy Che Azemi (2010) yang hanya pada tahap kepuasan yang sederhana. Namun begitu, keperluan amali di makmal/bengkel di PMM secara relatif adalah rendah berbanding item lain tetapi masih pada tahap yang memuaskan. Jelas menunjukkan bahawa PMM komited dalam menawarkan kemudahan dan perkhidmatan yang mencukupi kepada pelajar sebagai pelanggan institusi seperti yang telah ditetapkan oleh MQA (2010) serta pandangan daripada Mok S.S (2008) dan W. Jaffar. W. N. et. al., (2005) dalam Nurul 'Ain (2016).

Sementara itu, kemudahan dan persekitaran di perpustakaan PMM adalah kondusif, mudah, cepat dan mencukupi. Penelitian ini adalah kurang selari dari data kajian Syarifah Atifah Tuan Mat Zin (2013) dan Abd Rahman (2016). Ini menunjukkan bahawa kemudahan dan perkhidmatan yang ditawarkan di perpustakaan PMM juga mencapai standard asas kemudahan seperti yang telah disarankan oleh MQA (2010) dan W. Jaffar. W. N. et. al., (2005) dalam Nurul 'Ain (2016).

Hasil dapatan juga mendapati bahawa urusan pelajar berkaitan peperiksaan, hal ehwal pelajar, sukan, kokurikulum dan kebudayaan mudah diperolehi serta staf sokongan bersedia membantu pelanggan semasa berurusan di kaunter. Dapatan kajian ini menyamai kajian Roslinawati (2016). Namun begitu, kesediaan pegawai untuk ditemui, tempoh masa urusan di kaunter, kecekapan staf dan layanan mesra staf tidak boleh dipandang remeh bagi menjamin kualiti kemudahan dan perkhidmatan di unit peperiksaan, perpustakaan, jabatan pembangunan & hal ehwal pelajar serta di unit sukan, kokurikulum & kebudayaan. Penelitian ini adalah konsisten dengan dapatan kajian Roslinawati (2016) dan Noorbeha & Muziah (2018).

Dapatan ini keseluruhannya mendapati, kemudahan fizikal di jabatan akademik dan perkhidmatan sokongan akademik (perpustakaan, unit peperiksaan, jabatan pembangunan dan hal ehwal pelajar serta unit sukan, kokurikulum dan kebudayaan) di PMM berada pada tahap

yang baik yang seterusnya telah memberikan tahap kepuasan yang tinggi kepada pelajar. Ini secara tidak langsung akan meningkatkan motivasi (Ling Y. L., 2015) kepada pelajar dan rasa sokongan kepada kepimpinan dan pengurusan organisasi PMM yang komited dan prihatin terhadap segala keperluan pelajar dan melancarkan proses PdP dengan berkesan. Dapatan ini secara tidak langsung akan mewujudkan satu implikasi baru iaitu persekitaran yang kondusif dan kepercayaan (Ling, 2015) dalam hubungan antara pihak pengurusan dan pemegang taruh.

6. Cadangan dan Kesimpulan

Berdasarkan perbincangan di atas, dapat disimpulkan bahawa kemudahan dan perkhidmatan yang ditawarkan di PMM adalah pada tahap yang baik. Sehubungan itu, pihak pengurusan PMM perlu terus melakukan kajian, pemerhatian, pemantauan, penyelenggaraan dan penambahbaikan yang berterusan dari masa ke semasa. Kajian perlu melibatkan semua pelanggan yang menggunakan kemudahan dan perkhidmatan secara langsung atau tidak langsung. Ia adalah untuk memastikan keperluan dan kehendak pelanggan akan datang dipenuhi sebagaimana yang digariskan oleh Standard MS ISO 9001: 2015 dan EOMS ISO 21001:2018. Selain untuk mengekalkan tahap kepuasan pelanggan yang berterusan, ia juga bertujuan untuk mendapatkan kepercayaan pelanggan, menjaga kebajikan pelajar dan seterusnya membantu melancarkan proses PdP yang menjadi tunjang utama politeknik. Elemen lain juga perlu dan boleh diberi perhatian seperti perkhidmatan berorientasikan digital, kemudahan tersedia bagi orang kelainan upaya (OKU), penilaian secara dalam talian, perkhidmatan sokongan psikologi dan kesihatan mental, klinik untuk kemudahan rawatan dan sebagainya. Ini kerana persekitaran sekarang telah berubah dengan pantas yang memberi tekanan dalam pelaksanaan aktiviti pembelajaran dan pengajaran. Dalam pada itu, sebagai sokongan kepada maklumbalas, satu pengiktirafan atau penghargaan perlu diberikan kepada pihak yang menyampaikan mesej atau idea penambahbaikan mahupun kepada pihak yang telah memberikan perkhidmatan. Ia sebagai satu bentuk dorongan motivasi dan untuk mengekalkan prestasi yang menyokong sistem kualiti politeknik.

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CONSUMERS PERCEPTION ON *HALAL* LABELLING AND PURCHASING OF MANUFACTURED FOOD

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Abstract This study is about the discovery of the consumer's perception in halal labelling and packaging of manufactured food. In today's modern world, consumer's lifestyle has emerged especially in attitude, subjective norms and perceived behavioral control of consuming food product with halal certification and halal logo. This situation has occurred because people are beginning to be aware of the importance of consuming and purchasing health food in their daily life. The study aims to identify factor such as attitude and perception, purchasers and hygiene and cleanliness and its input towards the consumer's perception in halal labelling and packaging of manufactured food. The study used was being conducted using the descriptive research and the technique used in convenience sampling via questionnaires distribution to the respondents in Malaysia. The finding of the study indicated that attitude and perception and hygiene a cleanliness the customer perception intention in purchasing halal food while the purchased was not influenced the customer perception intention in purchasing halal food. The consumption of halal food for Muslims is different from the consumption of halal food for non-Muslims. The religious concern and hygiene and cleanliness concepts associated to halal foods probably make this decision more important for the consumer especially Muslims and thereby lead to different decision-making processes. In addition, it can be observed that consumers are very sensitive to halal information and any information or knowledge that might result in loss of their self-belief which might affect their planned purchasing decision.

Keywords Consumer, Perception, Behavior, Halal Logo, Halal Product

1. Introduction

Malaysia is a harmony country where it is popular for its multi-racial, multi-cultural and multi-religious society. Islam is the official religion of the country but the freedom of choosing own religion is very much welcome. Muslim population represent up to one quarter of the world's population. It is one the highest rising religion on earth both by birth and adoption (Shah Alam and Sayuti, 2011).

Religion has been known as one of the vital and crucial factors in the cultural environment and development of human beings since religion has an effect on the way in which people act and react towards the surroundings. It is apparently believed that it may have an effect on an individual's perception as well as the thinking style. One of the basic yet important elements (the others are *Tawheed* or Unity of God and *shariah* or the Islamic law) of the Islamic religion is *Akhlaq* (or moral and values). It gives guidance and outline that forms the

moral and ethical behavior of Muslims in the behavior of all aspects of their life. Moreover, it is observed that the Holy *Quran* remains as the main source of *shariah* where it has obviously provided or accentuate Muslims with the substantial and perfect set of values that remain unchanged under all situations or conditions, unlike other cultural factors that may be influenced by changes in the economic and political. *Shariah* Law means the Islamic Law is based on the one and only Al-Quran, “Al-Hadith” (Traditions of the Messenger of Allah), “Lima” (Consensus of Islamic Law) and “*Qiyas*” (deduction or analogy). In the Quran (*Quran is the holy book of Islam, the exact words of God [revelations]*), God commands Muslims to eat all that is *halal*. One of the many verses in the Quran which convey this command is as follows: “*O ye people! Eat of what is on earth, Lawful and good; and do not follow the footsteps of the evil one, for he is to you an avowed enemy*”. (Surah Al-Baqarah:168). A particular food becomes lawful or unlawful by *Shariah* or Islamic Law if it is considered so through any one of the above mentions sources.

Food consumed by Muslims must meet the Islamic dietary code known as *halal*. *Halal* is an Arabic word meaning lawful or permitted. Therefore, *halal* foods are food permissible under Islamic law. The opposite of *halal* is *haram*, which means unlawful or prohibited (Riaz and Chaudry, 2004). in Malaysia, Muslim consumers faced with a broad selection of products and services. These broad selections offer many different brands either locally or internationally brand names. Lately we have seen some of the local brands come into view to public as 'Islamic' brands' via their creative packaging and labeling works (Shafie and Othman, 2006). This can be considered as indirectly signal to their primary target, the Muslim consumers' on the *halal* status of their products. Eventually, owing to multicultural nature of Malaysia, not all local companies place the 'Islamic' characteristic on their packaging and labeling of the products (Shah Alam and Sayuti, 2011).

Halal industry has become one of the new growth sectors in Malaysia's industrialized sector and is the greatest growing global business across the world. It is an emerging market force that is attracting non-Muslims with its wholesome, hygienic and contamination-free principles is food production. According to Invest Penang's website, the global value for trade of *Halal* foods and non-food products is estimated at USD2.1 trillion annually. These figures, of course, do not take into account the growing numbers of non-Muslims who eat *halal* food. *Halal* market is too huge to determine, and it is growing all the time.

1.1 Problem Statement

Religion is a system of beliefs where it is initially practiced by groups of people who interprets and responds to what they feel as supernatural and sacred. Most religion prescribe or forbid certain behavior including choosing the right food products. Therefore, companies can inspire and increase the public trust and confidence in their brands and increase consumer loyalty through *halal* labeling, commonly known as declaration of belief.

The introduction of *halal* logo has developed the significance of consuming products or appealing in services that follow Islamic guidelines as well as the significant principles. *Halal* logo also declares restaurant which are allowable to be owned by Muslims. The aim of this approval is to point out to their target consumers that their products meet the Islamic standards. This absolutely will generate advantages to the manufacturers compared to its competitors where they might not have *halal* certification. Nevertheless, the lack of enforcement and observing in the practice of certified *halal* logo has caused the public to inquire the validity of *halal* logo on some of the products or services. This is true as for the

halal labeled food where actually no other parties can recommend or issue *halal* certificates or make self-declarations concerning the *halal*. As consumers are not in a position to accurately assess *halal* monitoring, they rely on the food manufacturing industry and government to instill the confidence for them.

The problem of Muslim consumers being deceived by immoral manufacturers using prohibited ingredients in their products and services with *halal* certification must be solved to gain the Muslim confidence in acquiring the products and services. Several un-responsible manufacturers have been caught either using the fraud *halal* logo or misrepresentation of the actual ingredients have made the *halal* logo questionable. There is a need for the determination of the perceptions of *halal* logo of the Muslim buyers on the way they actually make their purchase decisions in order to identify whether the *halal* logo do give an impact to the decision making process of a purchase. Looking to the scenario, it allows researcher to examine the consumer's perception on *halal* manufactured food products purchase intention, as well as applying the Theory of Planned to the study.

The general objective of this study is to determine the effectiveness of *halal* labeled and packaging of manufactured food and intention in making purchasing among Malaysian consumers.

1.2 Theoretical Framework

A theoretical framework is a conceptual model of how one theorized or makes logical sense of relationship among the several factors that have been identified as important to the problem (Sekaran 2003). Independent variables influence user attitudes toward *halal* labeling and packaging manufactured product. Below is a proposed model of how these variables affect consumer perception toward *halal* labeling and packaging manufactured product.

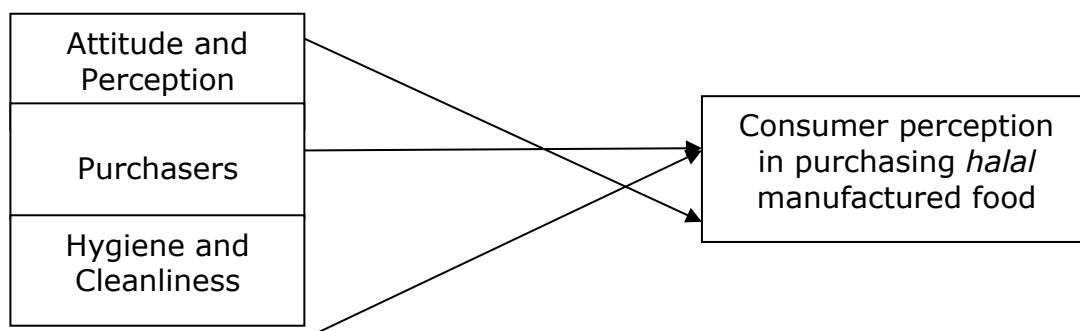


Figure 1.1 : Adapted from Theory of Planned Behavior (Ajzen, 1988)

Literature Review

Ajzen and Fishbein, (2011) defined attitude toward the behavior is determined by a person's evaluation of those outcomes as favorable and unfavorable (Alam and Sayuti, 2011; Ali et al., 2017). Previous literature has suggested that attitude is one of the leading factors in determining purchasing behaviours (Cazacu et al., 2014). For example, a significant relationship between attitude and *halal* food purchasing intention was found by Bonne and Verbeke (2006), Alam and Sayuti (2011) and Ali et al. (2017).

Perception is being defined as the process by which an individual receives, select, and interprets stimuli to form a meaningful and coherent picture of the world (Schiffman et al.,2005). Consumer perceptions are crucial to marketers because it will give an impact on the success and failure of the products in the marketplace. Attitude is being defined as the way consumers think and feel about the product and act towards some aspect of the product, company, services or brands. Usually, attitudes are constant with behaviors, in this case; the consumers purchase behavior toward specific incentive (Schiffman et al., 2005). Different people will eventually have different perception or mindset towards halal manufactured food. Consumers form perceptions of various food products through their comprehension of food *halal* label and the packaging itself as it attracts their attention or this is called as the first impression. These perceptions directly influence their buying decision at the point of purchase, which stresses the importance knowledge of *halal* manufactured food.

Subjective norms can be JAKIM which are some motivations from others beliefs or feelings about confidence on *halal* logo (Alam and Sayuti, 2011). They are perceptions on how others will influence the outcome of the behavior for example how food manufacturers are able to inspire consumers into purchasing *halal* labeled food while the food products are carrying *halal* logo. It is important to make sure that subjective norms are formed only in relation to give significant or confident opinions of buyer behavior. For example, if consumers think that *halal* products are high-quality, consumers will have more intention to purchase that products. Therefore, this shows that subjective norm influences intention to perform a particular behavior. Teo and Lee, (2010) supports the definition from TPB by defining subjective norm as "one's perception of whether people important to the individual think the behavior should be performed".

The health body is one of the favors granted by Allah to human being, and He asks them to look after it. Allah says: "Eat and drink and be not prodigal"(7:31). This is a command to people to eat before hungry and stop before full. This is to maintain the health of the individual.

Food hygiene is essential to ensure safe and cleanliness and appropriate preparation for consumption. The food manufacturers need to make sure that consumers are provided with clear information and easy to understand on the packaging label. Food manufacturers also need to ensure food preparation, handling and storage of food is handled properly in order to prevent contamination of food borne pathogens. Food hygiene practices should apply all over the food supply chain from primary producer to the ending phase of consumption; setting out the key hygienic controls and conditions at each stage of production. Consumers on the other hand should be familiar with their responsibility by following significant directions and applying suitable food hygiene procedures.

Ajzen and Fishbein (1975), define intention as a person's location on a subjective probability dimension involving a relation between himself and some action. Armitage and Conner (1999) stated that intention is known as the motivation for individuals to attach in a certain behavior. Furthermore, according to the TPB model, the immediate determinant of a behavior is the individual's intention to carry out or not that behavior. Behavioral intention is defined as the individual's subjective probability that he or she will connect in that behavior (Ajzen and Fishbein, 1975). Referring to theory of reasoned action (TRA), a person's intention is a purpose of two fundamental determinants, one personal in nature and the other reflecting social influence. The personal is the individual's positive or negative assessment of performing the behavior. This factor is termed attitude toward the behavior (Ajzen and

Fishbein, 1975). Meanwhile, TRA and TPB demonstrate person's behavioral intention as a combination of a three basic determinants; attitude towards the behavior, subjective norm, and perceived behavioral control (Randall and Gibson, 1991).

Personal characteristics like age, stage in life cycle, occupation, economic circumstances, life-style, personality and self-concept all influence buying decision of an individual. Age and stage in life cycle exerts tremendous pressure on a person's consideration to pursue the purchasing. Occupation and economic status have great bearing on borrowing and spending power, and the ability to save. An individual buying choice can be influenced by personality and self-concept. Personal traits like ambition, confidence, adaptability and sociability can strongly drive a person to decide the purchasing.

Methodology

In this research, the non-probability sampling was being used where the researcher decided on what elements to include in the sample. The sampling method used was convenience samplings which are by sending emails to personal contacts and also by distributing the questionnaire where sampling from both Muslim and non-Muslim consumers was conducted at every states in Malaysia and respondent's participation are based on voluntary basis (self-administered). The sampling size used in this study is 400. The sample size represents the returned questionnaires collected after the sampling procedures. The respondents were the customers from Malaysia age 18 and above. A five-point Likert-scale ranging from 'Strongly Disagree' to 'Strongly Agree' was used to indicate the level of agreement with several statements that reflected these factors. The five-point Likert-scale being asked in Section B and Section C. The questions for Section B were divided into three different issues given to the respondents. The issues are statements that reveal the attitude and consumer perception while the product was carrying *halal* logo and questions addressing on hygiene and clean concept in *halal* labeling and packaging manufactured food and consumer perception into purchasing *halal* food. Section C, the questions that reflects any actions you may have with respect to the best described your opinion being asked.

In this study, the Cronbach's Alpha was used to measure the reliability of 39 relevant variables that are being used in factor analysis. The Cronbach's alpha estimated for attitude was 0.949, purchasers was 0.609, hygiene and cleanliness was 0.938, and consumer perception in behavioral intention scale was 0.949. As the Cronbach's alpha in this study were all much higher than 0.6, the constructs were therefore deemed to have adequate reliability. It can be concluded that dimension used in the study are reliable and all the items filtered are consistent. The stated preference approach was considered in this section. Data were analyzed using descriptive analysis and Pearson correlation analysis. Data were analyzed using SPSS and were presented using correlation.

Analysis of Data

4.1 Background Profile of Respondents

Frequency analysis was used to provide information about the data set. It is to review the demographic profile of the respondent such as gender, age, highest educational level attained, race, residential area, state originally from, occupation and race. The finding shows the numbers of 107 (27.7 percent) respondents were males as compared to females 270 (72.3 percent). Food choices and food consumption are also driven by age. As such, most of the

survey respondents (53.1 percent) were between 31 to 40 years, while 33.4 percent (129) were between 21 to 30 years and 11.4 percent (44) were between 41 to 50 years. The smaller group of age belongs to above 51 years (7, 1.8 percent) and below 20 years (1, 0.03 percent). In this study the highest educational level attained were first degree, 43.5 percent (168), master degree 24.1 percent (93), diploma 16.3 percent (63), SPM 11.7 percent (45), STPM 2.1 percent (8) and the 'others' category included certificates and PHD were 2.3 percent (9).

Malaysia's ethnically diverse population of around 23.88 million consists of three major races: Malay, Chinese and Indian as well as other citizens. Majority of the respondents were Malays (330 persons, 85.5 percent), followed by Chinese (39 persons, 10.1 percent), Indians 6 (1.6 percent) and others 11 (2.8 percent). Since Muslims are the largest group of consumers in Malaysia, the importance of *halal* products is a huge issue. In this study most of the respondents were from urban and suburb which were 220 (57 percent) and 166 (43 percent) respectively.

The majority respondents have working experiences in various positions such as working for government sector 40.9 percent (198), private sector 42.2 percent (163) and students 12.7 percent (49). The remainders fell into the unemployed 1.6 percent (6) and the 'others' category (2.6 percent, 10) which included retirees, businessman and housewives. As for the religion, the compositions are as follows; Muslims 337 (87.3 percent), Christians 14 (3.6 percent), Buddhists 29 (7.5 percent), Hindus 5 (1.3 percent) and others 1 (0.03 percent).

4.2 Distribution of Consumers Based On State of Origin

The distribution of respondents based on their location of states shows that each district collected a total of 337 Muslim respondents and 49 non-Muslim respondents to find their Perception in *Halal* Labelling and Packaging of Manufactured Food. Perlis contributed (1%), Kedah (23.6%), Pulau Pinang (6.2%), Perak (14.5%), Selangor (14.8%), Kuala Lumpur (3.9%), Negeri Sembilan (3.9%), Malacca (3.1%), Johor (9.8%), Kelantan (9.1%), Terengganu (3.6%), Pahang (2.6%), Sabah (3.4%) and Sarawak (0.05%).

4.3 Perceptions in *Halal* Labelling and Packaging Among Consumers Respondent

A total of 84.7% of respondents stated that they are likely to choose *halal* products. The results showed that majority of consumers (86.8%) were very concerned about the religious obligations when purchasing the food products. Most of the respondents (83.5) always looked for *halal* logo during buying any kind of *halal* food. The results of the study also show that 79.1% of the respondents always be careful when choosing the product with *halal* logo. Moreover, majority of the respondents (86.3%) were very confident with *halalness* of those food products which carry *halal* logo compare to those without *halal* logo. The dependent variable which is consumer perception at high level and total mean is between 4.1244 and 4.3990.

The result shows that the majority of respondents (88.6%) indicated that choosing *halal* product is a good idea. Most of the respondents (84.9%) were aware that *halal* food processed is an important factor for them. Around 84.2% stated that they did check the existence of *halal* logo on food products. Large proportions (88.6%) believed in health benefits of *halal* food. Small groups of 20.5% were not influenced by advertisement on *halalness* of food products. Nearly 79.5% of respondents indicated that they always aware

with the product ingredient. The results of the study also show that majority of respondents (85.5%) perceived that *halal* food are safer. For attitude and perception factor has the higher level of total mean value which is 3.8113. This means that the majority of the respondents are influenced by their attitude in order to have the intention to purchase *halal* products. The mean value for advertisements on *halalness* of food products will influence the purchasing behavior factor that has moderate level which is 3.5492 where other factors have the higher level of total mean value.

For purchasers, the factor also has the higher level of total mean value which is 3.926. This shows that consumers do believe that their subjective norm such as friends and families do influence their intention towards buying *halal* products.

The results of the study show that 87.8% of respondents indicated that beliefs (religion) will help them to choose food products. About 63.7% indicated that product brand is an indicator of *halalness* of products. Majority of the respondents (89.6%) indicated that *halal* logo guarantees that food products are not contaminated with non-*halal* ingredients. Moreover, majority of the respondents (93.8%) were agreed that *halal* logo forced food producers to be transparent on food ingredients and confident (93.3%) with the *Halal* logo is being produced under the “*Halalness*” requirement of Islamic law. Around 78.2% of respondents confident with the international fast food premises and restaurants. However, only 38.2% of the respondents were confident in non-Muslim restaurants with *halal* logo. A total of 51% were very much confident with all the *halal* logos from different countries. For purchasers’ factor product’s brands, international fast food restaurant, non-Muslim premises and restaurants and products from other countries which have *halal* logo have the moderate level of total mean value.

The first statement reveals how often the respondents check *halal* logos on food products when purchasing. By referring to the mean, it is found that, *halal* logo was mostly checked by the respondents when purchasing and it was also one of the main factor in order to make sure the *halalness* of the products to the Muslim respondents (4.3575). List of ingredients was not very well-known among the Muslim consumers (3.6375) when making purchasers and it might be due to scientific and technical words which respondents are not very familiar with. The level of trustworthy among Muslim respondents on *halal* logo on food product when making purchasers was in the high level (4.0933) and the majority of them often trusted the reliability and validity of *halal* logos.

4.4 Correlation of Independent and Dependent Variables

This study is to determine whether the three elements, which were attitude, purchasers and hygiene, will have the influence by the consumer’s perception in *halal* labelling and packaging and intention to making purchasers.

This study used the multiple regression analysis. In the regression model, attitude, purchasers and hygiene and cleanliness are the independent variables, while the consumer perception on *halal* labelling and packaging is the dependent variable.

Table 4.1: Regression Analysis

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.815 ^a	.663	.697	.50721

- a. Predictors: (Constant), IV
b. Dependent Variable: DV

The model summary table shows that R, correlation of three independent variables which are attitudes and perception, purchasers and hygiene and cleanliness with dependent variable, intention to purchase *halal* manufactured foods is equal to 0.815. After inter-correlation R square (0.663) is generated is actually the square of R (0.697)². This means that 69.7 percent of five independent variables have impact on the dependent variable. In the other words, 69.7 percent of variance in intention to purchase *halal* manufactured foods was explained by the independent variables. The remaining 30.3 percent cannot be explained by the regression analysis.

Table 4.2: Regression Analysis

Model	Sum of Squares	Df	Mean Square	F	Significant
Regression	193.745	3	64.582	1251.035	.000 ^a
Residual	98.274	382	.257		
Total	292.019	387			

- a. Predictors: (Constant), IV
b. Dependent Variable: DV

According to ANOVA table, the F value of 1251.035 is significant at the 0.000 level. Therefore, the result reflects that 69.7% of the variance (R-Square) in *halal* products purchasing has been significantly illustrates by the three independent variable.

Table 4.3: Multiple Regression for The Variables

Model	Standardize Coefficients (Beta)	t- Test	Significant
(Constant)		-7.097	.000
Attitude	.481	12.205	.000
Purchasers	.031	.924	.356
Hygiene and cleanliness	.402	10.160	.000

- a. Dependent variable: Consumer perception

Table 4.3 above shows that three independent variables on the consumer perception on *halal* labelling and packaging of manufactured food and intention to make purchasers. At the list standardize beta coefficient for attitude was 0.481. This indicates the highest contribution towards consumer perception on *halal* labelling and packaging of manufactured food. The relation is significance of 0.000. The values for hygiene was 0.347 shows that the positive relationship between hygiene and the consumer perception on *halal* labelling and packaging of manufactured food which is significant on the level 0.000. The beta value for purchasers was 0.031 shows that the positive relationship between purchasers and consumer perception on *halal* labelling and packaging of manufactured foods but the p value is 0.356. This means

that attitudes is the critical elements followed by hygiene have influence the consumer perception on *halal* labelling and packaging and intention to make purchasing and purchasers is not predictors of intention to purchase *halal* manufactured foods.

5. Conclusion

In this survey, the data showed that consumers are concerned about the logo on food products and the *halalness* of the product. *Halal* logo is important for Muslim users compared to non-Muslim. Muslim consumers are more concerned about the *halal* logo on the packaging and majority of them will be looking at the *halal* logo before making any purchase. Food labeling is the primary method of communication between the producers and sellers as well as the purchaser and also the consumer. This study shows how consumers evaluate aspects of *halal* and hygiene aspects of *halal* foods. The study also shows that most of the Muslim and non-Muslim have equally good knowledge and understanding of food hygiene and *halal* food as well as the way it was being processed, prepared and marketed. The findings show that consumers do concerns particularly about hygiene and cleanliness. Public concern has increased in *halal* diet. Attitude is one of the factors that influence the intention of the consumers on making purchases of *halal* food products. Positive attitude will have a substantial impact on the decision-making in the purchase of *halal* food. From the findings, most of the Muslim really cares about the existence of the *halal* logo in the food products compared to non-Muslim. This is due to the religion where Muslim respondents are more concern with what they eat. "O ye messengers, eat good food (*Halal*) and good deeds. I am Aware of what ye do." (Al-Mukminun:51). The *halalness* is significant to Muslim respondents in making purchasers but the non-Muslim respondents are not concerned about it. However, the results show that there are non-Muslim consumers that are sensitive of the benefits to purchase food products with *halal* logo.

The former limitation is not too serious, as it creates an opportunity for the future research by raising the sample size to include all the states in Malaysia by using cluster sampling. Choosing these cities is owing to the fact that they are fast-growing cities linked to *halal* foods in Malaysia. It is also good if future research could consider a cross-countries study by involving Brunei, Malaysia, Indonesia and Singapore. By performing the study in these countries, the research results will be more comparable and provide workable direction on *halal* products in the said countries.

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The Moderating Effects of Director Ownership on Capital Adequacy and Risk Taking among private commercial Banks in Bangladesh Within the Basel Capital Adequacy Framework

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Abstract: The Capital Adequacy formation has enlarged noticeably, since 2014 Basel accord iii, both in the Capital adequacy and the risk taking. As a result, it has been a concerning issue to provide sufficient director's ownership in capital formation that influence to reduce risk. The purpose of shedding new light on the director's ownership on capital adequacy in its relationship with firm risk, this study develops a novel theoretical and empirical exploration of capital formation within the Basel capital adequacy framework as well as the moderating effect of director's ownership on capital adequacy and risk taking among the private commercial Banks in Bangladesh. However, the sufficient director's ownership gap between Capital adequacy and risk taking in Bangladesh and other regional Gulf countries is seen as one of the most important factors that affect the Banking industries. After controlling the effects of endogeneity through the application of fixed effect model in regression analysis, the study finds the presence of director's ownership in capital adequacy that influence on risk taking practices in financial industries. The secondary panel data were obtained from annual report of the 20 quoted private commercial Banks in Bangladesh as compiled in the Dhaka Stock Exchange for the period 2015 to 2019. The positive relationship of director's ownership can be explained within the agency theory context, where directors are regarded as more risk appetite because of the exercise and employment risk. As this study cover the role of director's ownership on capital adequacy and risk taking that could be useful for capital formation regulation and policy making.

Key words: Capital formation under Basel iii. Leverage Ratio, Managerial ownership, risk factors.

1. Introduction

Banking industries is an intermediary institution that play a significant role not only in local but also in the national economy. It is a financial system that maintains an importance linkage to the company's capital formation and it's regulated (NDIC, 2016). Therefore, this sector is considered as a strong and risky business at the same time, banks should manage their stability and enhance their reputation to build consumer's trust.

In order to make the bank's capital adequacy assessment that is more risk sensitive and to abide by the international norms and practices, Bangladesh Bank took the initiative to implement Basel-III framework. Banks in Bangladesh went live under Basel-III since 01 January, 2015. These disclosures under Pillar III of Basel III are made following 'Guidelines on Risk Based Capital Adequacy (RBCA) - Revised Regulatory Capital Framework for banks in line with Basel III' for banks. These quantitative and qualitative disclosures are intended to complement the Minimum Capital Requirement (MCR) under Pillar I and Supervisory Review Process (SRP) under Pillar II

and market discipline under Basel III. The purpose of these disclosures is to present relevant information on the adequacy of capital in relation to overall risk exposures of the Bank so that the market participants can assess the position and direction of the Bank in making economic decisions (Risk guideline, 2012).

The challenging in banking industry may trigger the financial crises. Most of this crisis were occurred due to poor market and capital indiscipline that failed to manage bank risk (Kargi, 2011) Since the Asian crises, major efforts of banking reform focus on recapitalization, decreasing the degree of non-performing loans, strengthening the banking regulation and corporate governance practice. To reduce this losses and challenges arising from borrowers' default, the banking industries follow the capital adequacy formation that ensure to absorb shocks or losses. CA and risk management is a critical option that need for banks to have adequate capital commensurate with risk taking. The various amendment in Basel capital had always aim at improving banking system stability through capital adequacy to risk and filling the gap arising from banking sector crisis (Andre, Laplume, Sunpar, & Reginald, 2008; Demirguc-Kunt, Detragiache, & Tressel, 2006) found that absence of sufficient fund formation that led to the occurrence of banking crisis.

Furthermore, the consequence financial crisis leads to default risk which affected the banks. (Baxter, Olson, & Juddah, 2012) asserts that banks meeting the new capital standards will put a big dent in banks' return on equity and make it harder for them to exceed their formation of capital. It is a burning issues that banks need to carefully monitor the risk (Gestel & Baesens, 2008). The banking system globally have dealt with a lot of problems ranging from financial system fragility and crisis resulting from the risk-taking behaviour of banks. The various amendment in Basel capital had always aim at improving banking system stability through capital adequacy and filling the gap arising from banking sector crisis (Demirguc-Kunt et al., 2006). Kosmas and Njanike (2009) found that absence of effective credit risk management led to the occurrence of banking crisis and that the growing economies places more responsibilities on the financial sector for the channelling of investible funds.

In addition, borrowers not repay their loans on time (Cecchetti & Schoenholtz, 2011), unsatisfied debt and demand with depositors uneven distribute of liquidity that underpin the risk which has become the most concerning issues in Bangladesh (Mollah, Hassan, Farooque, & Mobarek, 2017). According to Basel accord (iii) and BD central bank: About 75% of banking failure's or scandal is occurred due to credit risk. In 2016, A survey was conducted of IFIs in Bangladesh, there were 134 valid respondents, about 87.2 % of those respondents gave argument that around 86.3 % risk is occurred due to liquidity and credit limitation.

A survey of result decomposition analysis shows that risk in the short term (2 months) was mostly affected by own shocks up to 79.30% and by MTC (10.52%) in the long term (12 months) risk are the most concerning issues in a financial sector (Adamgbo, Toby, Momodu, & Imegi, 2019). Previous some studies have explored that capital formation and risk do have an economically meaningful on reciprocal contemporaneous (Vazquez, Francisco, Vazquez, Federico, & Pablo, 2015).

In the context of Bangladesh, there are six core risk in financial sectors such as credit risk credit policy 8 (CP8), market risk credit policy 13 (CP13), liquidity risk credit policy 14 (CP14), operational risk credit policy 15 (CP15) and interest rate risk credit policy 16 (CP16). However, there are several studies have examined on the issues of credit risk which has become the most concerning issues to the financial institutions (Guideline, 2018).

Afriyie and Akotey (2012) also asserted in their work that capital adequacy measures on credit risk management practices. The time series data are obtained from annual report of the fifteen (15) quoted private commercial banks in Nigeria as compiled in the Nigeria Stock Exchange Fact book for the period 2005 to 2019. The multivariate regression technique was specified and results obtained based on E-views version 9.0. Hence researcher showed the link between risk and capital adequacy ratio. Directors' entrenchment in managerial body is a substitute for solve the agency problem (Bouras & Gallali, 2017). Hence, director's ownership is Insider parties who influence on risk taking through solving the challenging issues. A director gets the right to access in dual position that effect on different objectives. A director as a manager who follows the job is submitted by others and as shareholder who participates in decision making (Jensen & Meckling, 1976). Directors ownership maintain dual dimension of agency theory. Although, director ownership is not only able to reduce agency cost but also create agency problem due to maintain dual standard of the shareholders. One way aligns decision maker and others way align to act with decision maker that may influence of the company's objective. As shareholding of directors and director's ownership influence on bank risk taking (Pausch & Welzel, 2002).

In a bid to contribute to the body of literature in this subject area, the study examines the relationship among director's ownership, capital adequacy and risk taking of private commercial banks in Bangladesh. The purpose of the study is to analysis the moderating effect of directorship ownership between Basel capital adequacy and risk taking in private commercial banks. To minimize these risks the study has examined the relationship of director ownership between capital adequacy and credit risk of IFIs in Bangladesh.

2. Literature Review

The journey of banking industries has a long history in global finance. In the early of economic revolution, economic system was an uneven competition but today, this system has become much popular due to safe and competitive packages with compliance of economic revolution which follows specific norms, principles and compliance of law (Nienhaus, 2014). The compliance of law is maintained under the financial institutions (IFIs).

These disclosures on the position of the bank's risk profiles, capital adequacy and risk management system under Pillar-III of Basel-III are made following revised "Guidelines on Risk Based Capital Adequacy" for banks issued by Bangladesh Bank in December 2014 (BCBS, 2015). These quantitative and qualitative disclosures are intended to complement the Minimum Capital Requirement (MCR) under Pillar-I and Supervisory Review Process (SRP) under Pillar-II of Basel-III. The purpose of these disclosures is to establish more transparent and more disciplined financial market so that stakeholders can assess the position of the bank regarding holding of assets and to identify the risks relating to the assets and capital adequacy to meet probable loss of assets. Bank faces credit risk that may arise from interbank transactions, acceptances, bonds and other sources of financial commitments or investment.

The Basel Committee on Bank supervision Basel iii (2011) asserted that credit risk is the potential loss that a borrower or counterparty will default as repayment on due time. Default occurs when the debtors are dishonoured their contractual deeds or any option not to do so even when properties are there. Credit risk is measured by the ratio of bad debt to total loan or loan loss reserves to gross total loans portfolio. According to Kargi (2011) credit risk in bank occurs whenever banks' funds are extended, committed, invested or otherwise exposed through other

sources. Without any prejudice banks need to hold substantial amount of owner's capital in relation to the amount of loan involve as well as the riskiness. In addition BCBS (2015) explain that the capital adequacy has been emerging economic custodian due to recover the credit risk. Capital adequacy ratios are referred as Shareholder 's fund total Assets. Therefore, capital adequacy to absorb risks is one of the essential parts banks need to consider. Basel capital accords in pillar iii introduced capital ratios to demonstrate the strength of risk management. As a result, in recognition of the vital role of capital ratio has led us to use indicators to measure the strength of credit risk management which lay the foundation of the study.

Banking industries limited has maintained the Risk Weighted Assets (RWA) to measure the risk within the risk capacity in order to achieve business objectives, as defined by a set of minimum qualitative and quantitative norms and standards. This Risk Weighted Assets (RWA) statement has been approved the board of directors. It is important because the BODs play significant role to risk-adjusted return on capital in banking operations which the bank has satisfied its appetite. To design a limit system, BOD always considered the following issues: 1. Risk-appetite: Risk-appetite is used considering its risk-bearing capacity. 2. Risk-tolerance: Risk tolerances are used by IBBL in risk evaluation in order to determine the treatment needed for acceptable risk. 3. Risk-limit: The bank allocates capital limits to business units considering the regulatory instructions.

Director ownership is that consider as moderator variable in this study (Thumbi, 2014) asserted that there is direct relationship between capital adequacy, credit risk, working capital and bank size. Hence bank size means a certain part of ownership. Managerial ownership seems to be merely a reflection of decision making that ultimately influence risk(Jahmani & Ansari, 2006). The main them of the capital adequacy formation is to ensure current capital adequacy and to plan for future capital needs. The aim of this philosophy is to manage the capital position, not only to ensure compliance with bank regulations but also to ensure capital adequacy for future bank expansion. These efforts will also have an impact on other risk policy and related procedures that may impact on bank and liquidity planning (Guideline, 2018).

Table 1: Summary of literature review

Author & year	Model and Area	Findings
(Pausch & Welzel, 2002)	Using the micro economics and banking modelled	The study showed that capital adequacy plays significant role for reducing the risk position of a bank.
(Jahmani & Ansari, 2006)	Panel Data with Regression model Nigeria	Managerial ownership seems to be merely a reflection in which managers receive their benefits rather than incentives to work harder for strengthen the company's performance.
(Poudel, 2012)	Financial bank in Nepal using time	The result indicates that credit risk management is an important predictor of banks' financial performance.

	series data 2001 to 2011	
(Alessandri & Seth, 2013)	Reg with Higher levels of managerial ownership are dynamics panel inefficient that counter to shareholder interests and data model in increasing business diversification. USA	
(Alessandri & Seth, 2013)	The descriptive research design on the 43 banks in Kenya.	The study established a direct relationship between capital adequacy, credit risk, working capital and bank size
(Mendoza, Mendoza, Paolo, & Rivera, 2017)	Multiple reg. uses the Arellano-Bon in Philippines.	The study find that credit risk has a negative and statistically significant relationship with profitability.
(Taiwo, Edwin, AgwuTaiwo, & Achugamonu, 2017)	The multiple linear regression models to analyse the five series data (1998-2014)	The study showed that credit risk and firm performance growth of banking industries.

2.1 Theoretical Motivation and Hypothesis development.

Kochubey and Kowalczyk (2014) state that during financial crisis, lower risk indicates higher capital, however higher capital implies more risk taking. A study about China's rural commercial bank implies that rural commercial banks have taken strict measures to supervise capital by maintaining a high CAR to avoid shocks of external exposure which indicates the higher capital adequacy, bank can tackle the higher risk issues (Cao et al., 2015). Operating efficiency for banks is essential for the challenging economy. CAR indicates positive effect and statistically significant on bank's operating efficiency, that definitely will impact bank risk taking and how banks will improve their performance. Credit Risk is Loan Loss Reserve to Total Loan Portfolio Capital Adequacy; Capital adequacy measures a bank's financial strength expressed by the ratio of its capital (net worth and subordinated debt) to it weighted credit exposure in terms of loans (Mendoza et al., 2017).

Someone scholars defined capital adequacy as capital risk-weighted asset ratio and it is used to assure depositors' confidence in the banking system and by extension the financial system stability. Without any prejudice banks need to hold substantial amount of owner's capital in relation to the amount of loan involve as well as the riskiness. BCBS (2015) mentioned that under the new proposal have expanded capital adequacy in recent times. Capital adequacy ratios are defined as Shareholder 's fund total Assets.

Therefore, capital to absorb risks is one of the essential parts banks need to consider. Basel capital accords introduced capital ratios to demonstrate the strength of risk management. As a result, in recognition of the vital role of capital ratio has led us to use indicators to measure the strength of credit risk management which lay the foundation of our research. According to the Basel Committee on Bank supervision BCBS (2000) posited that capital adequacy paly role to minimize

risk with capital formation. According to Kargi (2011) risk in bank occurs whenever banks' fail to operate the capital formation. From above discussion the following hypothesis is

Hypothesis 1 (H1): There is positive relationship between capital adequacy and risk taking.

Ownership is the insider diving of an organization that is ownership by directors, management, the commissioner or any person directly involved in company decision-making as a result, directors enjoy dual dimension that is ownership as well as company's staff. However, directors act as span in companies' organizational channel that impact on risk as well as capital formation one of the mechanisms used to resolve conflicts agency is to improve managerial ownership so as to align the interests of owners with the manager. Higher levels of managerial ownership are inefficient that counter to shareholder interests and increasing business diversification. On the basis of information, much information held by the management as well as the owner of the firms, so that it effects on company risk and others shocks (Jensen & Meckling, 1976).

Jahmani and Ansari (2006) examined the relationship between managerial ownership, risk-taking. Managerial ownership seems to be merely a reflection of the way in which managers receive their benefits. Managerial ownership does not seem to provide any incentive to work harder for improving the company's performance in the accounting sense. Alessandri and Seth (2013) has examined 'the effects of managerial share ownership on business diversification as well as share ownership also shifts risk to managers. Thumbi (2014) studied the working capital on capital adequacy on commercial banks affecting capital adequacy in commercial banks. Poudel (2012) appraised capital adequacy and risk taking. Mendoza et al. (2017) Their study findings suggested that it is imperative for banks to understand which risk factors have greater impact on performance and use better risk-adjusted performance measurement to support their strategies. They concluded that risk taking has an significant impact on the capital adequacy (Taiwo et al., 2017). Thus, this study hypothesized the relationship among director ownership, Capital adequacy ratio and credit risk as follows:

Hypothesis 2 (H2): The director ownership moderates the relationship between the Capital Adequacy and Risk Taking of private commercial Bank in Bangladesh.

Methodology of The Study

The data is obtained from the annual report of twenty (20) private commercial banks in Bangladesh compiled and expressed in the Dhaka Stock Exchange (DSE) in the period from 2015 to 2019. The filtered data is maintained a panel in STATA software to analysis the fixed effect model. The fixed effect model is suitable for the analysis which justify by Hausman test. This study seeks to analyse whether there exists any dynamic relationship the effect of director's ownership on capital adequacy and credit risk taking. The model is employed to establish the relationship among director's ownership, capital adequacy and risk taking. The study was conducted to analyse the statistical link among director's ownership, capital adequacy and risk taking. From the objectives of the study, the model specified below captures the five variants of capital adequacy measure within the Basel framework and credit risk. Baron and Kenny (1986), three steps of hierarchical regression are performed in the moderation analysis. To capture the

capital adequacy, six variables under Basel capital adequacy framework is conducted in the study. The variables include director’s ownership, capital adequacy and risk-taking variables are described in table 4, 5 and 6.

To test hypotheses (H01–H02), the study operates the following models (1) – (2): For risk-taking the study use the following equation

$$(1) RT_{i,t} = \alpha_0 + \beta_1 Tier_i_{i,t} + \beta_2 Tier_ii_{i,t} + \beta_3 CCB_{i,t} + \beta_4 NSFR_{i,t} + \beta_5 Lev_{i,t} + \beta_6 LCR_{i,t} + \varepsilon_{i,t} \dots \dots \dots (1.1)$$

To measure the moderating effects of director’s ownership between Capital adequacy and risk taking there are two steps to design the equation.

The first step to design the moderating effect can be expressed as follows:

$$(i) RT_{i,t} = \alpha_0 + \beta_1 Tier_i_{i,t} + \beta_2 Tier_ii_{i,t} + \beta_3 CCB_{i,t} + \beta_4 NSFR_{i,t} + \beta_5 Lev_{i,t} + \beta_6 LCR_{i,t} + \varepsilon_{i,t} \dots \dots \dots (1.1)$$

The second step of moderating effect:

$$(ii) RT_{i,t} = \alpha_0 + \sum_{i=1}^6 \beta_i XI_{i,t} + \sum_{i=1}^6 \theta_i (XI_{i,t} \times DOWN_{i,t}) + \varepsilon_{i,t} \dots \dots \dots (1.2)$$

Where:

RT = Risk Taking. Tier I = Tier I Capital to Total Assets. Tier II = Tier II Capital to Total Assets, CCB = Capital Conservation Buffer. LCR= Liquidity Coverage Ratio, DOWN= Directors Ownership, ε = Error term. β_0 = Regression intercept, $\beta_1 - \beta_6$ = Coefficient of the independent variable to the dependent variable.

Results and Discussion

Table 1 presents descriptive statistics of the dependent and independent variables used in the empirical analysis. The average risk taking in the BD financial institutions is 0.743858, the average Tier size is around 0.1339, whereas the proportion of Tier_ii size on boards is 0.0228. In addition, the CCB percentage shows 0.01340 and LEV ratio 0.1280 that a high level from requirement 3%. In addition, liquidity coverage ratio is 0.1950 that contribute to reduce risk. Net Stable Fund Ratio about 0.1326 make sustainable position that influence to reduce risk. The combination of independent variable under Basel iii firm 0.625235. Director’s ownership is 0.4374562 that contribute on decision making and contribute to reduce risk. These figures are consistent with some recently published in this area of research (Basel iii, 2011; Guideline, 2018; Kochubey & Kowalczyk, 2014; Pereira & Saito, 2015; Taiwo et al., 2017).

Table 2: Descriptive Statistics of variables

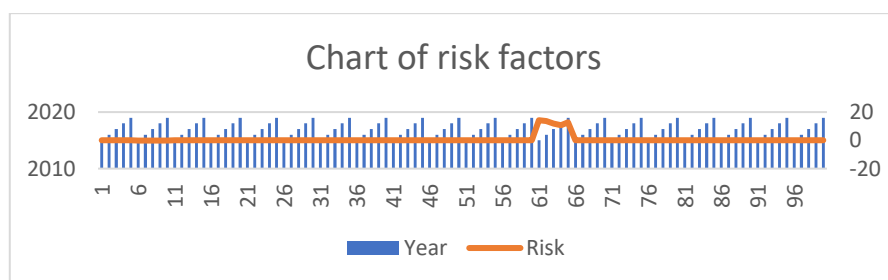
Variable	Obs	Mean	Std. Dev.	Min	Max
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Tier_1ratio	100	.1333911	.2359224	.0010289	1.025102
Tier_2ratio	100	.0228006	.0161295	-.0251019	.0568714
CCB	100	.0134076	.0110012	0	.0616
LEV	100	.1280147	.7554852	-.9868	7.49
LCR	100	.1950422	.1915579	.1	.9533
NSFR	100	.1325788	.1307202	-.1473	.9503
CAR	100	.625235	.8256413	.2709784	7.927732
DWON	100	.4374562	.1629986	.1	.87
Risk	100	.743858	2.758568	-.13157	14.25

Notes: Table 1 presents descriptive statistics among the variables of this study, where, Tier_1 is core capital, Tier_2 is supplementary capital (CCB) is Capital Conservation Buffer, LEV is Leverage Ratio, LCR is Liquidity Coverage Ratio, NSFR is Net Stable Fund Ratio, CAR is Capital Adequacy Ratio, DWON is Directors Ownership.

Figure 1

Chart of risk-taking factors



The chart shows the risk-taking value of private commercial bank in Bangladesh from 2015 to 2015. The risk-taking factors consist with credit, market and operating risk under Basel iii risk disclosure. The chart also shows the average value of risk is 0.743858 that is the most concerning issues to private commercial banks in Bangladesh.

Table 3 presents the correlation matrix among the variables of this study. According to Gujarati (2003), the disorder figure among variables consider as high collinearity that may cause econometric problems in those situations where no sequence on each other. The table shows 1 variable is more than 0.80 are high enough to cause any potential collinearity paradigm that influence results.

Table 3: Table of Corelation Matrix

	<i>Tier_1 Ratio</i>	<i>Tier_2 Ratio</i>	<i>CCB</i>	<i>LEV</i>	<i>LCR</i>	<i>NSFR</i>	<i>CAR</i>	<i>DWON</i>	<i>Risk</i>
<i>Tier_1 Ratio</i>	1								
<i>Tier_2 Ratio</i>	0.33480893	1							
<i>CCB</i>	0.11351576	0.20561068	1						
<i>LEV</i>	0.12634356	0.16198870	-0.126604	1					
<i>LCR</i>	0.54367563	-0.40370146	0.064495	-0.039874	1				
<i>NSFR</i>	0.32770047	-0.24410622	0.128354	-0.098226	0.212766	1			

CAR	0.34313047	-0.05748162	-0.030783	0.855601	0.377536	0.20839	1		
DWON	0.38347375	0.00319499	0.030033	0.068691	-0.013897	0.017315	0.17241	1	
Risk	0.08037485	0.228029325	-0.028446	0.489364	-0.078184	-0.038006	0.404734	0.12546	1

Notes: Table 3 presents descriptive statistics among the variables of this study, where, Tier_1 is core capital, Tier_2 is supplementary capital (CCB) is Capital Conservation Buffer, LEV is Leverage Ratio, LCR is Liquidity Coverage Ratio, NSFR is Net Stable Fund Ratio, CAR is Capital Adequacy Ratio, DWON is Directors Ownership.

Table 4: The Effect of overall variables (Capital adequacy) on Risk Taking

	Risk	
	FEM	REM
CAR	0.247*** (0.000)	.250 (.000)
_cons	0.589*** (0.000)	.587 (.244)
N	100	

p-values in parentheses

* p<0.05, ** p<0.01, *** p<0.001

The study about banking sector in Bangladesh shows that the involvement of sufficiency capital formation that may help banks to minimize risk taking. it is crucial for bank stability and sustainability, some banks do not have sufficiency capital formation to continue their business because of minimum control systems (Adamgbo et al., 2019), Since the government by central bank control the minimum capital requirement and banks usually operate above the minimum CA under Basel capital framework. Banks maintains their strategy after collecting their capital ratio, because they already precaution about the requirement, and it will be easier to maintain their capital formation.

Table 4 displays the regression result of capital adequacy on bank risk taking, common effect, fixed effect, and random effect in each of the two main columns. Since the chow test and Hausman test shows the result is below 5%, fixed effect is the appropriate model to analyse the effect of capital adequacy on bank risk taking. From the regression result, since chow test and Hausman test show below 5%, the appropriate model to analyse the bank risk is fixed effect model. Table 4 show the effect of capital adequacy ratio on bank risk taking is positive significant, banks are constrained by CAR and should adjust their capital ratio when they take the higher risk.

Table 5: The Fixed Effect Model (FEM) of Capital adequacy on Risk Taking

	risk	
Tier_1ratio	-0.155	(0.587)
Tier_2ratio	6.362*	(0.027)
CCB	-4.233	(0.100)
LEV	0.250***	(0.000)
LCR	0.0937	(0.633)
NSFR	0.146	(0.480)
_cons	0.607***	(0.000)
N	100	

p-values in parentheses
* p<0.05, ** p<0.01, *** p<0.001

Table 6: The Random Effect Model (REM) of Capital adequacy on Risk Taking

risk		

tier_1ratio	-0.401	(0.590)
tier_2ratio	12.03	(0.153)
ccb	-4.798	(0.560)
lev	0.382***	(0.001)
lcr	0.00640	(0.992)
nsfr	0.182	(0.785)
_cons	0.513	(0.180)

N	100	

p-values in parentheses
* p<0.05, ** p<0.01, *** p<0.001

The result of regression analysis shows that capital adequacy components accounted for approximately 0.625235 in changes in risk taking given the mean value of 0.743858. While the FEM and REM are used in the regression analysis. The result of FEM is suitable for the analysis, where Hausman test less 0.05. In FEM as the Tier_2 capital variable is significantly positive that is more suitable for reducing risk than Tier_2 capital. The cointegration result shows existence of a long run equilibrium relationship between capital adequacy measures and risk-taking management practices and further points to the suitability of adopting the unrestricted FEM approach at levels. In applying Hausman test, the study is considered the impact of the values of capital adequacy on risk taking. The result of FEM unveils that fluctuations in credit risk are statistically influenced by LEV while other capital adequacy components appeared insignificant to changes in risk taking. To analyse the statistical causality link between risk taking and capital adequacy measures. The FEM approach assesses whether equilibrium variance among variable helps in the prediction of the outcome of some other variable, given the past information on the latter. The result of LCR that positively significant to risk taking at 10% levels. The more engagement of Tier_2 capital and LCR will be sustainability and productivity to control risk.

Table 7: The moderating effect of director's ownership on Capital adequacy and Risk Taking

risk		

CA	-1.523	(0.505)
DWON	-2.027	(0.480)
c.car#c. down	5.760	(0.021)
_cons	1.172	(0.443)

N	100	

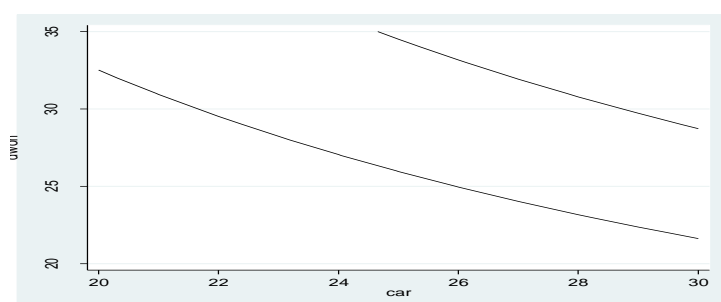
p-values in parentheses
* p<0.05, ** p<0.01, *** p<0.001

***, **, * Significant at the 10, 5 and 1% level, respectively. Where RISK is the dependent variable that proxies for bank risk taking, measured by risk-weighted assets to total assets, OWN is the percentage of common stocks held by shareholders who own at least of the total number of a firm's common stocks. $c.car\#c.$ down denotes interaction effect between director ownership. CAR is measured by capital adequacy ratio.

The table 7 shows the interaction of director's ownership concentration has positive effect on bank risk taking statistically significant at level 05%. The interaction value is 0.021 significant level 05% that is optimum to reduce risk. In contrary inconsistent result that ownership concentration negatively affects the bank risk taking which indicates, the higher ownership concentration bank risk will be higher (Jahmani & Ansari, 2006). On the other hand, higher ownership concentration reflects the higher percentage of director's ownership and control in a company. Since the shareholders basically expect the optimal investment return, they will tend to ask the lower risk for any investment spending. Another variable which individually shows statistically insignificant but in terms of interaction effect directors' ownership is positive significant that means it should involvement of director's ownership in capital adequacy within Basel capital framework is contribute to reduce risk taking.

Figure 2 present the output of the interaction terms. The vertical and horizontal axis of the graphs is director's ownership (DWON) and capital adequacy (CA) effect. In the study director's ownership and capital adequacy is interaction effects that moderates the relationship among CA and risk taking. The graph of the moderation effect shows the strong relationship between CA and risk taking. The interaction graph is presented by the following diagram as below:

Figure 2: The moderation effect CA and risk taking



Conclusion and Recommendations

The bank risk taking reveal the banks instability in capital formation. This study concern about how bank director's ownership plays important role in bank policy and decision making for facing the uneven competition, including the higher proportion risky asset, the bank financial sustainability which is measured by CAR and risk-taking components. Prior research indicate that capital adequacy and credit risk are able to explain bank risk taking behaviour. This study find that some indicator of capital adequacy does affect the bank risk taking. Ownership concentration play important role on bank risk taking. This finding suggests that the higher proportion in ownership may protect banks from agency conflict. The finding shows that the Tier_1 capital has

negative effect on bank risk taking. While CCB, NSFR and LCR indicates negative response to Bangladeshi private commercial bank in taking risk. On the basis of findings, there exist director's ownership concentration maintain positive relationship between risk taking and capital adequacy. The study suggest that sufficient director's ownership should be a matter of priority and policy focus in capital formation, risk taking components under Basel iii found to the most critical risk factor in banks, hence the need for more stringent measures, rules and regulations in collaboration with the Bangladesh Government should come up with implementation framework of Basel III capital Accords. Regulators and Central Bank of Bangladesh to review and update the prudential guideline for licensed banks in keeping pace with the current trend in the sector. This study contributes to the overall banking literature on capital formation and risk taking. Additionally, future research could further extend the role of the ownership concentration.

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Factors that influence the use of E-wallet among students

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Abstract – This research is conducted to study the factors that influence the use of e-wallet among students in Ungku Omar Polytechnic. The study used primary data which derived from questionnaires from the sample of 230 students. The objective of this research is to identify the factors that influence the use of E-wallet, to determine the relationship between independent variables and dependent variables and to identify the most important factor that influence the use of E-wallet among students. Statistical Package for Society Science also known as SPSS was used in data analysis. Three main analysis were performed i.e Descriptive Analysis, Pearson Correlation Coefficient and Regression Analysis. The result of this study showed that all the variables have influence towards the use of E-wallet among students. The factor of convenience to be found the most factor that influence the student to use E-wallet. It also indicates that all variables have a significant positive relationship. This study's results are beneficial for young generation ie students to use E-wallet wisely. It is also beneficial for E-wallet service providers to increase the level of the efficiency of e-wallet.

Keywords: E-wallet, influence the use of e-wallet, security, social influences, convenience

1. Introduction

Along with the advancement of technology, there have been many technologies that can help and facilitate people in carrying out various daily activities. One of the advancements of these technology is smartphones. Nowadays, smartphones become an important need in order to do various activities as online such as s to make the payments using their smartphone. When using smartphone, the payment process becomes easier, more practical, and faster by using mobile payment instrument. This mobile payment can be done without having to carry cash in shopping for daily needs.

Mobile payment or e-wallet is defined as a payment instrument using at least one mobile device as a tool for accessing the payment. In other words, it can be described as online services to make transactions for the purchase of product or services by using electronic money. It's also may be a sort of online account in which a user can store cash for any future online exchange. An e-wallet is secured with a secret word. One can make payments for online buys from websites offering anything from substantial items, services, and flight tickets by using e-wallet.

An e-wallet is the digital equivalent of a real wallet, with the exception that money is digital. Same as a regular wallets function, e-wallets also need moneys to function and perform transactions. This can be done by filling up the wallet with cash via credit cards, debit cards, and online bank transfer. It can be used to pay for services or goods at participating merchants or to transfer money to other fellow e-wallet users. Its function is like a credit or debit card and it

requires to be linked with the individual's bank account to make payments. It allows the user to use their mobile phones to manipulate their bank accounts, store value in an account linked to their handsets, transfer funds or even access credit or insurance product (Donner & Tellez, 2008). Furthermore, it allows the consumers to do transfer of money or doing payments with lower cost, more convenient and faster (Blockchains, 2018). E-wallet is a mobile payment in the electronic wallet category that can make non-cash transactions, does not use media such as cards to make payments and can carry out electronic media transactions such as mobile devices (Olsen, 2011). As stated by Jayaseelan (2017), the application of this E-wallet in daily life is a big step that helps Malaysian move towards the cashless society. Once funded, shoppers can use E-wallet online to make a transaction.

Over the last few years an e-wallets have been rapidly growth in Malaysia. Until now, there are a total of 53 e-wallets in the country according to a 2019 report by Fintech Malaysia (Fintechnews.my). This increasing trend doesn't seem to be slowing down, especially as the accelerated growth of e-wallets in the country is in line with the central bank's aim to transform Malaysia into a cashless society by 2020. Bank Negara Malaysia (BNM) even established a blueprint emphasizing its aim to increase the number of per capita e-payment transactions from 44 to 200 transactions. Several examples of e-wallet used in Malaysia are Maybank QR Pay, Touch 'n Go eWallet, GrabPay, Boost, WeChat Pay MY, Razer Pay, BigPay and so on.

2. Literature View

1.1 Convenience

If you have a smartphone, you probably have a mobile wallet waiting to be downloaded or discovered among your existing apps. It's an electronic ticket to a world of financial convenience, security and efficiency like you may have never experienced before. One of the reasons to have this mobile wallet is because in a few seconds, you can complete a transaction.

Convenience is one of the main reasons for the existence of technology to add convenience to life. It is proven to be at the forefront of a customer in evaluating perceived usefulness of a technology. From the perspective of self-determination theory, convenience is that users believe a technology is useful to their task completion.

In general, convenience can also be defined as an individual's preference for a convenient product or service and a way to determine whether a product or service is convenient depends on time and effort. According to Khrais (2017), convenience is an automated accessible online service 24 hours a day and seven days, that increases comfort for users while reducing the expenditure of time and effort on the part of using such an advanced technology.

The concept of convenience has been frequently mentioned by many customers desiring a service to be fast and simple (Tai & Liu 2015). In a payment context, convenience may refer to the speed and easiness during a transaction which impacts the perceived usefulness of the payment method (Hayashi 2012). In other words, if customers could exert fewer time and effort to facilitate a transaction, then the perceived usefulness of the payment method is higher.

According to The Nielsen Company's managing director of Consumer Insights – East Zone, Arslan Ashraf, in order to drive consumer acceptance, e-payment providers must overcome the need for convenient payment method, while also inspiring trust in the safety and security of digital wallets

1.2 Social influence

Social influence is the perceived influence of others who motivate customers in the transaction using the mobile technology. Families, friends, colleagues and neighbours are the classes of people who control the users of mobile wallets. Social influence is defined as the extent to which users perceive that people are essential, and have a close relationship with them, giving advice and believing that they should use it. More specifically, essential people are fishy sisters, parents in the family or those with close relations such as friends, relatives in the family, or influential people who think that individuals should apply technological systems (Venkatesh et al., 2003; Junadi & Sfenrianto, 2015).

According to Venkatesh (2000), the introduction and updating of new technologies is the call for survival in the present competitive world and use of modern technology for day to day activities is affected by social influences. Besides, with the steady development of technology and digital media as well a social network, individuals are also heavily influenced by groups and communities (Nguyen et al., 2014; Han, 2020). From a research by Venkatesh et al. (2003), it shows that social influence is one of four factors that directly and positively influence customer intentions. Individuals tend to be influenced by advice or feedback from people in the early stages of using technology without having enough experience and belief.

1.3 Security

E-commerce security is protection the various e-commerce assets from unauthorized access, its use, or modification. In simple words, you can say that using the internet for unfair means with an intention of stealing, fraud and security breach. There are various types of e-commerce threats. Some are accidental, some are purposeful, and some of them are due to human error. The most common security threats are money thefts, data misuse, hacking, credit card frauds, and unprotected services.

According to Donald and Rémy (2012), the security of e-wallets is defined as the degree to which customers believe that it would be safe to use a payment method via the mobile application will be kept safe. Security is also defined as a set of procedures, mechanisms and computer programs to verify the source of data and ensure the integrity and privacy to avoid the problems of the data and the network. Security relates to how the electronic payment system can protect consumer transactions. Perception of security is influenced by several factors, such as the security is easily found by consumers and technical protection of consumer privacy concerns against outsiders. In addition, security is also associated with regulatory and legal protection perceived by consumers.

Lack of security and privacy is one of the issues that keep customers away from purchasing goods unless it is protected (Milberg, Smith & Bruke, 2000). However, payment through e-wallet without security feature may lead an unauthorized access of personal information and a lucrative opportunity for cybercriminals to breach the data (Kaur et al., 2018). According to MariMuthu and Roseline (2020) the e-wallet has gained its popularity due to have effortless transactions but still lack of knowledge and awareness among people and fear to make transaction due to have security issues are the major factors that should thought.

According to the Nielsen Payment Landscape Report, while 67% of Malaysians use some form of cashless payment with debit card and online banking being the primary method, a mere 8% of the population uses mobile wallets as a means of payment. The main barrier, it seems, is security. As the report points out, 46% of non-users point to security concerns as their biggest barrier to to

adopting the technology. When it comes to perceived security concerns, up to 59% believe that e-wallets can lead to credit and debit card fraud, while 38% are concerned about missing transactions. 36% of those surveyed are worried about fake websites that are hidden as being from mobile wallet. 39% are worried that banking data are leaking. Meanwhile, 30% are afraid that mobile phones may be stolen to make purchases. Other issues include malware and software issues as well as concerns regarding data breaches.

Research Background

1.4 Problem Statement

Nowadays, more economies turning into a cashless due to there are some problems using cash to carry out transactions as potential inconvenience of going or getting to an Automated Teller Machine (ATM) or potential of losing wallet or having it stolen. When carry cash it limits the spending because of limited amount of cash carried. In addition, its bulky and heavy especially when get the change in coins.

The use of e-wallet is still limited where many players are spending heavily to get customers and merchants. (PwC Research & Analysis Malaysia, 2018). From a survey conducted by PwC Research & Analysis Malaysia (2018) whereby Malaysia is still behind its regional players like China, India and Singapore. China is a role model of cashless society.

The biggest barrier to accept e-wallet with 50% of non-users citing security as the main reason why they did not switch to e-wallets (Nielsen's Payment Landscape 2019) According to the Director of Customer Management Nielsen Malaysia, Deep Chowdury said that Malaysians still choose to pay in cash for most daily basis expenses such as buying groceries or eating out. In addition, due to smartphone might be stolen, 30% of Malaysians are hesitant to use e-wallet to make any payment. (Harian Metro, 2019)

After the visit of Jack Ma, who is one of the founders of the Alibaba Group (Yong & Kanan, 2018), the e-wallet were recently accepted by consumers and merchants in Malaysia. As stated by Jack Ma, they would proceed to increase the cooperation with their Malaysian partners, and he believed that Malaysia can become a cashless society. However, the acceptance of E-wallets in Malaysia is very low at only 8% (Tan, 2019) and may still not be accepted by the consumers and merchants due to limited knowledge in this area.

In 2018, PriceWaterhouseCoopers Malaysia initiated a customer survey insight on customer behaviour in adoption of e-wallet in Malaysia and the results turn out that only 22% of their respondents are e-wallet users.

1.5 Research objectives

- i. The main research objectives of the study are to identify the factors that influence the use of E-wallet among students.

1.6 Specific objective

- i. To identify the factors that influence the use of e-wallet among students
- ii. To determine the relationship between the use and the factor of using e-wallet among the students
- iii. To identify the most important factor that influence the use of e-wallet among students

Methodology

The researcher used descriptive research design and quantitative research. Descriptive research helps the researcher to gather the data and identify the relationship between the independent variable (IV) and the dependent variable (DV). Primary data were used in this research. Data were gathered by using questionnaires and distributed to the respondents to obtain the data. A set of questionnaires was developed and consisted of 2 sections which included demographic information and a question that relate with the dependent variables and independent variables. The items in the questionnaires for this research were adapted from the previous studies. Data collection was done through online survey by using the google survey form. The data was collected from 230 respondents of Commerce Department, Ungku Omar Polytechnic students. The data was analysed by using Statistical Package for Society Science also known as SPSS. The SPSS Version 20 were used. Three main analysis were performed i.e Descriptive Analysis, Pearson Correlation Coefficient and Regression Analysis. Descriptive analysis is to describe the highest rank of mean score value. Pearson Correlation of coefficient is to describe the strength of the relationship between three variables. Regression analysis is to describe which among the variables are related to the dependent variable. 5-point Likert scale were measured for all the items to express the statement of agreement. The researcher used Cronbach Alpha to measure the reliability of the instrument and the value of the scale were 0.96. This indicates the level of suitability of the item is reliable (Sekaran and Bougie, 2010).

Results and Discussion

5.1 Descriptive Analysis

Table 1: Respondent's Demographic

Item		Frequency	%
Gender	Male	62	27
	Female	168	73
Age	18-20 years old	215	93.5
	21-23 years old	15	6.5
Course	DAT	57	24.8
	DPM	70	30.4
	DIB	32	13.9
	DKB	35	15.2
	DRM	36	15.7
Semester	1	22	9.6
	2	57	24.8
	3	79	34.3
	4	50	21.7
	5	22	9.6
Using E-wallet	Yes	194	84.3
	No	36	15.7
Frequent in using E-wallet (a week)	Only once	138	60
	5 to 10 times	78	33.9
	More than 10 times	14	6.1

Table 1 shows the profile of the respondents under the study. 230 respondents from Commerce Department Ungku Omar has been taken as a sample for this research. As a result, 63 (27%) were male students and 168 (73%) were female students. With respect to the respondents, the highest percentage is from Diploma in Business Management (DPM) students which consist of 30.4%, 24.8% were from Diploma in Accountancy (DAT) students, Diploma in Retail Management (DRM) students were 15.7%., Diploma in Banking and Finance (DKB) students were 15.2%, and lastly, Diploma in Islamic Banking (DIB) students were 13.9%. The respondents were from various semester which consists of semester 1 until semester 5. The highest percentage were from the third semester students which indicated 34.3%. The lowest percentage were from first and fifth semester students which resulted only 9.6%. Among from this respondent, it showed that 84.3% using e-wallet. However, level of e-wallet usage is still at a low rate where the findings showed that only 15.7% were using e-wallet. It means that they prefer to use cash instead of e-wallet. It revealed that the usage of the e-wallet still low where 60% of the respondent only used once a time a week.

5.2 The overall Mean Score

Table 2: The Overall Mean Score

	Mean	Std. Deviation
Influence the use of E-wallet	4.06	.67687
Convenience	4.17	.72613
Security	4.00	.76676
Social influence	3.63	.75165

Based on the table above, it shows that the overall mean score for each variable which are convenience, security, social influence and the influence use of e-wallet. Convenience resulted the highest mean score with 4.17 followed by security which indicate of 4.00. For the lowest score is social influence which is 3.63. Based on this result, it shows all the variables have a strong influence on the use of e-wallet among respondents.

The respondents' convenience was found to be significant influence the use of e-wallet. According to Blockchains (2018), using e-wallet is more convenient and faster because it saves time and money. Besides, e-wallet has their own specific strengths such as e-wallet can be used while abroad and Big Pay is a solid option (RinggitPlus.com,2019).

5.3 Correlation analysis

Pearson's correlation is used to examine the relationship between the independent variables and dependent variable. The findings of the correlations between the independent variables and dependent variable are summarized and presented in Table 3.

Table 3: Result of Correlations

Variables		Convenience	Social influence	Security
Use of E-wallet	Pearson Correlation	.811**	.496**	.705**
	Sig. (2 tailed)	.000	.000	.000
	N	230	230	230

Table 4: Indicator for Pearson Correlation Analysis

Coefficient Size	Strength of the relationship
0.91-1.00	Very Strong
0.71-0.90	High
0.41-0.70	Moderate
0.21-0.40	Weak
0-0.20	Very Weak

Source: Adapted from Sekaran,(2013)

Based on the result above, it shows that a significant and positive relationship between the use of E-wallet with all the variables of convenience, security and social influence. Convenience resulted in the highest significant positive relationship of $r=0.811$. This result was supported by previous studies (Junadi & Sfenrianto, 2015; Bezhovski, 2016; Anyanwu et al., 2012; Kabir et al., 2017). According to Khalil et al(2010), consumers are more willing to adopt e-wallet if they truly witness and believe that the e-wallet provides more convenience and high efficiency in making transactions in their daily lives.

Next, the variable of security has a significant and positive relationship resulted as $r=0.705$. However, this contradicts with the findings by Chern Yong Xian et al, (2018) which showed an insignificant relationship. The view was parallel to the findings by Milberg, Smith & Bruke (2000) where lack of security keeps customers away from purchasing goods unless it is protected. Customers with no experience using e-wallet may concern regarding with security. Similarly, with the findings of Kaur et al (2018) said that the payment without e-wallet can lead to unauthorized access to personal information.

Variable of social influence resulted with $r=0.496$ which also positive significant. Parallel with the findings of Slade, William, Dwivedi and Piercy (2015) stated that social influence gives impact toward adoption of e-wallet. Similarly, the findings by Intan Shafinaz et al (2018) stated that social influences were the highest factor that influences the adoption of e-payment. According to Yang et al. (2012) and Lu et al. (2011), both also found that social influence does affect people's intention to use e-wallet and has a positive relationship.

5.4 Regression Analysis

Table 5: Summary of regression analysis

	Beta	t	Sig.
Convenience	.630	10.810	.000
Social influence	.101	2.270	.024
Security	.174	2.911	.004
** $p < 0.05$	$r^2 = 0.679$	$F = 162.788$	$\text{Sig.} = 0.000$

Based on the table 6, the value of R-square is 0.679. From this value, it indicates the independent variables of convenience, security and social influence contributed to 67.9% factors to the

influence of the use of e-wallet. Meanwhile, another 32.1% factor of the influence the use of e-wallet is obtained by other independent variable which is not being measured in this study. It also indicates that convenience has a highest β which is $\beta= 0.630$ $p=0.00$ followed by security $\beta=0.174$ $p=0.004$ and lastly is social influence $\beta=0.101$ $p=0.024$. It showed that convenience had the greatest influence towards the use of e-wallet. The result similar with Abbas & Hamdy (2015) where stated that convenience influencing perceived usefulness in mobile services.

Conclusion

. The findings of the study revealed that all the factors of convenience, security and social influence is related to the influence of the use of E-wallet among students. Among all the variables, the factor of convenience was found to be the most significant influence in the use of E-wallet.

Interestingly, the researcher's findings show that security has a significant relationship that contradict with previous research. It indicates that consumers are now believed that the issues of security are increasingly being addressed in line with the actions taken by government to address the issue and one of it is the gazetted of The Personal Data Protection Act 2010 ("PDPA that regulates the processing of personal data in regards to commercial transactions. Therefore, by strengthened security level in the e-wallet network, it will bring consumers to start changing the perception into the electronic payment system.

Slowly the community is increasingly accepting the use of this e-wallet after experienced themselves the benefit of this application. Even though in the early stage of e-wallet, an individual hesitates to use the application due to the several factors such as scammed syndicate or conservative mind setting. Hopefully with this research, Malaysians' mind setting can change towards safer, efficient and cashless transaction. Also young generation such as student especially can improve their financial management by using the technology wisely.

Without the acceptance of this new technology, e-wallet will not be successful. To ensure this e-wallet industry growth rapidly, the developer should offer more convenience user friendly application with attractive promotions and various benefits to encourage the usage of e-wallet.

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Raw material supply chain in bumiputera furniture industry

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Abstract – Malaysia furniture industry has high potential and contributes to the national income growth. The bumiputera participation in the industry has been long way discussed and a lot of studies in strengthen the bumiputera furniture industry has been done. The opportunities and the incentives provided by the government to the industry, the issues and challenges and the analysis gaps in the industry also has been studied in order to increase the bumiputera involvement in the industry. Among issues identified are raw material labour, financial capital, furniture design, etc. This article will be focusing on the effort done by FRIM-PCS to help the local furniture industry and in safe guarding the quality standard of furniture produced by the industry by product certification. Ensuring the sustainability of raw material in furniture industry is one of the objectives in supporting product certification services. The most use raw material in the industry has been identified based on previous study. The study continued to develop raw material supply chain to strengthen the raw material supplies among the bumiputera furniture manufacturers. Field visit to suppliers' factories and face to face interview using questionnaire form were conducted to identify the capability of manufacturers in supplying raw materials selected. The selected suppliers are shortlisted from list of suppliers registered with CTCS, MTIB and JPSM. The analysis also includes secondary data collection on furniture industry statistics and previous studies. The results able to recognize potential suppliers based on their factories' production. The ability of fulfilling the raw materials consumption are analyzed and compared based on the statistics and survey done by agencies. Results indicated that, the suppliers are not able to fulfill the raw material consumption of bumiputera furniture industry. It is suggested that a system of raw material management have to be developed to ensure the growth of bumiputera industry.

Keywords: Bumiputera furniture industry, raw materal, supply chain,sustainability of raw material supplies

1. Introduction

The Malaysian furniture industry has developed from a host of small manufacturers in the mid-1980s into a major industry. From simple manufacturer, the export-driven industry has today become one of the most important in Asia. The Malaysian furniture industry is the country's fastest growing sub-sector within the wood-based industry. This industry continues to be an important contributor to the Malaysian economy. According to Malaysian Investment Development Authority (MIDA) in 2018, Malaysia is ranked as the ninth largest exporter of wooden furniture globally (MIDA, 2018) at RM 7.8 billion export value (Malaysian Timber Industry Board (MTIB), 2020).

The timber industry continues to be one of the contributor's key to export earnings and growth domestic product country. Based on Malaysian Timber Industry Board (MTIB) website, total exports of major timber products in 2019 are recorded in total RM22.5 billion which is 2.3% of

Malaysia total exports Malaysia External Trade Development Corporation (MATRADE, 2020, MTIB, 2020). Three major products contributed to the export value of the timber industry is wooden furniture, plywood and sawntimber with value exports amounted to each RM9.14 billion, RM3.40 billion and RM3.38 billion. USA is the main destination for export of national timber products with an export value (22.1%) followed by Japan (15.4%) and China (8.1%) (MTIB, 2020).

Figure 1 shows that the highest total export value was in 2017 compared to previous year, 2016 with increment of 5% from RM 22.1 billion to RM 23.2 billion. However, the total export decreases about 4% in 2018 with 920 million decreases at RM 22.3 billion. The total export shows another slightly increases about 1% with addition of RM 213 million in 2019 (MTIB, 2020).

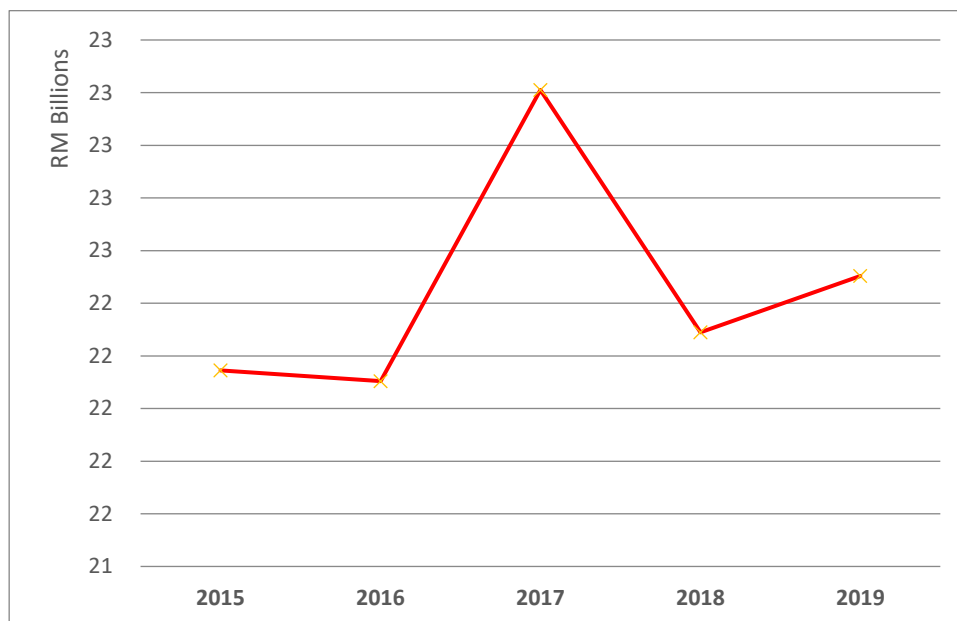


Figure 1: Malaysia Export Earning of Major Timber Products, 2015-2019
 (Source: Malaysian Timber Industry Board (MTIB), 2020)

Malaysian furniture exports recorded a significant growth in the first five-month in 2019, with an increase of 9.16% to reach a value of RM4.1 billion, compared to the same period in 2018. It is a key to note that in the first five months of 2019, the total furniture exports to the US were valued at RM1.6 billion, registering a double digit growth of 20.8 per cent compared to the same period in 2018 (Malaysia External Trade Development Corporation, 2019). The export value kept increasing until August 2019 which the export value of wooden furniture is RM5.6 billion which shows 13.5% higher value compared to the same month last year from RM4.9 billion of export.

The bumiputera industry also plays as important role in income generation and contributing economic growth to Malaysia furniture industry since bumiputera is the biggest majority in this country. Nevertheless, bumiputera participation was so small compared to other races in the country. (Tuan Mohd Rosli & Mohd Rafi Yaacob, 2014). According to Mohamad (2019), the value of the export value of timber and timber products by bumiputera entrepreneurs is only about 1% at present with the total bumiputera factory ownership being 370 out of an estimated 3,500 factories in Malaysia. Based on the interview with Wan Mohd Hafizi, Assistant Director of bumiputera Economic Empowerment of MTIB, state only five manufacturers registered under MTIB bumiputera programmes and this companies are actively contributing to the export market in 2017. These scenarios prove that bumiputera furniture manufacturer is less competitive

particularly in the export market. This scenario is becoming worst where majority of bumiputera furniture entrepreneur still depending on government market to expend their market globally.

Among the issues and challenges identified in the industry were labour, raw material, market demand and supply besides other issues identified in Ratnasingam, 2020 which were market, financial capital and company management. These issues and challenges were also considered as factors that contributed to the decline of low bumiputera contribution in the Malaysia furniture industry's gross income.

In order to enhance the bumiputera industry, Ministry of Finance with the cooperation of Product Certification Services, Forest Research Institute Malaysia (FRIM PCS) piloted an Economic Empowerment Program for bumiputera Furniture Manufacturer. The main goals of FRIM PCS are to help the local industries to produce quality products consistently, to ensure that the forest-based industry meet the required specifications and standards determined by the stakeholders and users and to assist the wood-based furniture industry in manufacturing quality products that meet the standards as demanded by the local and international market.

This paper will examine the major raw material used in the industry. In order to ensure the manufacturing quality products in wood-based furniture industry meet the standard as demanded by the local and international markets, FRIM PCS attempted to identify the raw material suppliers initially from bumiputera manufacturers and traders. The purpose of this study is to identify the potential bumiputera supplier raw material for bumiputera furniture industry.

2. Literature review

2.1 Bumiputera Furniture Industry

According to Oxford Dictionary bumiputera is a referring to a Malaysian of indigenous Malay origin. In other definition it can be a term to describe the Malay race and other indigenous peoples of Southeast Asia, and used particularly in Malaysia. The term comes from the Sanskrit word "bhumiputra", which can be translated literally as "son of the land" or "son of the soil".

Bumiputera furniture industry was started back in 1970s with the main objective to encourage the industry especially bumiputera furniture industry to venture into high value added wood-based industry and not only depends on logging and supplying sawntimber only (Ratnasingam, 2020). The Malaysian Bumiputera Furniture Industry Association (1989) was established on 7 October 1989 with the original name of the Malaysian Society for the Bumiputra Furniture Entrepreneur Association (the umbrella concept). By the Government in the field of manufacturing and supply of furniture to the government of Malaysia. The 'concept of umbrella' was established under the conduct of Guthrie Malaysia Trading Corporation (GMTC) and subsequently under Guthrie Furniture Sdn BHD (GFSB) and his remains was named GFSB's integrated marketing programmed. PETRA's target are to the government procurement (Central Panel Contracts) Ministry of Finance Malaysia (MOF) and the contract for the Ministry of Education, Malaysia (MOE) Government procurement policy. Currently, PETRA already have 87 bumiputera Manufacturer as registered member`s in Malaysia to supply a furniture for government institution (PETRA Malaysia, 2019).

The Government continue to support the development of the furniture industry in Malaysia through various initiatives to ensure its rapid and sustainable growth. In recent years, the growth has shifted from producing general products towards designing its own, and this has been key in

propelling Malaysia onto the international arena. Additionally, the Malaysia furniture industry has been as operating as an Original Equipment Manufacturer (OEM) model. The Taiwanese companies were the initial investor in Malaysia and they adopted the OEM model to provide visibility of volume to justify the investment required. Due to the successful model of OEM, the industry has grown tremendously and Malaysia furniture industry is in great demand (Nur Syazana O. et. al., 2018).

According to Minister Datuk Seri Mah Siew Keong (2017), Malaysia furniture industry contributed significantly to the total export earnings of timber and timber products. The growth of the timber industry in Malaysia has been orderly, gradually progressing from focus on primary products, such as logs, sawn timber, veneer and plywood, towards more value-added products, comprising reconstituted panel products, mouldings, BJC and furniture (Ratnasingam, 2000). Inevitably, the timber industry has emerged as an important engine of economic growth and accounts for 2% of the country's gross domestic product (GDP).

Bumiputera furniture industry also have high potential in the industry and there are numerous initiatives provided towards the industry in order to ensure the industry remain competitiveness. Among the initiatives provides from various agencies were training of skilled labour by such as Pusat Pembangunan Kemahiran Industri Kayu (WISDEC), Lembaga Perindustrian Kayu Malaysia (MTIB), providing training programmes in furniture manufacturing and production technology by Furniture Industry Technology Centre (FITEC) Majlis Amanah Rakyat (MARA) and furniture testing and certification by Program pensijilan perabot FRIM (Suhana Rafidah, M. Y., 2018 & Ratnasingam, 2020).

The effort continues to support the growth of the bumiputera furniture industry. One of the program conducted by the government was product certification by FRIM PCS that provide in-situ furniture testing which test furniture in manufacturers' factories. Furniture testing lab in FRIM is the only lab that accredited by Furniture Industry Research Association (FIRA), United Kingdom since 1996 (Khairul Maseat & Siti Zaleha, 2018).

As stated by Ministry of Entrepreneur Development (MED), the international furniture market is estimated at RM90 billion a year. With the total Malaysian furniture trade is RM9 billion for 2007. The current sales value of bumiputera furniture is 20% of the total or RM1.2 billion only. The value of furniture exports is RM7.6 billion and the percentage of bumiputera entrepreneurs is only 2% (Mohd Tahir bin Othman (2013).

In 2019, the bumiputera furniture industry represents only 3% of total Malaysia furniture industry and the export contribution of bumiputera furniture industry is decreasing at 0.08 of total furniture export with the 12.5% equity in export market hold by bumiputera industry (Ratnasingam, 2020).

Acknowledging the potential of the industry, a lot of studies pertaining to the industry growth and issues and challenges of the industry have been conducted. A lot of previous studies highlighted the potential of bumiputera furniture industry despite the issues and challenges faced by bumiputera entrepreneurs in the industry.

The strength of bumiputera are they have own reproduction forest, supports from the Malaysia government in type of government funding, various human capital development, priority given to the bumiputera furniture manufacturers in government contract and bumiputera have skills in traditional crafts (Ratnasingam, 2020). Bumiputera furniture also is being prioritize in National

Timber Industry Policy which one of the strategic thrust is to increase bumiputera participation in Malaysia furniture industry.

Despite of the bumiputera strength and advantage in the Malaysia furniture industry, the bumiputera furniture industry has low market competitiveness and lack of raw material management and control (Ratnasingam, 2020). Nevertheless, the sustainability of raw material issues not only an issues to the bumiputera manufacturers. Ratnasingam et al., 2013 asserted that, the most important factor to be highlighted in the Malaysia furniture industry is future sustainability of the industry will depend on the sufficient availability of raw materials and a large pool of skilled workforce at competitive cost.

2.2 Suppliers Selection Criteria

A proposed framework for selection of suppliers in sustainable supply chain has been presented in Zohreh et. al., 2013. Among the sustainable criteria identified are business, economic, social and environmental criteria. Requirement for suppliers' eligibility developed in this study also referred to various programme conducted by government agencies such as MTIB which developed criteria for credit opportunities in forest plantation (MTB, 2013). In addition, for ascertain the criteria of bumiputera raw material suppliers, other criteria that have been developed by other government agencies, private sectors and organizations such as Tenaga Nasional Berhad (TNB), Ministry of International Trade and Industry (MITI), Construction Industry Development Board (CIDB), Ministry of Health, Human Rights Commission of Malaysia (SUHAKAM) and Weir Group PLC.

All of the requirement has been studied by the research team in the program and as a result, this study highlighted that, a supplier must fulfil the minimum percentage of 70% bumiputera ownership, has been operated for at least five years, registered under private limited company, the company is registered with Ministry of Finance as furniture supplier, possess infrastructure equipment such as factory, warehouse and logistic. The potential supplier also has to be able to supply the raw material at market compatible price. The quality certification own by companies will also be considered besides the business information of the company such as annual sales, number of labour and business capital. The main requirement for the company to be considered is it has to be registered with Certified Timber & Credible Suppliers (CTCS) that is fully funded by MTIB and as a manufacturer under Peninsular Malaysia Forestry Department (JPSM).

3. Methodology

3.1 Data collection

The method used in this study are data collection, field visit to suppliers' factories and face to face interview using questionnaire form developed by the research team.

Primary and secondary data collections are gathered from previous studies conducted and statistical data published by MTIB and JPSM. The information of major raw material used in the industry are identified based on previous studies conducted.

3.2 Data analysis

List of potential raw material suppliers are identified from the list of bumiputera manufacturers that registered with program Certified Timber & Credible Suppliers (CTCS) that is fully funded by MTIB and supported by Ministry of Plantation Industries and Commodities (MPIC), MTIB,

Malaysian Timber Council (MTC) & Malaysian Furniture Council (MFC), manufacturers registered with MTIB program and with JPSM. The basis of this selection is for the suppliers listed in the program have fulfilled the criteria required by those programs and the agencies.

Further requirement criteria are developed based on reference to other suppliers criteria developed by various agencies, private sectors and organizations in selecting their suppliers and in procurement management.

Type of major raw material consumed in the bumiputera industry is identified from Rohana A. R & Noor Hazmira M, 2019 and survey conducted by Academy of Sciences Malaysia (ASM) (Academy of Sciences Malaysia, 2018).

Field visit to suppliers' factories and face to face interview using questionnaire form were conducted to identify the capability of manufacturers in supplying raw material selected. Among the requirement criteria assessed are the company capital and financial status, factories' infrastructure such as the ownership of factories', warehouse and logistic, number of labour and the type and quantity of raw material they are able to supply. The quality certification possesses by the manufacturers such as certification in product quality, environment and management system are also being assessed.

The list of selected suppliers then was divided according to zones to ensure the effectiveness of the raw material logistic process. The selection process of suppliers is summarized in Figure 2 below;

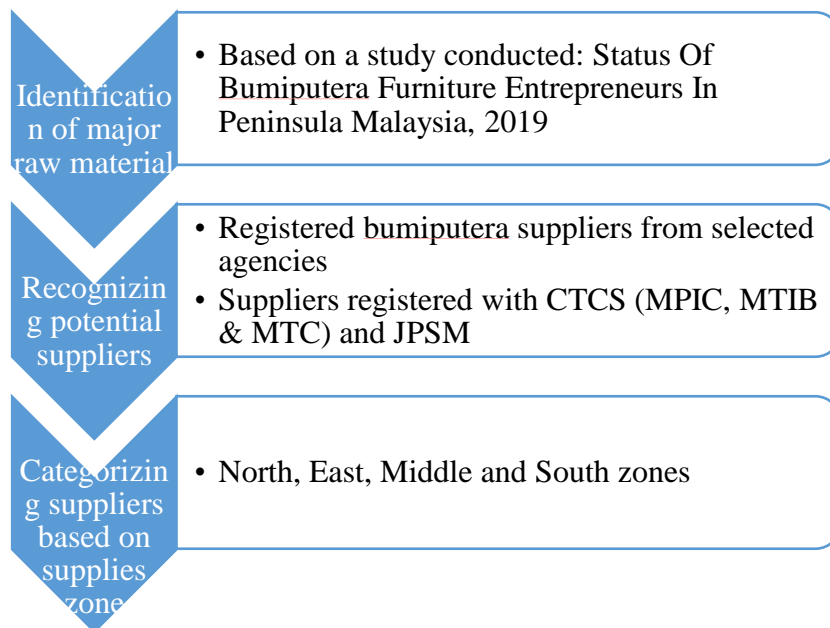


Figure 2: Selection process of suppliers

3.3 Research limitation

Availability of statistics data on domestic sales of sawntimber to major consumer is limited since it is gathered from open data sources. The data only available for year 2012 to 2016.

4. Results and discussions

Identification of major raw material consumed quantified that, among the major raw material were steel component (30%), panel products (30%), sawntimber (17%), plastic (8%), paint and thinner (5%) and others (10%) (Rohana A. R & Noor Hazmira M, 2019). This study focuses on four major raw material consumed in the industry which were steel component, panel products, sawntimber and plastic.

At the first stage of the identification of raw material suppliers, a number of 20 bumiputera suppliers for major raw material have been recognized. These list of suppliers are gathered from CTCS, MTIB and JPSM. Field visits to the manufacturers' factories are conducted and information on the manufacturers including the capacity of supplying selected raw materials are collected through face to face interview and fill in the questionnaire form.

After thorough selection process, the program finalized 13 potential suppliers and classified them in to zones. The distribution of the suppliers is presented in Figure 3.

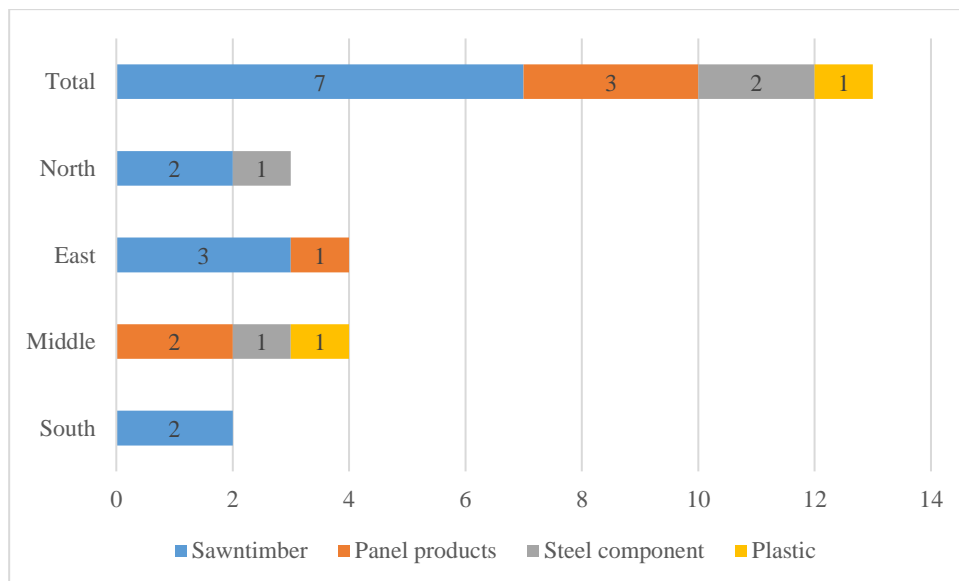


Figure 3: The Distribution of the Suppliers

The result shows that the most bumiputera suppliers identified are reliable to supply for sawntimber (7), followed by panel products (3), steel component (2) and plastic (1). The volume of raw material supplies is identified in m³ for sawntimber and panel products while the unit for steel component and plastic is in pieces or rolls.

Table 1 indicated the capability of suppliers selected in supplying major raw material identified earlier. East zone is the biggest supplier for sawntimber with the capability to supply 52,392 m³ sawntimber while middle zone is the biggest supplier for panel products with 40,000 m³ of supplies. Panel products supplier only available at middle and east zone. Similar to metal component supplies, only middle and north zone suppliers are able to supply it with only 200

pieces of supply for each zone. Last but not least, plastic supplies only available at middle zone for 200 pieces of supplies.

Table 1: Capability of suppliers selected in supplying major raw material

	Sawntimber (m ³)	Panel products (m ³)	Total	Steel component (rolls/ pieces)	Plastic (rolls/ pieces)	Total
South	21,328		21,328			
Middle		40,000	40,000	200	200	400
East	52,392	39,648	92,040			
North	21,992		21,992	200		200
Total	95,712	79,648	175,360	400	200	600

The consumption of sawntimber in bumiputera furniture industry is estimated at 5% based on the furniture domestic market; non-bumiputera 75%, bumiputera 5% and international linked companies 20%. Domestic sales of sawntimber to major consumer in 2012-2016 shows decreasing trend with an increase of sales in 2016 at 2,475,859 m³. The estimation is made based on Ratnasingam, 2020. Figure 4 shows the estimated consumption of bumiputra furniture manufacturers estimated at 5% is valued at 123,793 m³. The availability of sawntimber that identified suppliers able to supply is 95,712 m³, less about 28 thousand m³ from the estimated consumption of the bumiputera furniture manufacturer.

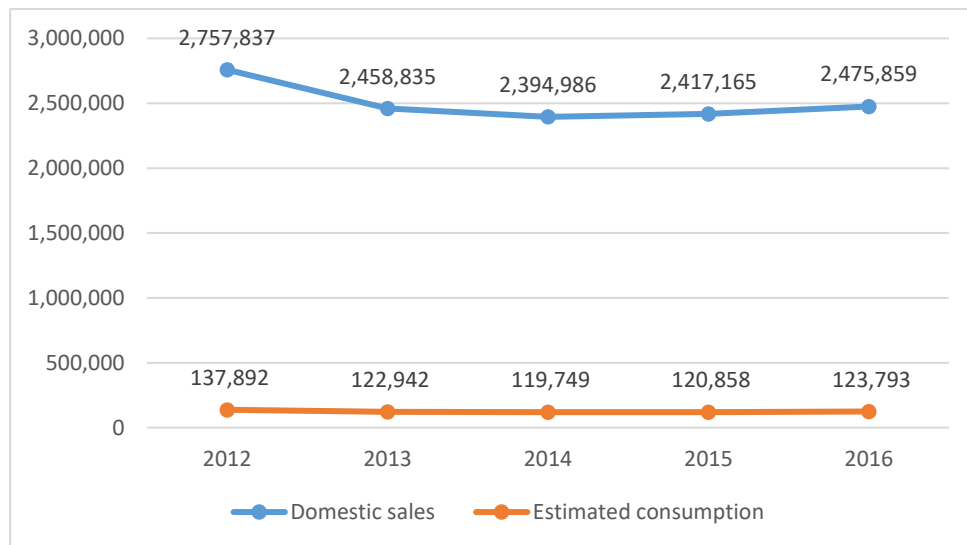


Figure 4: Domestic sales of sawntimber to major consumer in 2012-2016

Source: Peninsular Malaysia Forestry Department (JPSM) statistics

Note that the estimation cannot be made based on the domestic sales to furniture industry only because the data is reported by domestic sales by states in Malaysia, not by type of industry. This data shows the domestic sales of sawn timber for 2007-2016 to major consumers consists of furniture and other industry including joinery, moulding industry, construction industry, ship and

boat industries, boxes, crates and pallet mills, mining industry, agents and dealers, suppliers, public sector and others.

As for steel component and plastics, number of materials they able to supply is far from the actual consumption since the ratio of industry consumption for sawntimber to metal is three to one (57% to 17%) based on a survey conducted by ASM (ASM, 2018). In this study, the availability ratio of sawntimber and metal supplies are 239 to 1 (95,712 to 400). This ratio can be translated to insufficient of metal components able to be supplied by the selected bumiputera suppliers.

5. Conclusion

The study concluded that, the suppliers are not able to fulfill the raw material consumption of bumiputera furniture industry. In order to ensure the sustainability of raw material supplies and able to get quality raw material at compatible price, a system of raw material management have to be developed to continue the growth of bumiputera industry. Parallel to the effort there are some ideas to enhance sustainability of raw materials supply such as to coordinate a program to monitor all the bumiputera entrepreneur raw material supply chain. The system shall include the process of raw material purchases. A centralized raw material purchasing center that manages bulk raw material purchases shall be consider to ensure bumiputera furniture manufacturers able to buy raw material sources at a compatible price and to have the control of raw material prices. This program also ascertains the genuine of supplier.

Other than that, one of the factors of the decline participation among bumiputera in this industry is because of the lack knowledge in product value chain. In order to accomplish this undertaking, bumiputera manufacturers need to improve their human capital. The employees should have the knowledge, skills and competencies to work effectively in a rapidly changing and complex environment. The bumiputera manufacturer in this industry should participate in all training program to enhance their performance and take an opportunity through a lot of initiative that provided by government in order to ensure the growth of bumiputera furniture industry in Malaysia.

The idea of centralized raw material purchasing center also helps the bumiputera manufacturers to strengthen their internal capacity through a cross-broader strategic alliance and besides strengthen their source of raw material supplies. The effort is hoped to be done and help the growth of the industry and in facing fast-changing global consumer market. In addition, research and development (R&D) also one of the important criteria to ensure the growth the industry. The effort done in this area is another effort by government for bumiputera manufacturers. The participation of bumiputera manufacturers in R&D activities help the manufacturers to be more competitive and act as a win-win situation for both parties.

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Accessibility Learning Tools and Portability toward the Effectiveness of the Use of iPad Among University Students

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Abstract - Rapid changes in technology have affected many industries. Education industry is also affected in which ways of teaching and learning change rapidly simultaneously with changes in students' demographics. However, the use of technology in education especially in using portable learning devices is still not at large. Thus, this study aims to identify the effectiveness of use of iPad among university students. Through the simple random sampling 338 samples from 2800 students were chosen to answer a structured questionnaire. Statistical tests were employed to analyse the data collected. The results indicate that learning tools and portability are significantly correlated toward effective learning. This study significantly contributes in providing knowledge on the use of technology in teaching and learning.

Keywords: Effectiveness, Student, Portability, Learning tools, iPad

1. Introduction

The advancement of technology nowadays has changed the ways people learn. Education is changing and adapting due to this advancement. The change in and adaptation of technology in education is a challenge for those who are in education. This is due to the perception that the use of technology embedded in learning in classrooms can enhance the learning process among students. In addition, the use of tablets, computers and smartboards that are dynamic teaching tools seems to support teachers in delivering lessons effectively. Thus, teachers or lecturers have to make the right technology choices in teaching and learning so that both teachers and students would gain benefits (Grigoryan, 2020; Lee & Gao, 2020; Lestari & Indrasari, 2019).

The Malaysian government is critically concerned about the transition and changing trend path toward technology adoption and demographic preferences. Therefore, the Malaysian Ministry of Education introduced a comprehensive review of Malaysia's education system as an action plan to restructure Malaysia's education system. As a result, the government has developed a new National Education Blueprint to outline future verification education for changing new demographic preferences and rapid changes in teaching and learning technology. Malaysia Education Blueprint 2013-2035 is thus debuting to leverage the difference between various preferences (Blueprint, 2015). In addition, this action is an effort to improve education standards and provides the Malaysia education system's sustainable educational transformation until 2025 (Bush et al., 2018). The new era of metadata communication and technology (ICT) in education

should really be continuously evolved to match the ability of students due to transform demographic characteristics and industry 4.0 revolution, as well as their educational experience lectures due to new information technology development (Bridge, 2019). Hence, this research aims to discover the relationship between portability and learning tools toward the effective use of iPad among university students.

2. Literature Review

One-on-one technology device like iPad gives students access to educational information outside the classroom to support their education. It also makes it easier for lecturers and students to share references, notes and relevant information in an instance. It is undesirable to keep information technology out from the educational system since students nowadays are generation of gadgets and they use them in their everyday life. The mobile devices have become essential for many nowadays. Educators can learn from the benefits that technology has brought to other fields such as banking and e-commerce (Lee & Gao, 2020; Pamuk et al., 2013).

Besides, student learning experience is an important predictor of student success. The expectations of students influence, student satisfaction, and how students view their studies in terms of time and energy they expend on educationally purposeful tasks, which ultimately directly impact their performance and personal growth (Henderson et al., 2017; Ma et al., 2018). Therefore, the students are inspired and the more they enjoy the lesson, the more they learn. According to (Dyer, 2013), the studies have shown a positive impact on organizational and cognitive skills due to using iPad in classrooms or at home. This is in term of collecting and organising information, taking and storing notes and saving class learning materials. The students have gain empowerment to become researchers and independent learners by using iPad as a learning tool (Hargis et al., 2014).

The iPad App plays a role in offering plenty of the facilities in the teaching and learning process as students can select auditory and visual resources to reflect their needs, upload and exchange information with anyone and everyone, use it as a tool to display information and presentations due to its user-friendly apps. According to Ireland and Woollerton (2010), the education system is the primary working condition for making a leap for the next step in Apple's product and iPad device also uses multimedia types such as newspaper, digital books, magazine, music, video, games, all apple ios and android programs.

The integration of technology into education means using technology as a method for teaching subject matters and fostering problem-solving, higher-order thinking skills. It also focuses on reforming schools and universities (Striukova & Rayna, 2015). The entire education community of students, parents, lecturers and administrators have to accept that technology devices such as iPads are a part of students' life. The success of technology integration comes from a social network used by lecturers, students and institutional support in the learning session (Gibson et al., 2008).

Boling et al. (2012) define technology in education as an integrated framework for planning, implementing and updating the different aspects of the educational system as per the basic and clear common and particular objectives, and hires a collection of social human elements and various educational resources that are aimed at providing quality education. The role of using educational technology focuses primarily on the need to equip learners' skills on what they learn beyond classrooms. This condition is aligned with the assumption of modern educational theory

that considers the educational goal is not only of knowledge holding, but also engagement, participation and cooperation. The more engagement and cooperation between learning components are achieved, the more improved learning opportunities can be attained (Crosling et al., 2015). Accordingly, educational technology involves all measures and digital devices such as computers and mobile devices, and iPad device is one of them and can be used in effective teaching and learning.

There are many advantages of using iPad in classrooms. Li and Pow, 2011 have stated have four: increasing student engagement, enhancing thinking skills, improving learning strategies and preparing everyday activities in classrooms. The findings indicated that students improved compared to learning using the traditional instructor-centred method. Among the reason for this is that iPad provides interactive learning environment.

Most of the previous studies have states that the use of iPad in learning can make learners think and add interest and excitement in the learning process. Furthermore, it is also noted that students' performance in classrooms have improved and so is the cognitive ability. Teachers and students discovered that iPad was user-friendly and majority of them used iPad regularly in the process of teaching and learning (Hutchison et al., 2012). These researchers further explained that students' ability was enhanced by using mobile device and this would eventually enhance students' performance. This was in agreement with the purpose of embedding technology into education in enhancing learners' academic performance and achieving other educational outcomes.

Beauchamp et al. (2015) carried out a study to incorporate portable devices at eight various locations in Scotland. Study data were obtained through a primary and final survey of student and parent preferences, interviews with school teachers and principals, interviews with local authority leaders, student focus groups in each classroom, and research team's evaluation in each class. Findings of the study showed that using iPad facilitated learning process and achievement components included in the overall method structure. Although the initial stage of using iPad was more of facilitating internet access, it had developed into a wide range of interactive learning opportunities available in a way that was never before (Dunn & Kennedy, 2019; Gibson et al., 2008).

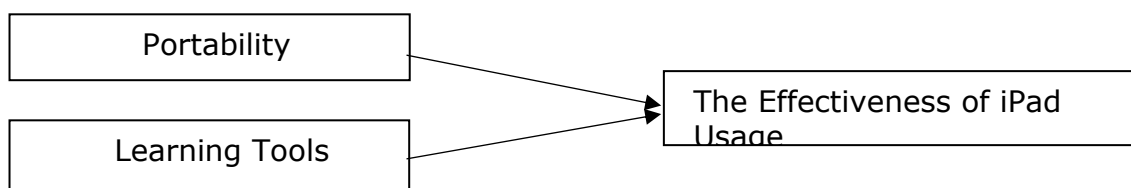
Outside the classroom, it is important to use the ideal size for iPad portability in fieldwork, transporting documents and e-books, capturing real-time observations or accessing references, storing and reviewing text data and multimedia (Park et al., 2012). The iPad device offers portability to change learning patterns or daily work activity. The size and weight of the iPad potentially makes it ideal as a portable learning device and will benefit those who want to use a computer in a way that makes technology 'invisible' within the learning experience (Boyle & Cook, 2001; Collis & De Diana, 1994; Simatele, 2015). It did not give a burden to a student if the weight iPad is ideal and easy to carry for class and outside class. So, when using the iPad, the student and lecture ease to access the information anytime and anywhere. The iPad shares many of the affordances provided by smartphones, tablets and laptops, but its key focus is the amount of interactivity available in such a portable unit (Dias & Victor, 2017; Stratton et al., 2019).

Hutchison et al., 2012 say that the iPad's design allows students to develop and interact with the meaning of the prints. Students can recognize icons and texts and connect them with the applications they want. They use the print concept to get the desired result. Many iPad apps naturally connect reading, writing, listening and speaking. When they use the iPad to hear familiar stories and then interact with the text despite the recording options, they become excited to hear themselves read or repeat the story. When they can change images or texts in the story, they develop a creative writing strategy. Students have a frequent opportunity to collaborate in an interactive process that helps expand reading, writing, listening and speaking connections (Lestari

& Indrasari, 2019; Pamuk et al., 2013). Finally, the iPad is allowed for mobile and kinaesthetic interactions that cannot be offered by traditional desktop or laptop computers. In conclusion, Walter insists that the use of the iPad in school helps teachers build and carry out learning activities that enable students to achieve “create” levels (Boling et al., 2012; Dunn & Kennedy, 2019; Simpson, 2018)

Other than what have been described, iPad can also help students to access learning materials or any other relevant reading materials or assessment according to their own time and space. In classrooms, iPad can assist students when they are discussing with their teachers or lecturers. Students could access any information that is required in a matter of minutes and this would save much time so that other meaningful learning activities can take place in classrooms. So, all the explanations gathered from previous studies have demonstrated that iPad indeed is an effective technology device to be used in the process of teaching and learning. Therefore, the conceptual framework of this study is shown in Figure 2.1.

Figure 2.1: Conceptual Framework



Methodology

This research aims to explore and identify the effectiveness of using iPad among university students. Three hundred and thirty eight respondents were selected from a total of 2800 population of University Malaysia Kelantan (UMK) students (Krejcie & Morgan, 1970). Simple random sampling was used to acquire the data by using a survey questionnaire. Computer-assisted personal interview (CAPI) was implemented to ensure the required sample of data was met. The questionnaire used a structured questionnaire in catering for large group (Hassanuddin et al., 2020; Weller, 1998).

The questionnaire had three sections that were Section A, Section B and Section C. These sections consisted of demographic profile of respondents, items on the dependent variable (Effectiveness) and item on the independent variable (Learning tools and Portability). Respondents had to answer the questions based on a 5 point Likert Scale.

Result and Discussion

4.1 Normality Test

Statistical errors are widespread in scientific literatures and many statistical methods, including parametric tests, need to verify the assumption of normality. The figure below is a summary of standard testing in statistical analysis using SPSS. A visual method using a Q-Q plot was used to ascertain normal distribution for students’ performance, portability, and effective learning tools for students’ use.

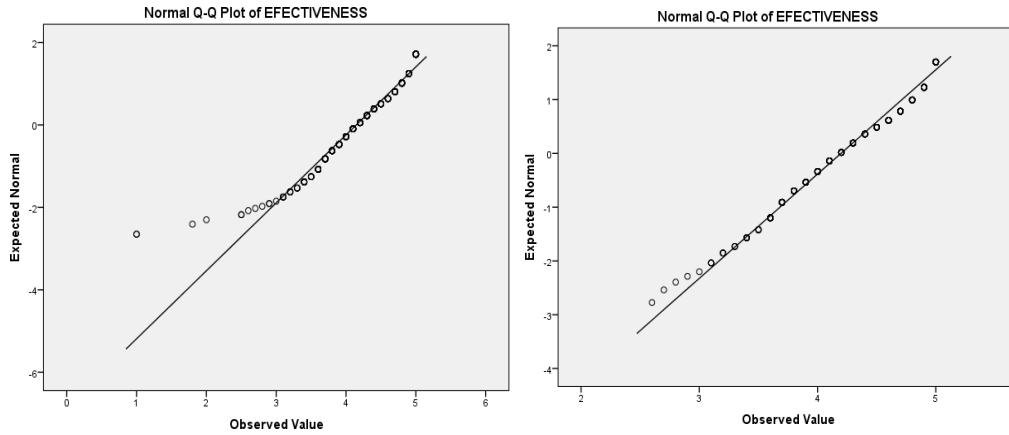


Figure 4.1: Q-Q Plot of The Effectiveness of iPad usage among students

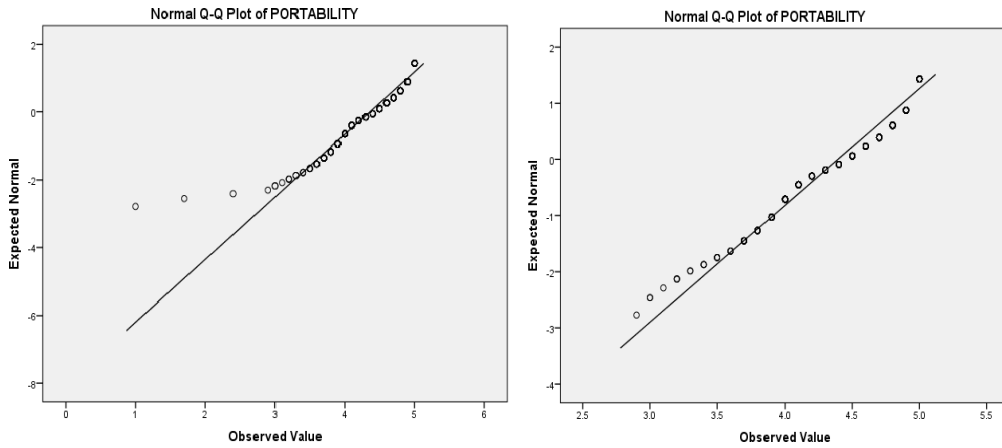


Figure 4.2: Q-Q Plot of Portability

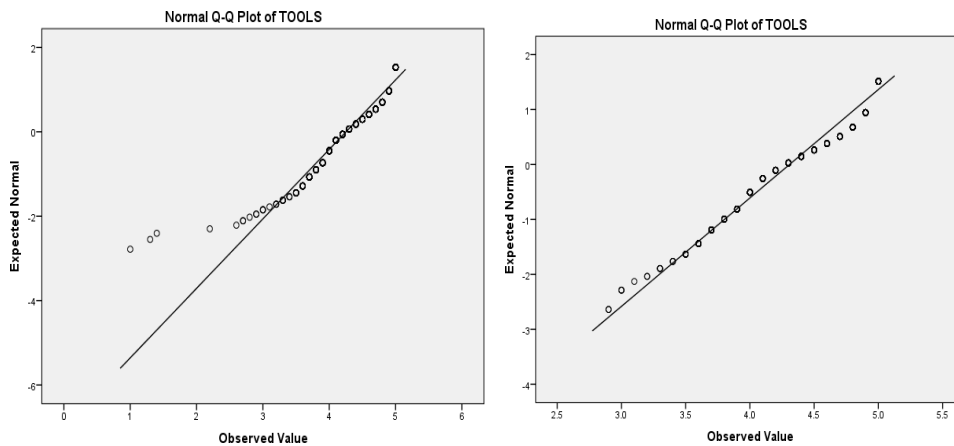


Figure 4.3: Q-Q Plot of Learning Tools

Based on the above figures, the results of normality before and after the respondents defined the factors were not placed along the diagonal line, which must be reduced by almost four per cent in order to reach the normal position in terms of all variables that were iPad capacity, student output,

portability, and learning tools. All figures on the right show that all data points were positioned approximately along the diagonal line, indicating that the data was normally distributed after second normality test (Ghasemi & Zahediasl, 2012).

4.2 Reliability

Reliability test was conducted using Cronbach’s Alpha analysis. It was conducted to determine the quality of internal consistency of the set of the dependent variable and the independent variable. Furthermore, the analysis enables the researcher to determine whether these sets of item have a strong level of stability.

Table 4.1: Cronbach’s Alpha

	N of items	Alpha Coefficient
The Effectiveness of Ipad usage	10	0.827
Student Performance	10	0.747
Portability	10	0.858
Learning Tools	10	0.887

The reliability of each variable is shown in Table 4.1. The alpha coefficient for the dependent variable was 0.827. Then, the values for alpha coefficient for the independent variables were student performance at 0.747, portability at 0.858 and learning tools at 0.887. Hence, all the variables showed very good of reliability except for students’ performance which has good reliability (Gliem & Gliem, 2003).

4.3 Descriptive Statistics

Descriptive statistics shows the mean for each variable. The responses were scaled using 5-point Likert where 1 indicated ‘Strongly Disagree’, 2 as Disagree, 3 as ‘Not at All’, 4 as ‘Agree’ and 5 as ‘Strongly Agree’.

Table 4.2: Descriptive Statistics

Variables	Mean	Std.Deviation	N
The Effectiveness of iPad Usage	4.1981	0.51565	359
Portability	4.3933	0.48029	359
Learning Tools	4.3084	0.50681	359

According to Table 4.2, three independent variables indicated an average mean which 4.3933 for portability, 4.3084 for learning tools and 3.9036 for student performance. Then, for the dependent variable the effectiveness of iPad use, the mean score was 4.1981. Each variable was considered as having high score. Mean score indicates how the respondents rate those variables. The results

show that respondents rated high score. The overall standard deviation was less than 1 which means all the respondents understood the questions and they could answer them well.

4.4 Pearson Correlation

Pearson's coefficient of correlation measures the statistical relationship or interaction between two continuous variables (Benesty et al., 2009; Hair, 2007). This analysis was used to identify whether the hypothesis formed to be accepted or rejected.

H1: There is significant positive relationship between portability and the effectiveness of iPad use among FEB students in UMK City Campus.

Table 4.3: Pearson Correlation for Portability

		Portability	The Effectiveness of iPad Usage
Portability	Pearson Correlation	1	0.489**
	Sig. (2-tailed)		0.000
	N	338	338
The Effectiveness of iPad Usage	Pearson Correlation	0.489**	1
	Sig. (2-tailed)	0.000	
	N	338	338

Based on the Table 4.3, the relationship between the independent variable and the dependent variable which were Portability and The Effectiveness of iPad Use is shown. The findings show that the second correlation between Portability and The Effectiveness of iPad usage was r-value of 0.489 (48.9 per cent). Therefore, this figure represents a low positive relationship between Student Performance and The Effectiveness of iPad Use. Hence, H1 is accepted.

H2: There is significant positive relationship between learning tools and the effectiveness of iPad use among FEB students in UMK City Campus.

Table 4.4: Pearson Correlation for Learning Tools

		Learning Tools	The Effectiveness of iPad Usage
Learning Tools	Pearson Correlation	1	0.708**
	Sig. (2-tailed)		0.000
	N	338	338
The Effectiveness of iPad Usage	Pearson Correlation	0.708**	1
	Sig. (2-tailed)	0.000	
	N	338	338

Table 4.4 presents the relationship between independent variable and dependent variable which were Learning Tools and The Effectiveness of iPad Use. The results show that the third correlation between Learning Tools and The Effectiveness of iPad use was r-value of 0.708 (70.8 per cent).

Hence, this figure represents a high positive relationship between Learning Tools and The Effectiveness of iPad Use. Hence, H2 is accepted.

4.5 Hypothesis Testing

Hypothesis testing is the use of statistics to determine the probability that a given hypothesis is true. There were three hypothesis testing conducted in this research which was students' performance, portability and learning tools.

Table 4.5: Hypothesis Result

Hypotheses	Result
I. Portability H2= There is significant positive relationship between portability and the effectiveness of iPad use among FEB students in UMK City Campus.	Accepted ($p>0.5$)
II. Learning Tools H3= There is significant positive relationship between learning tools and the effectiveness of iPad use among FEB students in UMK City Campus.	Accepted ($p<0.5$)

In Table 4.5, the significant value for student performance is 0.000 which is below 0.05. This shows that H1 is accepted. Hence, there is a significant positive relationship between students' performance and the effectiveness of iPad use among students of UMK. This shows that students' performance is a factor affecting the effectiveness of iPad use among UMK students.

In Table 4.4, the significant value for portability is 0.000 which is less than 0.05 and this means that H2 is accepted. Thus, there is a significant positive relationship between portability and the effectiveness of iPad use among UMK City Campus students. This also means that portability is an element that affects the effectiveness of iPad use among FEB UMK students.

The significant value for learning tools is 0.00 which is below 0.05 as depicted in Table 4.4. This indicates that H3 is accepted. Consequently, there was significant positive relationship between learning tools and the effectiveness of iPad use among UMK students. This also indicates that learning tools is a factor that influences the effectiveness of iPad use among FEB UMK students.

4.6 Limitation

Firstly, the findings of this research can be applicable to UMK only. This is because only UMK provides iPad to their students starting from 2014 based on a report in Utusan Online (2 September 2014). Other universities may not use the findings of this research effectively since they do not provide them with the device. Hence, the findings could not be generalised to other universities because the scenario might be different. Secondly, this research also did not cover other unit of analysis such as lecturers and postgraduate students.

Thus, this limitation can be further extended in future research works. Different demographic profiles and different items of variables can be explored in investigating the effectiveness of iPad use in higher education institutes.

Recommendation

It is recommended that other universities follow the footsteps of Universiti Malaysia Kelantan in providing students with a current and effective learning device like iPad. This is in agreement with the Education Blueprint 2013-2035 in which it is stated that technology needs to be incorporated in the learning and teaching process as to prepare future work force that are digitally skilled. This also facilitates the demand of today's education needs in the context of Industrial Revolution 4.0, preparing students to be more autonomous in their learning so that learning becomes more meaningful, engaging and interesting and they are more empowered in using technology.

It is also recommended that lecturers or educators to be more technology inclined in their teaching in allowing themselves to be more creative, innovative and competitive in this digital era. Teacher centred learning can be considered as an orthodox teaching method, thus lecturers can use technology in making their lessons or lectures more interesting and appealing to the students who are majority come from the millennial group that use gadgets in their daily routines. Lecturers and educators should take up the challenge in using devices or gadgets in classrooms so that they keep abreast with the latest development in educational technology. Their lessons or lectures would also be more interactive, interesting and appealing to students.

Finally, it is also recommended that future research works to be conducted in studying the impact or the effectiveness of using other devices such as laptop or desktop. Such research works would provide more useful and insightful data in enhancing teaching and learning using technology as we are globally moving toward the digitalisation of education especially with the recent COVID-19 pandemic that affects many countries in the world.

Conclusion

All in all, this study has proven that the use of iPad brings about positive influence onto students' learning in Universiti Malaysia Kelantan City Campus. iPad with all of its good attributes is able to make learning more appealing and meaningful for them. A portable learning device such as iPad makes learning more flexible for students as they can access information at their own time or pace. This would make them to feel less apprehensive in acquiring knowledge or skills and eventually, would make learning more effective and meaningful for them.

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The Effect Of Talent Attraction And Talent Development Towards Talent Shortage In Supply Chain Industry Among Young Generation

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Abstract - The purpose of this paper is to identify the factors of talent attraction and talent development contributing to towards the talent shortage in supply chain industry among young generation. Talent shortage being under acute situation in supply chain industry, it happen due to current generation of fresh graduates lifestyle and their work environment preference changed. The supply chain industry nowadays mismatch to provide the needs and want of new generation graduate. Poor talent attraction and development in supply chain industry has cause the industry remain stagnant. Therefore, this paper is using 5 dimensions, which are employee's benefits, compensation of salary, career development, training development and lifelong learning to determine the relationship between these 5 dimensions with talent shortage. Data analysis was conducted to execute of the methodology proposed. Data were collected through simple random sampling technique from 246 respondent. The analysis of the data generated by using SPSS version 25. The findings in this study showed that all the variables had significant relationship with talent shortage. In a nutshell, the implications of this paper is mean towards supply chain industry and young generation in providing future attractive and development of working environment.

Keywords: Talent Attraction, Talent Development, Talent Shortage, Supply Chain, Young Generation.

1. Introduction

There is no denying that there is a talent gap in the supply chain management career field. This talent gap should not have come as a surprise to anyone as it has been the subject of papers, research and articles in every major journal and trade magazine for the past 20 years. The time has come to build a bridge to fill the gap in supply chain talent. The responsibility for filling the talent gap is a combination of industry outreach programmes to universities and high schools and outreach by academia to partner with industry and modify curriculums to meet the needs of industry (Walden, 2020).

According to Hays, (2017), there are 97% Malaysian employers are still struggle to find the talent they need and the employers face skill and talent shortage challenge (2017). Skill and talent shortage is the biggest challenges for employers in Malaysia on that year. There have 69% of Malaysian employers said they do not have the right talent to achieve current business objective based on Hays survey. Talent shortage problem in supply chain industry under acute situation, where highest significant contribution of talent shortages are in supply chain industry encompasses of logistic mover, logistic skilled operation worker, automation logistic and supply chain technician, data mining engineers, and others. The employers face difficulty in logistic and supply chain sector to recruit a candidates to fill entry to middle management roles in the current market is aggregated at 7%.

In contrary, according to Beheshtifar, Nasab, & Moghadam, (2012) difficulty to fill up the vacant in logistic and supply chain industry is due to most of the organization could not attract new talent. The situation occur is because lack of an attractive compensation providing by the industry towards young generation. Based on that situation, recent movement made by some companies, they kept attract more people into this industry because they want to reach new talent pools. From that action, there are 32% of companies are improving employees benefits and uses it as an attraction tool and also to boost employer brand image (Talent Shortage Survey, 2018). Apart from that, there are other reason cause talent shortage that is lack of development and the survey showed that one third of companies are does not have appropriate future career path for their talent pipeline (Solutions, 2019).

2. Problem Statement

The imbalance between young generation working environment preferences and supply chain value proposition benefit provided caused unresolved mismatch between supply and demand equilibrium. Young generations believed they have an adequate skills equipped from degree certification awarded and they feel they deserve better value proposition benefit. Whereas, the supply chain and logistic industry contrariwise believe, where the stated that young generation do not ready, unfit to start and paid enough for their job level. If this problem remain happen, the industry will facing difficult to find the talent to meet the demand.

Besides, supply chain industry demand is keep growing and change but the employers remain in presumptuousness. Therefore, young generation often to be attracted and difficult to find, and the industry will lost their future talent with special expertise to perform their job tasks. The need of harmonization between young generation talent and the industry should be symphonised appropriately to resolve talent shortage. Providing the industry render with attractive talent value proposition and clear career path development for them to feel secure with their job.

Hence, this paper aims to outline three main objectives a) to identify talent attraction and development factor contributing towards talent shortage in supply chain industry, b) to analyse the factors contribute towards talent shortage, and c) finally to propose resolve talent shortage framework in supply chain and logistic industry for young generation.

3. LITERATURE REVIEW

Talent Attraction

The creative human being and the exceptional skill are the most important of these. Organization need to handle talent efficiently, attract the most talented people, be more adaptive, adaptable and productive to present and future jobs requirements. Attracting and retaining top talent is a major concern for human capital management practitioners today by Yaseen, Shatnawi, & Obeidat (2018). Talent attraction is one process from talent management needed to raise employee productivity. It is important in talent management to retaining of employee in company with the employee talent. According to Al-Lozi, Almomani, & Al-Hawary (2018), the process of attraction is based on a set of criteria, which is to take into consideration the value of the organization and its vision. The organization operates to create skill and expertise after attracting talented individuals to create these talents through education, training and growth.

Other than that, factors such as employee value proposition, individual approach, brand consistency, employer brand communication and employer brand effort measurement are essential for attracting talent to organization through people education, attracting and development. The researcher found out a solid employer-branding component is the foundation of talent attraction, Myburgh (2015). In addition, tracking and attracting talent must be incorporated with the general policies of the management. Identifying and attracting skilled talent help organization choose individuals who not only possess the necessary abilities,

but also display attitudes, personality traits and behaviors that guarantee organisational fitness and encourage engagement.

Employee Benefit

Benefit is programs an employer uses to supplement the cash compensation that employees receive WorldatWork (2011, p.5). According to Armstrong & Murlis (2007), employee benefit serves as attraction tool as they provide for actual or perceived personal need. This show employee benefits are important in overcome talent shortage of supply chain. If lack of employee benefits such as health, sick pay and other, it makes employee see benefits they receive as the extent to which their organization value their contribution and care about their well-being Jensen, McMullen, & Stark (2007). The researcher found out the lack of employee benefit will influence talent shortage of supply chain. Employee benefit is one from talent attraction to make employee stay in company.

Monetary Compensation

For poor compensation of salary, it will influence talent shortage of supply chain because according to Kwenin et al., (2013) when employees are rewarded fairly, they will be inclined to stay with their current employer. From this the researcher found out poor compensation of salary influence the talent shortage of supply chain but if rewarded fairly, talent shortage will decrease. According to Johari, Yean, Adnan, Yahya, & Ahmad (2012), researcher found out that compensation system helps to attract, retain and motivate employee to continue contributing towards organization. The mostly critical issues when it comes attracting and retaining talent is direct compensation by willis (2000). In the future, compensation to attract employee stay in company, with the poor compensation of salary will give effect to employee in talent shortage of supply chain.

Talent Development

According to Alferaih, Sarwar, & Eid (2018) talent development is mainly known as a key component of talent management. Even though the research and scholarly articles which explaining this phenomenon is very limited, but the necessity of talent development is clearly seen among the huge success of companies in managing talent. Talent development is mainly accomplishing “zero talent outages” and to create a solid talent succession plan rather than replacement of talent. Besides, according to a research conducted by Garavan et al., (2012) clearly explains the importance of talent development both in global and local level. His studies are also that talent development is not a one size-fits-all approach, but it should be differentiated with an emphasis on customizing talent development aspects to meet the needs of customers.

Development of employees is a main element for organizational growth and without having a proper learning, it may become very problematic for employees to maintain their performance in in today’s competitive business field. Hence, development of talent is very essential for employees for upgrade their skills to meet the needs of continuously changing environment. Perhaps, employees are not performing well due to lack of skills and capabilities and this will cause talent shortage in industry. Hence, execution talent development programs such as of coaching and mentoring practices by organization helps workers to develop skills to meet the performance requirement at work place. According to Achi & Sleilati (2016) coaching is one-to-one intervention for leaning and development that improvise the goal focused approach in developing the potential employee’s skills and competency level.

Training Development

Training development is one of the main dimensions under talent development variable. Training and development have become one of the necessary functions in most organizations because they lead to a higher-level performance in business field and important part of human resource management.

Besides, according to Kovalenko (2019) believe that training element in improving the productivity of employees which ultimately affects a company’s performance and effectiveness. Furthermore, training must help to covers the employee’s performance and development needs in accordance with their job

requirements. Besides Alipour, Salehi, & Shahnava (2009) also said that training techniques are classified into behavioral or On-the-job or off-the-job cognitive. Hence, its clearly seen that training development is totally important to support talents to build employee's skills and competency level.

Career Path Development

According to the author career is defined as "Work is now defined not by occupational titles or categories, but by skills and values. Effective career builders know how to shape and build their careers, project by project. This is a new competency, still largely unrecognized by most adults in the workforce". The modern attitude of career is that is something that to be developed or build through continues and sincere effort. Career development may differ according to an organization goals and strategic plans. Furthermore, according to H. Church (2014), a well-developed and improvise career plan will tie a star worker to his or her job hence decreasing the possibilities of talent shortage.

Based on Hoekstra (2011), there are several roles of career development namely an identity for a talent. Hoekstra has come out with some major process of career development by obtaining dissimilar career roles. Basically, career roles define as the continuous development of career identity on the personal side which have a high potential on preventing talent shortage in any business field.

Life Long Learning

Lifelong learning is another important dimension in explaining talent development variable. According to Hager (2004) lifelong learning includes in both formal and informal educational process which provide further opportunities for employees to growth in and industry. According to Kirby, Knapper, Lamon, & Egnatoff (2010), the importance of lifelong learning has increased as a result of rapid change in the world, and the lifelong learning approach began to appear in educational systems.

The concept of lifelong learning provided an understanding of education as a continuing aspect in daily life in the 1970s. Means there are issues about less of knowledge in economic which means those who are low in level of skill and lack of updates about the surrounding will difficult to find the job. Hence, an individual must have the ability to enhance him or herself in lifelong learning process to indulge in their future career which will provide a major contribution to reduce talent shortage.

Talent Shortage

According to Dalayga, Mohkber, & Rashid (2017) talent shortage refers that people who had expert knowledge and skills are being less and suitable people for a position are more difficult to find and retain nowadays. Besides, the researcher found that talent development is a major activity in global talent management has obvious effect on talent shortage. Besides, there was a new topic on global talent management that related with self-initiated foreign workers, embedded the huge company performance with cultural intelligence and defining the talent in worldwide market.

According to Wójcik (2018), competition for talent is current issue and critical challenges that facing by human resources (HR) departments. The result shows that talent shortage caused by unfavorable demographics and lack of appropriate qualifications of potential workers. Talent shortage cause ability of customer service being limited, lack of competitive advantage and lack of productivity.

Conceptual Framework

A research framework has been conducted to investigate the influences of talent attraction and talent development in improvising talent shortage at entry level in supply chain industry. There are 5 dimensions to use to investigate the relationship between independent variable (talent attraction and talent development) and dependent variable (talent shortage). This framework helps the audience to understand the variables of the study easily.

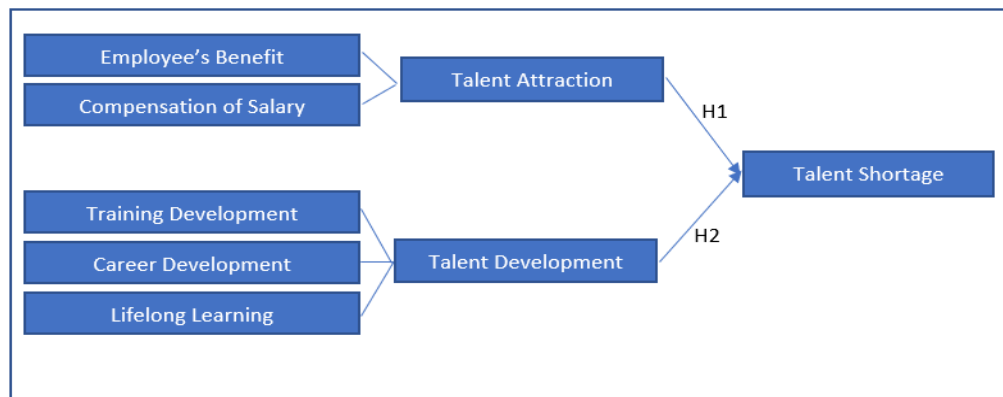


Figure 1: Conceptual Framework for Talent Shortage among Young Generation

4. METHODOLOGY

This is quantitative research conducted to investigate the relationship between talent shortage at entry level in supply chain and talent attraction and talent development in University of Malaysia Kelantan. Target sample of this study are the final year students from Faculty of Entrepreneur and Business (FEB) in University Malaysia Kelantan. The population of this study is 686 and the sample size is 246 according to Krejcie & Morgan (1970) table. Before the actual distribution of questionnaire, there have 60 respondents involved in the pilot test in order to ensure the reliability and accuracy of the survey.

The data will be analysis through Statistical Package for the Social Science (SPSS) Version 25. In this study, data analysis will be performed in two stages. For the first stages, descriptive analysis will be uses to analysis the demographic data in this study. For the respondent demographic, it can be present through frequency distribution which means that present into the table foam, bar chart, pie chart, histogram and others. With frequency distribution, researchers are easily to interpret the data. With descriptive analysis, researcher will easily to identify the respondents' demographic in this study. By using Pearson Correlation, researcher will able to determine the independent variables is positively influenced talent shortage at entry level in supply chain or not. Thus, by develop multiple regression analysis, researcher will able to identify which factors are significant predictors of talent shortage at entry level in supply chain.

5. FINDINGS

Demographic of Respondents

The total respondents that had been participated by answered the questionnaire was 246 respondent and the demographic profile are include of the respondents' gender, age, ethnic, course, interest in supply chain and employees expected benefit.

Table 5.1 Demographics Result

Profile		Frequency	%
Gender	Male	98	39.8%
	Female	148	60.2%
Age	Below 24 years	230	93.5%
	Above 25 years	16	6.5%

Ethnicity	Chinese	93	37.8%
	Malay	74	30.1%
	Indian	79	32.1%
Interested to Work in Supply Chain Industry	Yes	216	87.8%
	No	30	12.2%
Expected Employee Benefits	Attractive Salary	198	80.5%
	Health Care Benefits	31	12.6%
	Flexible Working Hour	17	6.9%

The male respondent are 39.8% and the female respondent are 60.2%. There are 246 respondents who were take part in answering the questionnaire; there are 98 male respondents, while 148 respondent who are female. The frequency of various ethnicity of respondents which are Chinese, Malay and Indian who involved in the questionnaire is shown in table and figure. Out of 246 respondents, there are 93 of respondents or 37.8% are Chinese, 74 of respondents or 30.1% are Malay. Indian occupied 79 or 32.1% been participated for the questionnaire. Next, there are frequency of few group of respondents who had been take part in the questionnaire. Out of the 246 respondents, 230 of respondents with 93.5% are below 24 years old. The least group of respondents are fall under category above 25 years old which contribute 6.5% and consists of 16 respondents. Next for the interest in supply chain industry, there are 216 respondent which are 87.8% mention that got interested in supply chain industry. Followed by there are 30 respondents which are 12.2% stated that did not had interested in supply chain in industry. Lastly, there are 198 respondents or 80.5% expected attractive salary from employers. Moreover, the 31 respondents or 12.6% of them concerned about health care benefits from the employers. Lastly, based on the SPSS output it shows that 17 respondents which are 6.9% of them expected flexible working hours from the employers.

Descriptive Analysis for Mean

There are 30 items are been tested and presented in Table 4.3. All the mean score of those 30 items are above 8.00. This is an indication that the majority of the respondents agreed with the items' statements.

Table 4.2: Summary of the means of items according to variable (N=246)

Variables	Importance	
	Mean	Std. Deviation
Talent Shortage (DV 1)	8.2520	1.2815
TS1 Employers cannot find the skills they need	8.3902	1.1720
TS2 Talent shortage are growing	8.0122	1.4242
TS3 Lack of applicants is main reason of talent shortage	8.1301	1.3819
TS4 Applicants lack required hard skills or soft skills they need	8.0854	1.3839
TS5 Large firms are more difficult filling roles		
Employee Benefits (IV 1)		
EB1 The provision of employee health and wellness programme	8.5894	0.9721
EB2 The provision of incentive bonuses if I do a good job	8.6463	1.1216

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EB3	The provision of medical aid benefits	8.6382	1.0396
EB4	The provision of work life programmes (Example: Flexible working arrangement, Flexible hours)	8.5325	1.0676
EB5	Having a manageable workload and reasonable work pace	8.6016	1.0972
Compensation of Salary (IV2)			
CS1	The provision of a competitive pay package	8.5976	1.1050
CS2	The provision of financial recognition (Example: Cash, Paid travel)	8.6748	1.1139
CS3	Get reward if perform well	8.7561	1.0407
CS4	Increase salary frequently	8.6667	1.2300
CS5	Feel motivated if get promoted by company	8.7033	1.0328
Career Development (IV3)			
CD1	Company always plan on employee's career growth	8.5000	0.9762
CD2	Company offer career development programs	8.4553	0.9710
CD3	Company has in-house development programs	8.3211	1.1386
CD4	Company provide career internship program	8.2236	1.0780
CD5	The provision of career mentor	8.3008	1.0570
Training Development (IV4)			
TD1	Company provide additional training and development programs	8.5081	1.0604
TD2	Company provide proper job instructions and coaching	8.3780	0.9853
TD3	I prefer job rotation at my organisation	8.3415	1.0208
TD4	The provision of layer training method	8.3252	1.0142
TD5	Company provide off-job-training	8.2154	1.0293
Lifelong Learning (IV5)			
LL1	Company allow self-direct learning in organisation	8.1951	1.0929
LL2	Company connect employees with inspirational mentors	8.3130	1.0079
LL3	Company create opportunities for social learning	8.3049	0.9982
LL4	Company build a library of learning resources	8.0285	1.2169
LL5	Company make learning goals as important as performance goals	8.1463	1.1654

Table 4.3: Result of Reliability Test

Variables	Dimensions	Cronbach's Alpha
Independent Variables	Talent Attraction	
	Employee Benefits	0.864
	Compensation of Salary	0.861
	Talent Development	
	Career Development	0.803
Dependent Variable	Training Development	0.746
	Lifelong Learning	0.828
	Talent Shortage	0.768

Based on table, it shows the Cronbach's Alpha value for talent shortage (dependent variable) is 0.768 which considered as adequate. For talent attraction, the Cronbach's Alpha value for employee benefits and compensation of salary is 0.864 and 0.861 respectively which considered as preferable. Next for talent development, the value of Cronbach's Alpha for career development is 0.803 indicates that it is preferable. For training development, the Cronbach's Alpha value is shows 0.746 and it considered as adequate while the Cronbach's Alpha value for lifelong learning is 0.828 which is considered as preferable.

Normality Test

Table 4.4: Result of Normality Test

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
TS	0.108	246	0.00	0.97	246	0.00
EB	0.101	246	0.00	0.959	246	0.00
CS	0.133	246	0.00	0.939	246	0.00
CD	0.084	246	0.00	0.979	246	0.001
TD	0.097	246	0.00	0.977	246	0.00
LL	0.117	246	0.00	0.984	246	0.006

According to Kolmogorov-Smirnov test and Shapiro-Wilk test, $p > 0.05$ is considered as normal while $p < 0.05$ is considered as abnormal. For sig. value ($p=.000$) of Kolmogorov-Smirnova test of all variable and sig. value ($p=.000$) of Shapiro-Wilk test for talent shortage, employees' benefit, compensation of salary and training development are considered as abnormal. For sig. value of career development and lifelong learning are 0.001 and 0.006 respectively, it also considered as abnormal because the sig. value is less than 0.05.

4.5 Pearson Correlation Coefficient

Table 4.4: Summary Result of Pearson Correlation Coefficient

Hypothesis	Result	Findings
H1: There is a significant relationship between employees benefits and talent shortage at entry level in supply chain.	$r = 0.425$ $p = 0.000$ Moderate positive	H1: Accepted
H2: There is significant relationship between compensation of salary and talent shortage at entry level in supply chain.	$r = 0.275$ $p = 0.000$ Weak positive	H2: Accepted
H3: There is significant relationship between career development and talent shortage at entry level in supply chain.	$r = 0.411$ $p = 0.000$ Moderate positive	H3: Accepted
H4: There is significant relationship between training development and talent shortage at entry level in supply chain.	$r = 0.432$ $p = 0.000$ Moderate positive	H4: Accepted

H5: There is significant relationship between lifelong learning and talent shortage at entry level in supply chain.	r = 0.426 p = 0.000 Moderate positive	H5: Accepted
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Based on the result above, all the hypotheses are accepted and majority relationship between talent attraction (employees benefits and compensation salary), talent development (career development, training development and lifelong learning) and talent shortage is moderate positive. The range of correlation is between 0.275 and 0.432 and the p value is smaller than 0.05 therefore null hypotheses are rejected and alternative hypotheses are accepted. It also means that there are significant relationship between talent attraction, talent development and talent shortage.

Multiple Regression

Table 4.6 Model Summary Regression

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.463 ^a	0.215	0.208	0.75399

a. Predictors: (Constant), Talent Development, Talent Attraction

From the Table 4.6, R square value is 0.215, it means that 21.5% was indicated of model of Talent Talent Shortage. The R square is to show the relationship between independent variable and dependent variable. This variance value means dependent variable that can be explained by independent variable. So in other word, 21.5 percent of Talent Shortage can be explained or influenced by both of factors Talent Development and Talent Attraction. The R value is 0,463, this value indicated good level of prediction, R show the multiple correlation coefficient, this also to predict the quality of dependent variable.

Table 4. 7 Coefficients Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.730	.694		3.932	0.000
1 Talent Attraction	0.194	0.086	0.163	2.264	0.024
Talent Development	0.466	0.097	0.345	4.791	0.000

a. Dependent Variable: Talent Shortage

By looking on the Coefficients for multiple regression Table 4.7 above, unstandardized coefficients indicate how much the dependent variable (Talent Shortage) varies with an independent variable (Talent Development and Talent Attraction) when all other independent variables are held constant. The unstandardized coefficient, β_2 , for Talent Attraction is equal to

0.194 p value = 0.024, Hence, we can conclude that the coefficients are statistically significant because the corresponding p-value is below than 0.05. Meanwhile, the unstandardized coefficient, β_2 , for Talent Development is equal to 0.466 p value = 0.000, Hence, we can conclude that the coefficients are statistically significant because the corresponding p-value is below than 0.05.

In conclusion, overall all the hypothesis have been meet and answer as the Talent Attraction and Talent Development positively effect toward Talent Shortage. In which, it has indicated that the listed variable of independent variable do significantly affect the movement of dependent variable.

6. Discussion and Recommendation

According to correlations analysis, there is shows that a significant relationship between talent attraction, talent development and talent shortage. It proved by Pearson Correlation between these two variables with the p-value is 0.000 and the value is less than 0.01.

The fresh graduated and industry need make improvement in their talent from any factor such as talent development, and talent attraction which is influenced supply chain of talent shortage. The factor is significance in this research. For example, talent attraction such as compensation of salary which is the company give reward to the employee based on their performance. This show talent shortage can overcome and industry will better be understanding issue influenced talent shortage which is be helpful in developing strategies in long term situation. The result and finding in this study will helpful and give benefits for industry which is how their overcome the talent shortage by understanding about how supply chain talent shortage at entry level on attracting, development and education.

For the upcoming researchers who planned to use primary data, we suggest that; sending questionnaire to target respondent through online or internet will consume time and researcher have to wait for the reply or feedback from the respondents in the research survey. Moreover, to collect the data or information which needed to use in the research, the researcher has to adopt or use digital interview or face-to-face interview via online with the target respondents.

7. Conclusion

In short, the findings in this research show there are strong relationship between talent attraction (employee benefits, compensation of salary), talent development (career development, training development, lifelong learning) and talent shortage at entry level in supply chain management. After accomplished this research, the understanding about the talent attraction and talent development towards talent shortage at entry level in supply chain industry had been improved.

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The Effect of Service Quality toward Customer Satisfaction among Malaysian Airline Passenger

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Abstract - The evolution of airline industry recently has change the pace path of its development. Where, previously airline transportation was mean for whom acquire the high status and plenty of monetary value. However, this landscape now has evolved towards everyone could fly using an airline transportation. This situation evolves since the birth of low cost airline that give an ample room to middle level citizen to use it. Despite of those thing, there are a perception among the customer that low cost airline does not provide an enough service quality that lead to customer satisfaction compare to full cost airline. Therefore, this paper attempt to bring the current accessibility of the proportion of customer satisfaction from the service quality perspective at low cost and full cost airline. Structure interview by questionnaire was used to acquire data about 384 respondents among passengers. The tangible features of the service quality found to have significant value at low cost and full cost airline industry. Hence from this finding it would give a profound service quality value that should be focus by both airline industries for better service quality enhancement.

Keywords: Customer Satisfaction, Service Quality

1. Introduction

In recent years full service have been losing market share to low cost carriers in some routes as mentioned by Tuck Sai, H.Ekiz, and Kamarulzaman (2011). Low cost carriers have proven to be a major competitor to full service airlines in Malaysia. Although there have been studies done in full service airlines and low cost carriers in many part of the world none have been in Malaysia, especially between Malaysia Airlines and AirAsia. Tuck Sai, H.Ekiz, & Kamarulzaman (2011). The total passenger movement for both full service and low cost carrier was 118.6 million in 2016 (Malaysia Airport Berhad Annual Report 2016).

In Malaysia Aviation Commision Consumer (MAVCOM) report from March to August 2017, a total of 677 complaints were received during the March to August 2017 period, with 673 complaints on airlines and 4 on airports. This is an increase of 92.3% as compared to March to August 2016, when Malaysian Aviation Commission received 350 complaints. Processing of refunds, mishandled baggage and flight delays represent 62.6% of the nature of complaints received by MAVCOM during this period. Between March and August 2017, Malaysia Airlines was the highest contributor of complaints received by MAVCOM which was 119 complaints. This is followed by AirAsia with 119 complaints. The top three complaints received by MAVCOM from March to August 2017 were related to refunds, mishandled baggage and flight delays. Complaints related to flight delays for March to August 2017 also increased to 124 from 53 during the same period in the prior year, with Malaysia Airlines and Malindo Air contributing

three-quarters of the complaints received in this category for the current period. Table below shows the statistic on complaint received by airlines:

Category / Airlines	AirAsia		AirAsia X		Firefly		Malaysia Airlines		MAS wings		Malindo Air		Foreign airlines		Total	
	Mar-Aug		Mar-Aug		Mar-Aug		Mar-Aug		Mar-Aug		Mar-Aug		Mar-Aug		Mar-Aug	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
Complaints handling	1	4	-	1	-	-	6	3	-	-	1	3	-	-	8	11
Customer service	8	3	1	2	1	1	13	8	-	-	5	5	-	2	28	21
Denied boarding	6	4	4	-	-	1	38	12	1	-	3	7	6	5	58	29
Facilities/inflight services	2	1	-	-	1	-	7	2	-	-	6	-	-	-	16	3
Flight cancellation	3	20	2	1	2	1	23	2	1	1	23	5	-	1	54	31
Flight delays	20	15	8	1	1	-	51	6	1	1	43	27	-	3	124	53
Food and beverage	1	-	-	-	-	-	-	1	-	-	1	-	-	1	2	2
Frequent flyer program	1	1	-	-	-	-	7	1	-	-	-	-	-	-	8	2
Mishandled baggage	26	7	5	2	-	-	78	18	-	-	23	6	12	4	144	37
Online booking	15	26	8	4	3	2	20	9	-	-	7	13	1	2	54	56
Refunds	28	47	10	15	-	1	43	10	2	-	64	15	8	4	155	92
Safety and security	1	-	-	-	-	-	1	2	-	-	-	1	-	-	2	3
Special assistance (Persons with Disability)	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	2
Upgrading/downgrading	1	-	-	1	-	-	3	-	-	-	-	-	-	-	4	1
Others	6	4	-	-	-	-	8	-	-	1	2	2	-	-	16	7
Grand Total	119	132	38	28	8	6	298	74	5	3	178	85	27	22	673	350

Figure1: Complaint categories by airline for March-August 2016 against March-August 2016 (Source: MAVCOM Annual Report 2016-2017)

The complaints category by percentage, the most received complaints received by MAVCOM from March to August 2017 were related to refunds (24%), mishandled baggage (20.9%) and flight delays (17.7%), which collectively contributed to 62.6%. All of these complaints Malaysia Airlines had the highest number for each.

The complaints received by all the airlines in percentage which shows Malaysia airlines has 44% and AirAsia has 17.7%. The total complaints received and complaints received by MAVCOM per million passengers. Based on the table total complaints received by AirAsia are 119 which are equivalent to 6 million passengers carried. On the other hand, for Malaysia airlines has 298 complaints equivalent to 30 million passengers carried.

According to Chen (2008), it is a vital issue to realize the factors affecting a customer's loyalty and it is commonly believed that higher service quality can direct to a customer's higher overall satisfaction and consequently to positive behavioural intentions. The aim of this research is to examine effect service quality towards customer satisfaction between low cost and full service airlines carriers. Hence, the research objective of this study is to find the relationship between service quality towards customer satisfaction between low cost and full service carrier. The main issue to address in this research is the effect service quality towards customer satisfaction between low cost and full service airlines carriers. Therefore, the research question of this research is there any relationship in service quality towards customer satisfaction between low cost and full service carrier?

2. Literature Review

Customer Satisfaction

Based on Zeithamal V (2003), customer satisfaction can differ from person to person and product to product. Generally, if a product has at least met the requirement of the consumer then it is said to be customer satisfaction. In case it didn't meet the minimum expectation then it will be turned into frustration. According to Usman Khan (2014), Tolman was the first person to use the term expectation in the context of behaviour. In general terms, expectations borrow from Tolman's expectancy theory whereby, subsequent to learning, people actualize or ward off potential consequences of their actions.

Customer satisfaction is measured in a given time period. So with due respect of time even it changes, so as the satisfaction level. It changes from time to time and factor to factor as it is a dynamic process. In exceptionally association choices it is critical to meet the satisfaction level. According to Zeithamal, V (2003), if it didn't meet the expected level then the companies will loose the customer as there is no second chance for the customer to come back. Parasuraman, Berry, and Zeithamal (1991), expressed that expectation play a part in the development of satisfaction and service quality through the anticipation disconfirmation paradigm and the gap model.

Customer satisfaction research in many services contexts can be sorted into two categories. The first category is research that measures the level of guest satisfaction and identifies the shortfall of the service delivery mentioned by Huimin Gu (2008). These tend to be more for managerial purposes as they are diagnostic in nature. The second category is research that examines customer satisfaction in a multivariate model including its antecedent factors such as service quality, perceived value, brand image, as well as its consequences such as customer loyalty. A study conducted by Dwi Suhartanto (2012), overall researchers agree that service quality and perceived value including price are important determinants of customer satisfaction.

Service Quality

According to Satyanarayana (2014), customer service providers are under the notion that the company's technical perspectives and internal marketing activities are the commitment to the customers' service quality. But in the customer's point of view the company has shortage in providing the expected quality service to the customer. The resources of the airlines' are used for organizational objectives, such as sales improvement, profit maximization, or maintenance and increase of market share in Airline Company. The resources of the service providers are focused on organizational objectives such as sales maximization and profit maximization or maintenance and increase of market share. The management commitment of the company towards service quality to customer is very important to satisfy the tastes and preferences of customer.

Based on Sigit Haryono (2015), many researchers connects service quality to customer satisfaction, customer delight and word of mouth. The study on service quality within the aviation industry has been done by other researchers as well. Service quality affects customer satisfaction, and that customer satisfaction affects customer behaviour, including repurchase intention and word of mouth, it is stated that the service quality of airlines has an important effect on customer satisfaction, that customer satisfaction has a significant effect on customer loyalty.

Zagat recently released its 2005 survey of US domestic and international airlines. As is typical of these types of measures, they represent a cross-sectional sample of flyers and provide separate categories for different basis of service. Zagat used five basis criteria which are overall performance, comfort, service, food and website of the firm to rate the airlines services which will lead to customer satisfaction and this was illustrated by Rhoades (2006). Factors chosen in this survey will be only four from the Zagat survey which are comfort which comes under the tangible features, the service that is provided by the staff, the website which will be under online service and the overall performance which will be the schedule.

2.3.1 Tangible Features

Tangibles are defined as the physical facilities of the aircraft as example the seating comfort, seat space and legroom, in-flight entertainment service which consist of books, newspapers, movies, games, and magazines

According to Zeithaml, Parasuraman and Berry (1990), tangible features (TF) consist of the appearance of physical facilities, equipment, personnel and communication material, thereby

comprise of some of the most important aspects of services cape. Based on studies that was carried out by Ai Jia, Shee Cheae, Pei Pei, and Chun Yam (2012), they stated that Services cape is used to describe the physical surrounding of a service company which includes the exterior and interior design as well as ambient conditions. Therefore, it is important for the operators to make sure that the tangible and visible aspects of the airlines are attractive, clean and comfortable which was illustrated by Bruno and Morales (2008).

2.3.2 Schedule

According to Ai Jia et. al (2012), there is very less issues regarding with the weather and excessive traffic demand that can cause the flight schedule to be delayed. Sometimes, mostly flight delays are due to the overall flight system in a not sequential. Somehow, the flight can still be calculated to be on time if the schedule contains sufficient slack.

Based on Andrews (1999), the airspace overcrowding should be taken into consideration as the terminal and airport space can affect the all over flight system. Therefore, a proper flight system should be achieved to ensure that everything is within good control. A good system is significant as it will make the industry to predict the flight arrival and departure sequences.

According on Saha and Theingi (2009), satisfied passengers are mostly affected by the schedule. Such customers engage in positive word-of-mouth communication and have high repurchase intentions. Airline marketers should develop a convenient schedule for passengers as these directly affect passenger satisfaction.

2.3.3 Service provided by staff

Staff in airlines here are the ground staff and also the flight attendant. Namukasa (2013) has stated that airline passengers can experience many service encounters with front-line employees as well as in-flight attendants. According to Ai Jia et. al (2012), the job scope of airlines ground staff can be divided into check-in, ticket information counters, flight control centre, lost and found, customs immigration-quarantine, boarding gate, transit, and load control in the main working space of the ground staff in airports.

Flight attendants board airplanes on a daily basis. In a study by Namukasa (2013), stated that in-flight services that are offered by flight attendants affect the customer satisfaction. Taking that in mind, in order to develop a good customer service, the in-flight crew should give attention on tangible cues in order to create a strong organizational image Namukasa (2013).

Finding by Bamford and Xystouri (2005), indicated the perceived “bad attitude” of staff was a major effect towards customer satisfaction. For employees to be adequate in offering soft quality, rigorous selection procedures and appropriate training was important. Without a formal training, airlines staffs will have less tools to meet the customer expectations.

2.3.4 Online Service

Based on Nusair and Kandampully (2008), providing information is the main goal of a website. Information quality refers to the amount, efficiency, and the form of information about the products and services offered on a web site. Saleh, Ghoneim, Dennis, & Jamjoom (2013) urged that online service, such as selecting seats, web check-in and, more importantly, buying tickets are all considered important for airline companies to succeed.

Singh and Crisafulli (2016), illustrated by their research that consumers are increasingly becoming adapted to online services and technology-mediated interactions. Through the servers, passengers buy flight tickets, transfer money, and undertake training courses and online consultations.

A research was carried out by Hussain (2016) and he stated that the airline should maximize service quality by identifying various of ways to affect passengers' service quality perception. The airline's website should be user friendly for a smooth online purchase experience.

Relationship between Service Quality towards Customer Satisfaction

Customer satisfaction in airline operations has become critically important and Denet (2000), suggested that as competition created by deregulation has become more in-tense, service quality in the airline industry has also received more attention. The delivery of a high level of service quality by airline companies became a marketing requisite in the early 1990s, as competitive pressures continued to increase. Based on Miller (1993), most airlines began to offer various benefits, such as the frequent flyer programs, in an effort to build and maintain the loyalty of customers. Airline companies also attempted to adapt their services through the use of computerized reservation systems which were also designed to create customer loyalty in the distribution channels. However, Baker (2013) highlighted that the airlines' efforts to differentiate their services, an extensive survey of frequent fliers conducted revealed that consumers did not perceive any difference from one carrier to another. He noted that when all airline companies have comparable fares and matching frequent flyer programs, the company with better perceived service will draw passengers from other carriers.

Based on Parasuraman, Zeithaml and Berry (1988), a vital factor driving satisfaction in the service environment is the service quality. On this matter, however, there is some controversy as to whether customer satisfaction is an antecedent or consequence of service quality. One school of thought refers to service quality as a global assessment about a service category or a particular organization.

However, it has been argued by Abdullah (2016), that while the two concepts have things in common, "satisfaction is generally viewed as a broader concept where service quality is a component of satisfaction". Satisfaction derives from various sources Bitner and Hubbert (1994), propose two ways of viewing satisfaction: service-encounter satisfaction (i.e. satisfaction or dissatisfaction with specific service encounters) and overall satisfaction (based on multiple encounters or experiences). In other words, little satisfactions based on each service encounter lead to overall satisfaction with the service.

Research done by Abdullah, (2016) has illustrated that in many of the service settings customers may not receive the level of service they expected before the actual service experience. The performance of the service falls either below customers' expectations or above expectation. When expectations are exceeded, service is perceived to be of high quality and also to be a surprise. When expectations are not met, service quality is deemed unacceptable. When expectations are confirmed by perceived service, quality is satisfactory. However, quality, which falls short of expectations, has a greater effect on customer satisfaction than quality which exceeds satisfaction.

Conceptual Framework

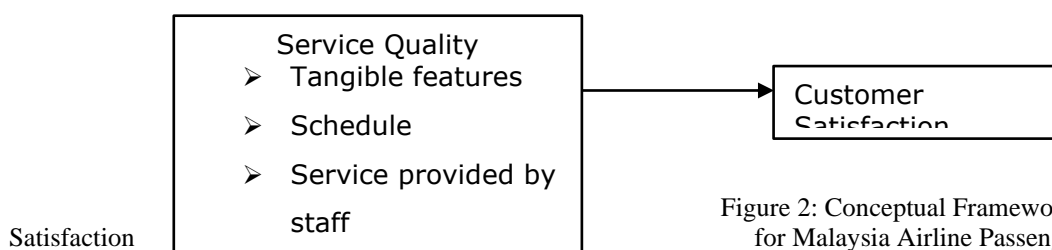


Figure 2: Conceptual Framework of Customer Satisfaction for Malaysia Airline Passenger

As shown in Figure 1, the independent variable which is service quality include four factors that affect the dependent variable which is customer satisfaction. The factors chosen under the independent variable was tangible features, schedule, service provided by staff and online

service that affect the dependent variable. From the independent and dependant variable, it interprets relationship in service quality towards customer satisfaction between low cost and full service carrier.

3. Methodology

Data for the research study are obtained from primary source with quantitative approach. The researcher obtains the information gathered from the distributed questionnaire to the passengers of low cost and full service carrier at KLIA and KLIA2. There are 156,000 population for Kuala Lumpur International Airport (KLIA) and 123,0000 population for Kuala Lumpur International Airport 2 (KLIA2) total together 279,000 population for both. Hence, there are 384 sample size have been determined (Krejcie & Morgan, 1970). Self-administered questionnaires have been applied via google form with 10-point likert scales to all respondents.

Before the questionnaire have been sent out, firstly, content validity used with an expert to ensure the validity of questionnaire (Sekaran, 2003). Simple random sampling is used for data collection technique at both KLIA and KLIA2 to acquire probability data.

The collected data from questionnaire were analysing by using Statistical Package for Social Science (SPSS). Descriptive analysis with frequency and normality test employed. Then, followed by inferential analysis through reliability, correlation and multiple regressions.

4. Findings

The distributions of passenger are categorized into few groups which are gender, age, marital status, nationality, work status, recently used airlines. 203 out of 384 respondents are female which will give percentage of 69.40% and the rest 181 are male respondents which will give 47.10%. Next, the most supreme age come from the range of 18 to 30 years old which was 229 respondents out of 384 equivalents to 59.60%. The second supreme age range is 31-40 years old which was 103 respondents out of 384 equivalents to 26.80%. Third supreme age range is > 40 years old which was 30 respondents out from 384 respondents equivalents to 7.80%. Lastly, the age range is 18-20 years old which was 22 out of 384 respondents equivalent to 5.70%.

Single is the most supreme marital status which was 193 respondents out of 384 equivalents to 50.30% and married was 191 out of 384 respondents equivalent to 49.70%. The Malaysian passenger was 212 out of 384 respondents equivalent to 55.20%, whereby the foreigner passenger was 172 out of 384 respondents equivalent to 44.80%.

The most supreme respondents are full time worker equivalent to 198 out of 384 respondents (51.60%). Second are students equivalent 110 out of 384 respondents (28.60%). Third are those who are not working equivalent to 49 out of 384 respondents (12.80%). Next are part time worker equivalent to 23 out of 384 respondents (12.80%). Lastly are retired equivalent 4 out of 384 respondents (1.0%).

The mostly used airline is AirAsia with 206 respondents out of 384 equivalents to 53.60% and followed by Malaysia Airlines with 178 respondents out of 384 equivalent to 46.40%.

Skewness and kurtosis value of tangible features are -0.430 and -1.201, which are normally distributed. Secondly, the skewness and kurtosis value for schedule are -0.527 and -1.177 which are also normally distributed. Thirdly, the skewness and kurtosis value for service provided by the staff are 0.181 and -1.495 which are normally distributed. Fourthly, the skewness and kurtosis value for online service are -.644 and -0.940 which are also normally distributed. Lastly, customer satisfactions are also normally distributed as the values are -0.508 and -1.267. In conclusion, all the variables are normally distributed as the value are in the range between of -1.96 to 1.96.

There are no outliers shown. These Outliers are normally the error or abnormal value from random sample of populations, which these outliers will be removed in order to get normal distributed data. As shown in the figures, the upper fence and the lower fence are approximately the same size. Since there are no outliers and the lower fence and upper fences has the same size, it means that data for the service quality and customer satisfaction are normally distributed.

Table 2: Reliability

Variables	Cronbach's Alpha	N of Items
Tangible Features	0.935	7
Schedule	0.957	7
Service Provided by Staff	0.950	7
Online Service	0.959	5
Customer Satisfaction	0.937	6

For reliability and stability analysis the consistency of measure as indication and the instrument used for assess the “goodness” of measure. Based on the reliability statistic at table above, it shows that the Cronbach’s Alpha value of all are above than 0.9. This also means all the variables have high consistency correlated.

The coefficient ranges from -1 to 1. A value of 1 shows a perfect positive linear relationship, a value of -1 show a perfect negative linear relationship and a value of 0 shows no linear relationship which was illustrated by Hair, Bush, and Ortinau, (2003).

Table 3: Correlations

		Tangible Features	Schedule	Service provided by staff	Online Service	Customer Satisfaction
Customer Satisfaction	Pearson Correlation	.881**	.878**	.472**	.843**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	384	384	384	384	384

** Correlation is significant at the 0.01 level (2-tailed).

Based on the table 7.8, customer satisfaction has highest positive value with tangible features with value of 0.881 shows the highest correlation value. The second highest value is for schedule with the value of 0.878 followed by the third highest value 0.843 for online service. Lastly, the lowest value is 0.472 for service provided by the staff. From this, it is shown that customer satisfaction has highest correlation with tangible features followed by schedule then online service and lastly service provided by the staff. All the variables have positive correlation with the dependent variable which is customer satisfaction. The highest correlation value (tangible features) also shows that it effects the customer satisfaction the most. On the other side, the lowest correlation value (service provided by staff) affects the customer satisfaction the least.

Table 4: Regression Modal Summary

Model	R	R Square	Adjusted R Square

1	.914 ^a	.835	.833
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b. Predictors: (Constant), Online Service, Service Provided by Staff, Tangible Features, Schedule

From the Table 7.9, R square value is 0.835; it means that 83.5% was indicated of customer satisfaction. The R square is tested as the result of the tangible features, schedule, service provided by the staff and the online service towards the customer satisfaction. In other word, 83.5 percent of Customer Satisfaction can be said has influenced by the four factor of independent variable which are tangible features, schedule, service provided by staff and online service. The R value is 0,914; this value indicated good level of prediction.

Table 5: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1Regression	1282.409	4	320.602	478.913	.000 ^b
Residual	253.716	379	.669		
Total	1536.125	383			

Table 7.10 shows the ANOVA which shows how well the regression equation fits the data. This table shows that the regression model predicts the dependent variable significant well. By having a look at “Regression” row and to the “Sig.” column 0.000, which is under 0.05, and that shows, in general, the regression model significantly predicts the outcome variable. It can be said that, there is relationship between the service quality which include tangible features, schedule, service provided by the staff and online service and customer satisfaction.

Table 6: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.450	.156		2.880	.004
Tangible Features	.404	.045	.412	8.901	.000
Schedule	.324	.050	.324	6.442	.000
Service Provided by Staff	-.009	.022	-.010	-.412	.681
Online Service	.228	.044	.228	5.125	.000

a. Dependent Variable: Customer Satisfaction

Based on the Table 6, the formula for the regression is $(Y) = 0.450 + 0.404X_1 + 0.324X_2 + 0.228X_3$ which means there is no 0.404, 0.324 and 0.228 change in independent variables. Only tangible features, schedule and online service have positive significant which shows there is a relationship between service quality and customer satisfaction. The highest strength is in tangible features with the value of 0.404. The factor, service provided by staff is not significant as it has value more than 0.05 which means there is no relationship between service provided by staff and customer satisfaction. In conclusion, tangible features, schedule and online service effects the customer satisfaction.

Following to that, in T-test with T-statistical of 2.880 and T-critical value of two-tailed test of 2.576 where if T-stat is larger than T-critical. Then, H₀ is rejected and accept H₁. The result is 2.880 > 2.576 which means reject H₀ and accept H₁, While H₁ means there is a relationship between service quality and customer satisfaction of low cost and full service airline carrier.

In F-test the value of F-statistical is 478.913 and F-critical value is 3.32. Therefore, $478.913 > 3.32$ means accepts H1 and reject H0. There is a relationship between service quality and customer satisfaction in low cost and full service airline carrier. In conclusion, we accept the H1 and reject H0.

5. Conclusion

This research paper has been conducted to find out about the effect of service quality towards customer satisfaction between low cost and full service carrier. There are three factors of service quality that the researcher focused on, which are Tangible features, Schedule and Online service, these factors affected to the customer satisfaction. Before this in the previous study, this was conducted by Ai Jia et. al (2012), mentioned that there is positive relationship between all the variables above.

After finishing this study, the researchers have discovered that there are a few spaces for enhancing the quality of this research in future. The researcher also had some recommendations that the carrier can use.

The researchers have only covered four factors that have affected the customer satisfaction. However, the researcher might left out certain significant factors that is important in determining the satisfaction level towards Service Quality that is delivered by the low cost and full service carrier. Price, promotion and food service are highlighted by some of the passengers. Thus, these four factors can be carried out in future research to obtain more understanding on customer's satisfaction level towards low cost and full service carrier.

To avoid language bias, the researcher can provide the questionnaire is Multilanguage like English, Malay, Tamil and Chinese. This will improve the understanding of the people as not everyone has full understanding on the English language. Besides that, when the respondents have better understating on the questionnaire, it will help us to get more accurate results.

6. Managerial Implication

The chosen carrier airline which are AirAsia and Malaysia Airlines can focus more on the tangible features as that effect the customer satisfaction the most. The airlines can have better service quality in term of the seats and the air conditioners in flight to give their customer the best service while they are flying. The comfort while flying is considered as very important as passenger will be flying for long haul at times.

Other than that, the airlines can focus also on the schedule by having less delay during depart and landing and having convenient flight time. The both airlines can have more convenient flight time which can make passenger's flying experience nicer with a perfect timing of departing and also landing to their destination. The airlines can provide more than one timing of flying.

The responsiveness of their online services also effect the customer satisfaction. Especially for online booking, during the promotional period. During promotion, there will congestion on their website which may cause frustration among customer. Customer will not be able to make any search and gather information. Hence, the airlines can add more servers to boost their website performance.

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SUB-SESSION 3

ENTREPRENEURSHIP

Mapping potential sectors based on financial and digital literacy of women entrepreneurs: A study of Palembang City, Indonesia

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Abstract This study aims to map the potential sectors based on financial and digital literacy of women entrepreneurs in Palembang City, Indonesia. The descriptive statistics is employed and the results show that the most businesses in Palembang City are businesses engaged in the food, beverage and tobacco industry, which account for 44.9%, while businesses engaged in other processing sectors rank second among the micro and small businesses in Palembang City. Local and provincial governments can be more responsive to stimulate the food, beverage and tobacco industry sector, other processing industry sectors and the wood industry sector, and wood furniture products so that products in the industrial sector can be superior in the future. The provision of coaching and training must also be more intensively provided by the relevant agencies so that they can help MSEs to develop in the future.

Keywords: Potential sectors, financial literacy, digital literacy, small business enterprises, Palembang-Indonesia

1. Introduction

The micro, small and medium business sector (MSMEs) contributed 60.34% to Indonesia's economic growth, where the number reached 93.4% with a workforce absorption rate of 97.22% [1]. The large level of labor absorption indicates that the MSME sector is one of the foundations of economic stability through labor-based, community-based economic activities. The ownership of the MSME sector in Southeast Asia is dominated by women entrepreneurs in the amount of 35% [2]. The MSME sector owned by women in 2016 ranged from 30-37% of the total MSMEs in developing countries [3]. In Indonesia alone, as many as 60% of MSMEs are managed by women out of a total of 52 million MSME actors [4] with a contribution to GDP of 9.1% [5]. The speed of development of new businesses owned by women entrepreneurs is faster than male entrepreneurs [6]. Women entrepreneurs are able to create new jobs not only for themselves but also for others by employing at least one person [7]. IFC predicts that women entrepreneurs will create new businesses where half of the workforce will be contributed from the sector [8]. Not only that, MSMEs in the formal sector owned by women entrepreneurs have increased since 2009 with a percentage of 42.8% and increased to 47% in 2013 [9].

Significant contribution of the MSME sector managed by women is not accompanied by easy access to finance, access to marketing networks and other accesses so that the MSME sector itself still has various obstacles. Limited access to effective finance from financial institutions because most of these sectors do not yet have good financial management so that it is not uncommon for MSMEs to experience growth stagnation and some even do not develop and are eventually abandoned [10]. Furthermore, the limited knowledge of financial management and digital entrepreneurship for women inhibits the growth of this sector where most women entrepreneurs only have a role to help the head of the family in meeting the family's living needs. The limited access to loans is because women do not have ownership rights over assets because ownership of assets is usually in the name of the household head [10]. To support the growth of women's entrepreneurial businesses, financial and digital literacy is needed because some studies conclude that financial and digital literacy through mastery of financial management and ICT will provide added value [11]. But this is not in line with the fact that most women in Southeast Asia have very low financial and digital literacy caused by low levels of education based on the 2011 Asia Pacific Women's Information Network (APWINC) survey [12]. Furthermore, social and cultural barriers also cause women in developing economies to have low digital rates [13]. Not only that, the

unavailability of statistical SME entrepreneurship data based on sex in Indonesia makes it difficult to make certain projections of the contribution of women entrepreneurs to the economy.

Literature Review

Women entrepreneurs are now given the opportunity to open businesses and develop businesses more easily although they still face various barriers both cultural, financial and educational obstacles [14]. Most research on entrepreneurship in developing countries is focused on male entrepreneurs and only a little research on women entrepreneurs [15] [16] [17]. So that the generalization of the results of male entrepreneurial business research on female entrepreneurs is inappropriate and the results of the study cannot be used as a basis for female entrepreneurial research because there are differences in characteristics between male and female entrepreneurs in various aspects [18] [19] [20] [21] [22].

Although there is research that focuses on women entrepreneurs, the focus of research is mostly carried out in developed countries. Here are some studies that focus on women entrepreneurs who focus on whether women entrepreneurs are different from male entrepreneurs [23] [24] [25] [26] [27] [28] [29] [19]. MSMEs create jobs and increase welfare, create innovation and increase economic development [30]. Women's entrepreneurship is defined as a new business initiated and managed by women [31] [32]. Women entrepreneurs are women who initiate, organize and operate businesses through product and service innovations [33] that are able to play a significant role in economic and social improvement in the MSME sector [34].

Several studies have found that women entrepreneurs start their businesses with small capital and less debt compared to male entrepreneurs [35]. This is because (1) women entrepreneurs are more focused on the service sector which requires less capital and this sector is easier to set up [36], (2) women entrepreneurs have higher limitations in terms of access to finance [36] where only 1% loans that are collateral free and 65% of loans require collateral from immovable assets [9]. Even though women entrepreneurs have lower default rates than men entrepreneurs [9]. Female entrepreneurs have fewer track records of loans than male entrepreneurs [38].

Limited financial knowledge (financial literacy) and digital (digital literacy) is one of the obstacles for women entrepreneurs in accessing finance and business development through digital networks [39]. Literacy consists of basic literacy, function literacy and information literacy. Basic literacy includes the ability to read and write. Literacy functions include the ability to use tools and information literacy includes the ability to obtain, process and use information effectively. Similar to information literacy, financial literacy is the intellectual ability of individuals to understand and use information relating to finance, financial products and financial services through lending, investment, planning, risk and information related to financial well-being.

Research Method

This research uses primary data and secondary data. The research sample is small and medium businesses owned and managed by women entrepreneurs in Palembang where there are 18 districts. The research sample will be taken from 18 districts in the city of Palembang proportionally. Survey methods such as interviews and focus group discussions (FGDs) were conducted. The descriptive statistics is employed in this study to map potential sectors and products. Mapping is conducted following these steps (a) identifying superior products, (b) assessing strategic indicators, and (c) statistical analysis of the

potential factors of superior products and sectors. Following are the steps in identifying the superior products of Palembang City. (1). Identifying the resulting product; (2). Identify the amount of production (3). Identifying export and non products; (4). Identify the number of products exported; (5). Comparing the number of production for each product; (5). Comparing the number of products exported. The results of identification and comparison will be presented in the form of a comparison matrix with the aim of making it easier for readers to conclude the research results. From the entire identification of products and the amount of production, both export and non-export products, an assessment of the strategic indicators of Palembang City is then carried out using 7 (seven) indicators: exports, local content in products, employment, growth in added value of products. linkages between sectors, environmental conservation, marketing reach. The indicators above will be presented in the form of a matrix to facilitate the comparison process. Before the survey was started, the researcher made a questionnaire and interview questions and FGDs used in this study. Survey questionnaires have become the most widely used choice in collecting data related to MSE capital (Graham & Harvey, 2001; Tucker & Lean, 2003; Houssain, Millman & Matlay, 2006). The making of questionnaires, interview questions and FGD materials will be made in five stages: (1) Preparation of the initial questionnaire by the team according to the variables that have been determined based on the research objectives to be achieved, (2) The initial questionnaire that has been made, is tested between fellow research team and colleagues to ascertain the appropriateness and accuracy of the variables to be measured. In this stage, the researcher ensures whether the respondent (the research team and colleagues) understands the intent, direction and purpose of the questions asked, (3) If there is an error in the question to measure the variables in stage two, then at this stage a re-design of the questionnaire will be carried out. (4) Questionnaires that have been tested with fellow research teams and colleagues and re-designed are then tested on a number of respondents (MSEs) to determine the accuracy and appropriateness of the questions asked, (5) The same as the stage in point 2, if the respondent cannot understand the direction, purpose and purpose of the question, the respondent cannot answer according to the question, and the question is not in accordance with the research objectives to be achieved, so at this stage the research team will redesign the questions, interview material and FGD. At this stage the research team will determine the final list of questions for the questionnaire, interview material and FGD material. The data was obtained through a survey conducted in mid-January to mid-March before the COVID 19 pandemic before Indonesia was declared officially exposed to COVID 19. The survey was conducted in Palembang City on micro and small businesses, especially women business owners and there were 300 respondents.

Findings

Based on the results of descriptive statistics, here are the results:

- Based on ownership status, overall, SMEs owned by one owner are 292 respondents or 97.3%, 2 owners are 6 respondents or 2% and only 2 SMEs are owned by a group (several people) or equivalent to 0.7%. This shows that the ownership of SMES is more dominantly owned by one owner.
- Based on gender, 185 respondents owned SME businesses, equivalent to 61.7%, while 38.3% were owned by women. It can be concluded that the distribution of respondents based on gender is dominated by male business owners.
- Based on the level of education, that 49 percent of the respondents have a high school education and 9 percent have a tertiary education, while the rest of the respondents have elementary school and junior high school education, which is nearly 20%. It can be concluded that most respondents have high school education and above.

- Based on SME implementers, as many as 206 respondents or 68.7% of SME respondents run their own businesses (owners as well as implementers) and only 86 respondents or 28.7% are carried out by non-owners (families), and only 8 respondents or 2.7% have their businesses run by not the owner (someone else). When viewed from the gender composition, more men run their own businesses, namely as much as 63.1% compared to women 36.9%, and if seen from the total, the male gender manages more independently, which is 43.3% when compared to families (17.3 %) and others (1%). The same thing also happened with women business owners where more women manage themselves (25.3%) compared to family (11.3%) and other people (1.7%).
- Based on the SME status, more than 85.3% or 256 SME businesses did not register their businesses with the relevant agencies. 44 registered SME businesses or 14.7%.
- Based on the type of SME industry, SME in Palembang City is more dominated by the food, beverage and tobacco industry as much as 143 SMEs or as much as 47.7 percent and the processing industry which is as many as 79 businesses or 26.3% and the SME that is the least respondent is the textile industry, apparel and leather, wood and wooden products industry and paper industry with 26 SMEs or 18.7 percent respectively.
- Based on market objectives, there are 290 SMEs or 96.7% of SMEs that produce products for local consumption, and only 10 SMEs or 3.3 percent of SMEs whose products are export-oriented. This is similar when seen from an SME business, where only 14.7% are registered with the agency. Export products from SME are produced by crackers & kemplang, woven fabrics, songket, furniture and wood carvings with a total of 10 SMEs.
- Based on the use of technology for production, 196 SMEs or 65.3% do not use technology and only 104 SMEs or 34.7% use technology. Most SMEs do not use technology in the food and beverage sector. Of the 65.3% SMEs that do not use technology in production, the distribution that does not use male and female entrepreneurs is balanced, but when viewed from entrepreneurs who use technology in production, namely 34.7%, the composition that uses technology for men is 77.9% compared to 22.1% of women, this means that male entrepreneurs use technology more than female entrepreneurs.
- Based on the ease of product marketing, overall, the marketing of SME products is easy to market, as evidenced by 190 (15 agree and 32 strongly agree) SME or 63.4% answered agree that the marketing of these products is easy, and only 26 SMEs or 8.7% said they disagreed that marketing their products was easy.
- Based on the marketing reach of products outside the region, there are 57 SMEs or 19% who market around the production area, while 148 SMEs or 49.3% market outside the production area. This shows that these SME products are also in demand by consumers from outside the production area. Most of the SME products marketed around the production area are from the food and beverage industry. For each industrial sector, as many as 49.3% of the total respondents answered that they agreed that products were sold outside the production area, and the industries that had the most were the food, beverage and tobacco industries ranked first, and the leather processing industry was the second largest.
- Based on the potential of SME products as export products, although SME products which are export products are still small, 130 (97 agree + 33 strongly agree) or 43.3% stated that SME products have the potential for export. This can be seen from the respondents who answered disagree as many as 56 SMEs and strongly disagree with 4 SMEs. For each industrial sector, only the food, beverage and tobacco industry (77 SME) and processing industry (23 SME) stated that the product had export potential.
- Based on product quality, the quality of products produced by SMEs is of good quality, because more than 232 respondents or 77.3% agreed that the quality of their products was good, and very few SMEs stated that their products were of poor quality.

- Based on the stability of the amount of production, as many as 201 (167 agree + 34 strongly agree) respondents or 67% answered agree that SME has production stability, and only 30 (27 disagree + 3 strongly disagree) who stated it was unstable.
- Based on the target consumers of SME products, users of products made by this SME are products for end users, as many as 250 SMEs or 83.3% stated that users of their products are end users, although there are 23 SMEs (20 disagree + 3 strongly disagree) or 7.7% who state that their products are not used by end users, this means their products are processed again to become other materials, with a small number of SMEs whose products are not final products, this indicates a small forward linked from this product.
- Based on the use of production technology in SME, as many as 141 (103 agree + 38 strongly agree) respondents or 47% answered using technology and only 99 respondents (95 disagreed + 4 strongly disagreed) or 33% answered not using technology. This can indicate that most respondents in the study use production technology to produce their products and some do not use production technology to produce their products and this shows that many of the products made by SMEs are also done manually.
- Based on the regional characteristics of SME products, the products produced by SME are more characteristic of regional characteristics, this can be seen from 136 SMEs (100 agree + 36 strongly agree) who agree that the products produced have regional characteristics, however However, there are still 1040 SME (103 disagree + 4 strongly disagree) which states that the products produced do not have regional characteristics. Some of the products that have regional characteristics include the food industry such as pempek, textiles such as songket and souvenirs from songket and the wood industry in the form of Palembang carvings that characterize the region.
- Based on the continuity of local traditions that exist in SME products, as many as 162 SMEs (98 disagree + 4 strongly disagree + 60 are neutral) or 54% stated that the products they produce are not regional traditions, meaning that only general products will however, 138 SMEs (117 agreed + 21 strongly agreed) stated that their products are continuing local traditions.
- Based on the reflection of local culture on SME products, SME products are also relatively not a regional culture, this is evident that there are 160 SMEs (94 disagree + 5 strongly disagree + 61 are neutral) or 53.3% who state that their products are not local culture. The SMEs who answered that their products were local culture were as many as 140 SMEs (106 agreed + 34 strongly agreed) or 46.6%.
- Based on the local workforce used, the workforce used by SMEs is mostly from the local community, this is indicated by the answers of respondents who stated that they agreed were 204 SMEs (162 agreed + 42 strongly agreed) or 68%, while those who answered no agree is that as many as 51 SMEs (45 disagree + 6 strongly disagree) or 17% stated that their workforce is not local community, and 45 SMEs or 15% stated neutrality. Industries that use labor from outside the region are mostly from the textile and wood industries. Songket products require skilled labor who are imported from outside the production area, as well as many wood carvers who are imported from outside the production area. Furthermore, as many as 204 SMEs or 68% of the total respondents answered agree about local labor, and the food, beverage and tobacco industry ranks first, the use of local labor, namely 97 respondents or 32% of respondents (SME), and the processing industry ranks second who use local labor with respondents as much as 62 or 20.7%.
- Based on SME product packaging, as many as 131 respondents (114 agreed + 17 strongly agree) or 43.7% agreed that the SME product packaging was well packaged, and as many as 75 respondents (55 disagree + 20 strongly disagree) or 25 % answered disagree that the SME packaging was good and as many as 94 respondents or 31.3% answered neutral. This can indicate that the SME sector as the people's business sector still has weaknesses in the

packaging sector, this can be due to the small amount of capital and low levels of profit, thus inciting SME owners to innovate their SME products. SME which has good packaging, often this packaging is the result of assistance from the CSR (corporate social responsibility) program of profit organizations both government and private. Furthermore, 131 SMEs stated that their products were well packaged, 75 SMEs stated that their products were not packaged properly and 94 respondents were neutral. Well packaged SME products come from the food and beverage industry and the processing industry. This is in line with the types of products produced for use by end consumers.

- Based on the process of SME product brands, the products produced by SME are well known by consumers, this is evidenced by the fact that as many as 186 SMEs (171 agree + 15 strongly agree) or 62% state their products are known to consumers. Only 38 SME (37 disagree + 1 strongly disagree) or 12.6% stated that the product was not known to the public, while 76 SME or 25.3% stated that it was neutral.
- Based on the labor absorption rate, although only 74 SMEs (59 agreed + 15 strongly agreed) or 24.7% stated that their products absorbed a lot of labor, while 63 SMEs (62 disagreed + 1 strongly disagreed) or 30% who stated that they did not absorb labor force, and as many as 163 SMEs or 54.3% stated that they were neutral / doubtful about labor absorption. SME which print neutral is bigger than those who agree and disagree.
- Based on the multiplier effect of SME efforts on other businesses, as many as 166 respondents (154 agree + 12 strongly agree) stated that their SME business had an impact on the emergence of other related businesses, and as many as 96 respondents or 32% answered neutral, and 38 respondents (37 disagree + 1 strongly disagree) answered that their business had no impact on the emergence of other related businesses. Furthermore, the food, beverage and tobacco industry sector ranks first with a multiplier effect, and the processing industry sector ranks second.

Table 1. Productivity of SMEs per industry sector

Productivity	Type of Industry					Total
	Food, beverage and tobacco	Textile, leather processing	Wood and wood products	Pulp and paper	Processing industry	
<1000	21 46.70%	3 6.70%	0 0.00%	3 6.70%	18 40.00%	45 100.00%
1000-3000	54 66.70%	6 7.40%	0 0.00%	3 3.70%	18 22.20%	81 100.00%
3001-6000	33 29.70%	0 0.00%	0 0.00%	15 13.50%	63 56.80%	111 100.00%
6001-10000	9 30.00%	3 10.00%	0 0.00%	0 0.00%	18 60.00%	30 100.00%
>=10000	15 45.50%	0 0.00%	0 0.00%	3 9.10%	15 45.50%	33 100.00%
Average	43.7%	4.8%	0.0%	6.6%	44.9%	100.0%

Based on the data obtained, the other processing industry sector ranks highest for productivity, namely 44.9%, while the food, beverage and tobacco industry sector ranks second for productivity, which is 43.7% and the wood and wood products industry sector ranks third for productivity which is equal to 6.6%. Productivity is grouped into five productivity categories, namely productivity over output of less than 1000 per workforce is given a score of 1, productivity over output from 1000-3000 per worker is given a score of 2, productivity over output from 3001-6000 per worker is given a score of 3, productivity over an output of 6001-10000 is given a score of 4, and productivity over an output of greater than 10000 per workforce is given a score of 5. It can be concluded that, based on productivity in Table 64, the highest productivity in Palembang is in the processing industry sector, the food, beverage and tobacco industry sector ranks second and the textile, apparel and leather industry sectors rank third. So it can be suggested that the specialization of increasing MSE products should be more stimulated because it is a regional potential for MSE products in the processing industry sector, the food, beverage and tobacco industry sector and the textile, apparel and leather industry sectors to be the superior products of Palembang City.

Conclusion

The most businesses in Palembang City are businesses engaged in the food, beverage and tobacco industry, which account for 44.9%, while businesses engaged in other processing sectors rank second among the micro and small businesses in Palembang City. Local and provincial governments can be more responsive to stimulate the food, beverage and tobacco industry sector, other processing industry sectors and the wood industry sector, and wood furniture products so that products in the industrial sector can be superior in the future. The provision of coaching and

training must also be more intensively provided by the relevant agencies so that they can help MSEs to develop in the future.

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Asnaf Entrepreneurial Scheme : Evidence From Lembaga Zakat Negeri Kedah

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Abstract – Islam is a universal and comprehensive religion that penetrates and shapes every facet of the everyday life. Zakat is one of the five Islamic pillars that is compulsory for those who have excessive of property. The concept of zakat is to purify the property of the wealthy by giving to the poor and needy. Zakat institution play an important role as the organization to collect and manage the distribution to the right recipients. Over the year, there is an increase of zakat collection which enable zakat authorities to diversified the distribution with several means. Among them, is asnaf entrepreneurial scheme which provided financial and non-financial assistance to the poor to start a business or to assist the asnaf ongoing business. This paper discusses the concept of asnaf entrepreneurial scheme given by Lembaga Zakat Negeri Kedah as one of the way to eliminate poverty through business. Based on the quantitative survey involving 60 respondents, it has found that there is positive relationship between asnaf entrepreneurial scheme and poverty elimination. The findings of this study are aimed to fill the literature gaps and strengthen the current policy of Lembaga Zakat Negeri Kedah specifically on asnaf entrepreneurial scheme.

Keywords: asnaf entrepreneurial scheme, poverty elimination, zakat

1. Introduction

Zakat as one of the five pillars in Islam and every Muslims are compulsory to performing zakat which is giving out one's wealth to the rightful recipients known as asnaf. Allah SWT has been emphasized the important of zakat by mentioning it 30 times in the Qur'an (Al-Qardawi, 2000). Zakat is monetary devotion with the concept that all material things belong to Allah (God) while mankind as an amanah (trust) of the wealth. As mentioned in Surah at-Taubah verse 60 and 103, the distribution of zakat should be given to the right person, the poor and needy (asnaf).

“Alms are for the poor and the needy, and those employed to administer the (funds); for those whose hearts have been (recently) reconciled (to Truth); for those in bondage and in debt; in the cause of Allah and for the wayfarer: (thus is it) ordained by Allah, and Allah is full of knowledge and wisdom.” (Surah at-Taubah : 60)

“Of their goods, take alms, that so thou mightiest purify and sanctify them; and pray on their behalf. Verily thy prayers are a source of security for the; And Allah is One Who heareth and knoweth.” (Surah at-Taubah : 103)

Nowadays, most of zakat management authorities of several states in Malaysia has received the increasing number of zakat collection which encourage them to diversified the distribution into several way. As Malaysia's government has implemented various initiatives to increase our economic growth as well as to counter poverty, some of zakat institutions take part in the initiative by introducing entrepreneurship programs as one of the alternatives to help the poor and the country particularly in reducing poverty. As Mohamed, Mastuki, Syed Yusuf and Zakaria (2019)

stated that, zakat “is a unique instrument for poverty alleviation as wealth is transferred from those with surplus earnings” with the objectives of to achieve socio-economic justice (Adnan & Bakar, 2009).

The efficient management and the right channelled of zakat will help to eradicate poverty and one of the ways is to provide an opportunity for asnaf to venture into business using zakat fund in the form of business capital. The concept of asnaf entrepreneurial scheme is paralleled to The Prophet S.A.W in a Hadith, stated that 9/10 of livelihood comes from business, and Muslims were urged to strive and work hard for worldly success as if they were to live forever, though they were similarly urged to strive hard for their Hereafter with the mindset as if they were to die tomorrow. Asnaf entrepreneurial scheme using zakat fund is replacing the microfinance concept as provision of financial services to those people whom are denied access to the financial market.

Access to finance has always been a critical constraint for the poor which it is the main barriers to access for capital from the financial institutions. Nevertheless, loan applicants are bound to the requirements and high interest rates stipulated by the banks, which places them at risk of bad repayments. Thus, the main objective of this scheme is to encourage people who have business idea but lack of adequate funds to carry out their projects or business. Several previous studies conducted on zakat has discussed on the issues of zakat compliance behaviour (Saad et al., 2019; Ghazali, Saad & Wahab, 2016), zakat management (Saad, Sawandi & Muhammad, 2016) and financial assistance given for business (Ramli et al., 2011; Hassan & Rom, 2016; Din, Ismail, Muhammad, Rosdi & Mahmood, 2019). It is noticeable that research on the area of zakat still need to be discovered since there are many aspect of zakat that are still open for discussion. Previous studies such as Ramli et al. (2011), Hassan and Rom (2016), Din, Ismail, Muhammad, Rosdi and Mahmood, (2019) had confirmed that zakat distribution through entrepreneurial programme have positive impact for asnaf’s social economy, standard of living and positive improvement for existing business. While Said, Ahmad and Syed Yusuf (2014) stated that there is lack of studies on the impact of business capital assistance using zakat funds. Hence, this paper aimed to determine the effectiveness of asnaf entrepreneurial scheme towards poverty elimination.

2. Literature Review

2.1 Zakat

In Islam, zakat plays an important role to educate both the payer of zakat also the recipients. Abdul Hamid and Hamid (2020) explained, zakat as religious obligation has two aims to purify the poverty owned by Muslims and to overcome poverty and hardship in the society. The researchers added that zakat implementation is also to ensure that social justice and stability prevail. Sawandi, Abdul Aziz and Saad (2017) added that “zakat also bridges the gaps between members of the society and prevents animosity and jealousy among human beings”. As mentioned by Kasim (2005), some of the benefit or *hikmah* of zakat are to educate to infak or to give and zakat can expand the property. These two *hikmah* are explained in Al-Quran in Surah Al-Imran and Ar-Rum.

“Alif Lam Mimm. This is the Book; in its guidance sure, without doubt, to those who fear Allah. Who believe in the Unseen, are steadfast in prayer, and spend out of what We have provided for them.” (Al-Imran : 1-3)

“That which ye lay out for increase through the property of (other) people, will have

no increase with Allah, but that which ye lay out for charity, seeking the Countenance of Allah, (will increase): it is these who will get a recompense multiplied.”(Ar-Ruum : 39)

Ibrahim (2007) emphasized that zakat plays significant role in economic system in solving poverty. The researcher also explained that asnaf can be categorized into two: productive recipients, those who are able to work and unproductive recipients, those who are unable to work such as having health problem, senior citizen, disability and so on. Moreover, Islam emphasizes the establishment of a society that is fair, humane and united society which protects people from starvation also to ensure social security and dignity which are the compulsory elements that should be followed in our community. Rasulullah S.A.W said, starvation is the most pressure in society. Hence, Islam proposed zakat institution as one of the mechanisms to save people from starvation, ensure socio-economic justice in society and provide an environment that people can respect each other and execute their duties towards Allah.

Early Islamic history demonstrates this charitable institution to be very effective in taking care of the needy sections of the population in Muslim societies. Narrations from the time of Umar bin al-Khattab (13-22H) and Umar bin Abdul Aziz (99-101H) indicate that poverty was eliminated during the time of these two rulers, as zakat collected in some regions could not be disbursed due to lack of poor recipients (Ahmed Habib, 2004). There are eight categories of zakat recipients (asnaf) as mentioned in Surah At-Taubah verse 60 which are fuqara (poor), masakin (the poor), amil (the person in charge in collecting the fund), muallaf (the person whose hearts are to be inclined), ar-riqab (the expenses for ransoming of slaves), al-qharim (the people in the debtors), fisabilillah (people in the cause of Allah) and ibnu sabil (the wayfarers). The zakat administration and distribution in Malaysia has been managed by zakat institutions or zakat authorities which are under the supervision of State Council of Islamic Religion or Majlis Agama Islam Negeri (Mohamed, Mastuki, Syed Yusuf & Zakaria, 2018). Currently, there are fourteen zakat institutions in Malaysia with the main objectives of zakat is to achieve socio-economic justice (Adnan & Bakar, 2009).

Asnaf Entrepreneurial Scheme

As the world changing, zakat institutions try to make the distribution of zakat more effective or distribute it into various ways. Apart from it, zakat authorities aim to change the mindset of the asnaf to not depending on the zakat allowance to support their entire life. Consequently, asnaf entrepreneurial scheme has been formed to give small amount of money for asnaf to form a small business or to enable them to purchase the equipment and materials they need to lift them out of poverty. The core objective of this scheme is to eradicate poverty as well as to raise income levels and to broaden financial markets by providing financial or non-financial to the financially excluded people. Several zakat authorities that implement the concept of asnaf entrepreneurial scheme are Lembaga Zakat Selangor (LZS), Lembaga Zakat Negeri Kedah, Majlis Agama Islam dan Adat Melayu Perak (MAIP), Majlis Agama Islam Wilayah Persekutuan (MAIWP) and Majlis Agama Islam dan Adat Istiadat Melayu Kelantan (MAIK). Lembaga Zakat Negeri Kedah has introduced asnaf entrepreneurial scheme or *Bantuan Jaya Diri* in 1986 as one of the solution to counter the poverty problem in Kedah. In Islam, entrepreneurship is the way of acquiring wealth where The Prophet S.A.W (peace be upon him) said, “Nine tenths of sustenance is derived from trade”. Allah (SWT) commands the Muslims to respect other;s life, family, property and honour and that they should not acquire each other’s property by means which are against the Shari’ah. Instead they should benefit from the opportunities of business and trade that Allah (SWT) has allowed for them such as transactions, trade and industry. The importance of the development of

entrepreneurship has been mentioned in 370 ayah in Al-Qur'an which discussed entrepreneurship and business as one of the livelihood's sources.

In entrepreneurship, Islam educates its *ummah* not to be dependent on others, ask or begging for something but being self-reliance and work hard. Thus, Lembaga Zakat Negeri Kedah concerned to develop new asnaf's identities to be self-independence, hardworking and transform themselves from asnaf to zakat payer. Thus, the main objective of the implementation of asnaf entrepreneurial scheme is to eradicate poverty particularly among Kedahan through zakat distribution given as a business capital to the poor and needy. Lembaga Zakat Negeri Kedah collaborates with many agencies such as MARA, TEKUN and state government in carrying out various entrepreneurial development activities. The assistance given to the asnaf are in term of money (business capital) or equipment, also training and motivational support. The qualified asnaf are granted an amount of business capital up to RM 3000. The capital given are not subjected to any repayment either to pay the principal and no interest charges.

Asnaf Entrepreneurial Scheme and Poverty Elimination

The founder of Grameen Bank, Muhammad Yunus (1994), identified poverty as a lack of sufficient income to fulfil one's basic needs, apart from insufficient access to resources and inability to develop his/ her skills. In Malaysia, poverty is commonly conceptualised and operationalised from the monetary approach perspective (Abdul Rasool, Mohd Harun, Mohd Salleh & Nor Aini, 2011). In the 2012 Government Transformation Programme (GTP) Annual Report, Malaysia has successfully reduced the poverty rate from 49.3 percent in 1970 to 3.8 percent in 2009 and 1.7 percent in 2012. A 2014 survey by the Department of Statistics Malaysia (DOSM) on a sample size of 81,634 households reported that only 1 percent of the households were living under the poverty line (below RM 870 for rural area). The achievement has proven that the government is really concerned and has put in a lot of effort in eradicating poverty as well as hunger among Malaysian.

The concept of asnaf entrepreneurial scheme is to increase asnaf financial ability to invest more on income generating activities. In consequence, asnaf entrepreneurial scheme is expected to provide opportunity and employment for the poor and needy and generate their own income. A research conducted by Ahmed (2004) in Bangladesh found that, zakat as a concept of microfinance play an important role in reducing poverty. While Haron and Rahman (2010) supported that the socio-economic justice among Muslims will be achieved when the asnaf receive the fund in form of capital then return it back as the zakat payer to help others (asnaf). The zakat based Islamic mode of financing would be an alternative model for poverty alleviation and ensuring sustainable livelihood (Bhuiyan, Siwar, Ismail & Islam, 2012). On the same note, studies conducted in Malaysia have found that access to credit through financial assistance that provide small amount of loan programmes has significantly reduced poverty rates (Al-Mamun et al., 2012).

In light of the positive effects of small amount of capital, it is suggested for zakat authorities to provide small amount of zakat fund as business capital to assist businesses of all levels, especially entrepreneurs from low-income groups. In summary, lack of access to credit, or problem in financial capital, is one of the most critical constraints in the starting-up of businesses, especially for the poor and needy who are ignored by financial institutions due to lack of collateral. The best available alternative source of capital assistance is from zakat institutions that provide small amount of loan as financial assistance which will lead to poverty elimination.

3. Methodology

This study employed a structured questionnaire survey, which was considered to be the best method for measuring attitudes as well as obtaining personal details, social facts, and beliefs (Babbie, 1990). The other methods of collecting data that has been taken were also reviewing journals, zakat authorities' documentation and website also annual report. A total of 60 samples size out of 94 asnaf under this scheme answered the survey which representing 63.8% of response rate. The number of sample size is reasonable and beyond the proposed target number suggested by Roscoe (1975) in order to allow precise analysis' result. The data was processed using the Statistical Packages for Social Science (SPSS) version 21. SPSS was used as it was a versatile package that allowed for many different types of analyses, data transformations, and output forms. In short, the usage of SPSS has more than adequately served the objectives of this study. In order to find the relationship, correlation has been used in analysing the data.

4. Findings

There are 30 women and 30 men involved in the survey as illustrated in Table 1. The descriptive analysis in Table 2 shown that, most of the respondents are 45 years and above (26), while 25 asnafs at the range of 35 to 44 years old, 25 to 34 years (8) and only one at the age of 24 and below. While 45 of the respondents are married, 3 divorced, 9 widows and 3 are widowers. The Pearson correlation analysis was used to identify whether asnaf entrepreneurial scheme and poverty elimination are related to one another. The result in Table 3 presented that there is a significant relationship between asnaf entrepreneurial scheme and poverty elimination ($r=0.350$, $p<0.01$). The result showed that correlation is significant at the 0.01 level (2-tailed) for both independent and dependent variables are less than 0.05. It is also found in Table 4 that poverty has influence on asnaf entrepreneuial scheme. Meanwhile a 1-unit increase in poverty elimination would increase asnaf entrepreneurial scheme by 0.313 and is statistically significant which β_3 , 0.313 at the p-value of 0.006 is less than 0.05 ($p<0.05$). The findings were supported by previous study of Bhuiyan, Siwar, Ismail and Islam (2012) and Al-Mamun et al., (2012) that emphasizes on zakat as poverty elimination and financial assistance that reduce poverty rates. A study conducted by Ishak, Omar, Othman and Ahmad (2012) on the asnaf who receive the zakat entrepreneurial scheme revealed that, there is empirical evidence on poverty alleviation through the utilization of religion-based fund called zakat in one Muslim dominant country in Asia.”

Table 1 : Respondents by Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	30	50.0	50.0	50.0
Female	30	50.0	50.0	100.0
Total	60	100.0	100.0	

Table 2 : Respondents by Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 24 years and below	1	1.7	1.7	1.7
25 - 34 years	8	13.3	13.3	15.0
35- 44 years	25	41.7	41.7	56.7
45 years above	26	43.3	43.3	100.0
Total	60	100.0	100.0	

Table 3 : Correlation of asnaf entrepreneurial scheme and poverty elimination

		poverty	asnaf
poverty	Pearson Correlation	1	.350**
	Sig. (2-tailed)		.006
	N	60	60
asnaf	Pearson Correlation	.350**	1
	Sig. (2-tailed)	.006	
	N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4 : Regression of asnaf entrepreneurial scheme and poverty elimination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	13.775	2.255		6.109	.000
	poverty	.313	.110	.350	2.842	.006

a. Dependent Variable: asnaf

5. Conclusions and Recommendations

The study emphasized that the utilization of zakat fund in effective way will lead to zakat as an important instrument in reducing poverty. Ahmed (2004) suggested that Muslim countries to integrate this vital-faith-based institution as part of countries development strategy and programs by operating the structures effectively which can build faith, reputation and trust among society. In fact, the yearly increasing amount of zakat collection will enable zakat authorities to distribute it in various ways (programs or scheme). Based on this study, it revealed that asnaf entrepreneurial scheme did help eliminate poverty among the asnaf or the recipients of the scheme. Thus, the relationship between asnaf entrepreneurial scheme and poverty elimination is significant. It is

suggested for future research to develop an operational model of this scheme with the possibility success factors of this asnaf entrepreneurial scheme. The continuous support in term of training, motivation and additional assistance either financial or non-financial also need to be considered by future researcher. Apart from that, the researche could be broaden as future research to be done in the context of zakat distribution to B40 and the amount of distribution given to the existing recipients (asnaf). The researcher also would like to list few recommendations for zakat authorities in order to strengthen this asnaf entrepreneurial scheme as follows:

- a) Zakat authorities should provide consultancy and financial management advices or training to the asnaf
- b) More collaboration with the relevant agency especially related to entrepreneurship such as Suruhanjaya Syarikat Malaysia (SSM), Malaysian Global Innovation & Creativity Centre (MAGIC) and Institut Keusahawanan Negara (INSKEN)
- c) Understand the nature of businesses involved or proposed by the asnaf therefore that the amount of capital or fund would be sufficient

In short, asnaf entrepreneurial scheme should be commercialized among the society especially asnaf as Prophet SAW has stressed that nine over ten of the income come from business activities. After all, it is hope that the recipients of zakat fund through asnaf entrepreneurial scheme will turn to be the contributor of zakat (zakat payer). Finally, it is not impossible that the country could be free from the poor and needy as happen in the time of Khalifah Umar bin al-Khattab (13-22H) and Umar bin Abdul Azizi (99-101H) which indicate that poverty was eliminated during the time of these two rulers as the zakat collected cannot be disbursed due to lack of poor recipients.

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The Persuasive determinants of e-Commerce Adoption Among Adolescence in Kelantan

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Abstract: Online business it is generally known as 'e-Commerce' offers people to purchase services or products via Internet platforms. There are numerous factors that influence the electronic commerce adoption where can easily access to the Internet, which offers them time flexibility, variety of product range, saving cost and time as such on the specific products. This study is aimed to examine the persuasive factors by consolidate Technology Acceptance Model (TAM) theory to know how user come to accept and use the technology; (perceived usefulness and perceived ease of use) to perceived of trust and self-efficacy, in influencing electronic commerce adoption among adolescences. Concentrated literature review was carried out to fulfill the research objective, to find the significance of the relationship between the variables and fulfill all the objectives by applying the relationship between the dependent variable, adoption of e-Commerce among youth in Kelantan and the independent variables such as perceived usefulness, perceived ease of use, perceived of trust and self-efficacy, was investigated. The total of 384 questionnaires had been distributed to respondents who are the youth aged between 20 – 30 years old. The data that have been collected were analyzed by using Statistical Packages for the Social Sciences (SPSS) methods and analyzed through the reliability test, validity test, descriptive test and Pearson correlation coefficient. The result from the study discovered that all four variables have a significant relationship towards electronic commerce adoption among youths in Kelantan preferably Kota Bharu.

Keywords: Adoption, e-Commerce, perceived of trust, self-efficacy, perceived usefulness, perceived ease of use, adolescent

1. Introduction

Online business which generally known as '*e-Commerce*' offers people a platform to purchase any services or products via Internet from the marketers (Muda, Mohd and Hassan, 2016) while process of purchasing products or services through the Internet known as online shopping (Oxford, 2018). The trend of e-commerce encompasses a very large Internet business field preferably among growing organizations such as manufacturers, retailers and customers involved in concluding a business online. In order to create a connection between customers and retailers, the entire e-commerce system can be manually carried out by exploiting the Internet network, software, applications,

also information and communications technology. In fact, electronic commerce or e-commerce not only emphasizes on the transactions, various financial activities and various business aspects of trade, but it is essential for the expansion of worldwide trade relations via the Internet.

Furthermore, it involves suppliers, sellers, consumers, clients, states, traders and so on (Omar and Anas, 2015). Interesting to share, it was approximately 22 million of Malaysia citizens using the internet (Malaysia Country Commercial Guide, 2017) and there are roughly 68 percent of the populations, which are high rates of e-commerce usage. There are 15.3 million shoppers, according to Export.gov, with 50% of Malaysia's population. It is found that the costs, the quality of review, offers made by online shops, such as comfort, free shipping and other exclusive deals and the product range in online shops attracted many Malaysian online shoppers to buy more products online (Malaysia Country Commercial Guide, 2017) for example like Zalora.com, Lazada, Shoppe and many more. The increasing number of websites offering transactions and purchases online (Murad and Salleh, 2014) amongst the internet consumers.

Furthermore, everyone recognizes that online shopping is a platform that allows customers to purchase goods and services directly through the Internet. Most of the consumers indicate online shopping because they can easily access to the Internet, which offers them time flexibility, variety of product range, saving cost and time as such on the specific products (Muda, Mohd and Hassan, 2016). The younger generation would not only would familiar with the e-commerce but also enable them to obtain information effectively. According to The Centre for Generational Kinetics (2018), generations born in the year of 1945 was the Silent Generation, born between 1946 to 1964 was the baby boomers, born between 1965 to 1976 was the generation X, born between 1977 to 1995 was the generation Y, and the latest is generation Z that born after year 1996 until now. Previous study showing that 49.3% of people who is around 20 until 30 years old would go for online shopping few times in a month but there is a situation where Kelantan with the population of 314,946 the lowest percentage by 22% for adoption of e-commerce in Malaysia (ECS 2018). At the same time, there are 12.1% of full-time students who is Internet users in Malaysia in 2018 while activities in online shopping had increased into 53.3% at 2018 (MCMC Internet User Survey, 2018). According to Rashid, Yusof, et al., (2019), the majority user of the Internet, skills in information technology and familiarity of computer were consisting from young generation. Therefore, the researcher would like to figure out the factors that influencing e-commerce adoption among youth in Kota Bharu Kelantan since it seems the increasing trend of e-commerce but low percentage in adoption of e-commerce while majority of the Internet users are young people.

The four main objectives of this research:

1. To test the significant relationship between perceived usefulness and e-commerce adoption among youth.
2. To identify the relationship between perceived ease of use and e-commerce adoption among youth.
3. To analyze the relationship between perceived of trust and e-commerce adoption among youth.
4. To determine the relationship between self-efficacy and e-commerce adoption among youth.

2 Literature Review

2.1 *E-commerce adoption*

E-commerce defined as the process of selling, transferring, buying, exchanging the products or service by using network, Internet or intranet (Rahayu and Day 2017). It enables people to interact, communicate and trade with invisible customer or supplier by using electronic devices without face-to-face meeting and exchanging physically (Zainuddin, Ismail et al. 2018). It could be also accessed by 24 hours where it can give more freedom to choose the services during the flexibility hour and location (Rashid et al. 2019). The uses of e-commerce by adopting the information and communication technology enable businesses to enhance the competitiveness and closer relationship between consumer and supplier (Awiagah, Kang et al. 2016).

2.2 Conceptual and Hypothesis Development

2.2.1 *Perceived of trust*

Perceived of trust in e-commerce including the belief on exchange parties where the both parties are willing to act honest and being promised. When the higher level of trust among exchange parties, the higher expectation of each other during transaction (Sullivan & Kim, 2018) and higher benefit would gain. E-commerce also depending on how a person interacts by using computers and people would more concern on security and privacy of online payment (Aboobucker, 2019). At the same time, the trust would enable to make buyer feels guarantee and fulfill what seller promised before transaction (Sullivan & Kim, 2018).

However, the results from previous literature shows that attitude towards e-commerce could be affect by the trust on e-commerce (Singh, Zolkepli & Kit, 2018). The systems that could ensure the safety of user to make sure that the environment is safe to use with the trust and in the long-term relationship from e-commerce user (Goh, 2017). E-commerce service provider enable to build the trust between consumer and service or goods provider where service provider is providing the availability secure link so that the information of consumer is secured (Fatima, 2017). Information quality, service quality, system quality and vendor specific quality would able to build up trust between consumer and product or service provider (Fatima, 2017). This research would figure out the relationship between the adoption of e-commerce and perceived of trust in e-commerce especially in terms of payment method and security of website interface.

H1: There is a positive relationship between the perceived of trust and adoption of e-commerce among youth.

2.2.2 *Self-efficacy*

According to the previous research, self-efficacy can be affected by the self-confidence and self-motivation (Qasim et al., 2017). The situation of self-efficacy is where they have the ability in whether they can accomplish the transaction through the system or not (Goh, 2017). The individual with the characteristic of self-efficacy is the one who had better performance on intended task and high confidence level when exploring such new technology (Singh, Zolkepli & Kit, 2018) but it found out that self-efficacy was insignificant. In fact, it enables the perceptions of e-commerce system user in believe

towards online information and the intention of entrepreneur to accomplish achievement in their business (Adam, Jizat & Nor, 2016). The attitude of user towards e-commerce would depends on the confident level of consumer in using the e-commerce systems (Adam, Jizat & Nor, 2016). This research would figure out the correlation between self-efficacy and e-Commerce adoption especially in terms of confidence of use, feedbacks, mode of payment and tracking systems.

H2: There is a positive relationship between self-efficacy and e-commerce adoption among youth.

2.2.3 *Perceived Usefulness*

Perceived usefulness defined as individual belief in using some systems would increase job performance affected by the external motivation (Goh, 2017). The external motivation consists of experience from the family members and friends that had good impression and experience when using e-commerce that finally would lead to increasing of user confidence level towards e-commerce system (Goh, 2017). According to the research, education and qualification, family support, role model, new challenges and opportunities are the motivation factors to use e-commerce in entrepreneurship (Qasim, Mohammed et al. 2018). The expectation of an individual in using of new system will enhance the capability of the system user (Singh, Zolkepli et al. 2018). At the same time, user will have high self-efficacy to use the e-commerce system when there are many good comments from other user too (Goh, 2017). This research figures out the relationship between perceived usefulness and the adoption of e-commerce especially in time consuming of the system and the variety of product offered.

H3: There is a positive relationship between perceived usefulness and e-commerce adoption among youth.

2.2.4 *Perceived Ease of Use*

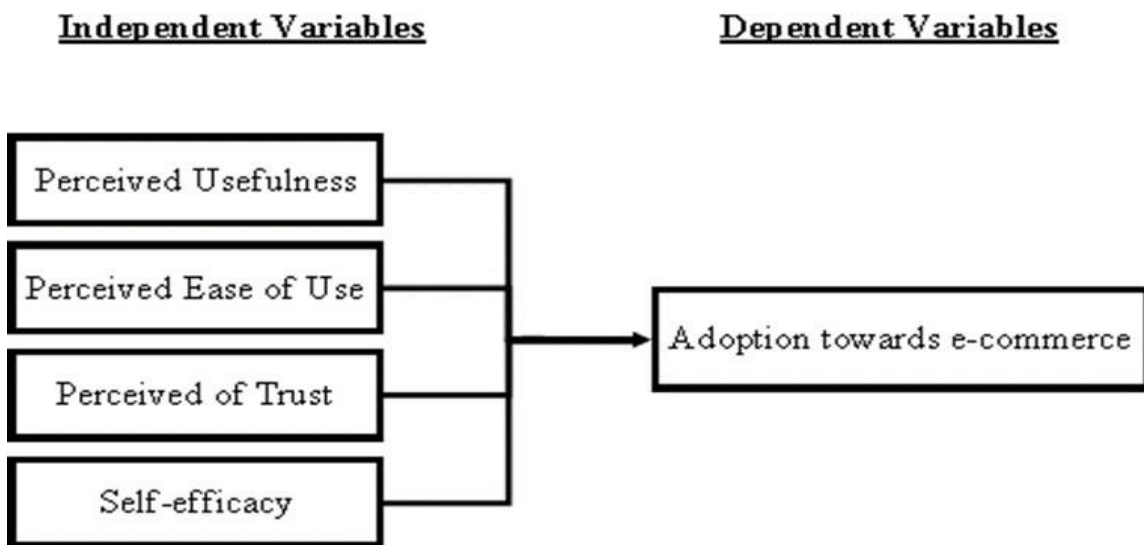
Perceived ease of use described as the effort that needs to put into consideration when utilizing and learning the website or systems (Goh, 2017) in which included physical and mental effort (Singh, Zolkepli et al. 2018). Perceived ease to use has the significant relationship with the intention of using the system among Malaysian (Goh, 2017). The convenient of user to keep, spend and exchange by using e-commerce system able to help the user save more cost and time (Goh, 2017). Perceived ease of use would also refer to the belief of user that they need to only less effort to learn new things with the same technology (Singh, Zolkepli et al. 2018). The adoption of e-commerce depends on the good attitude of entrepreneur such as accept of new technology and the ease of use of the e-commerce system where it is related with the behaviour (Adam, Jizat et al. 2016). The ease of use in using the e-commerce system will lead to user of e-commerce and service provider to have long term relationship and high interest (Goh, 2017). This research would figure out the relationship between the e-commerce adoption and perceived ease of use in e-commerce remarkably in consumption of time, shopping process and mode of payment.

H4: There is positive relationship between perceived ease of use and e-commerce adoption among youth.

2.3 Conceptual Framework

Based on the literature review, there are numerous determinants that can influence and persuade youth to adopt e-commerce. The proposed conceptual framework for this study is as follows:

2.3.1 Conceptual framework



3. Methodology

This study used the descriptive research and structured questionnaire as a research instrument since the researchers can survey a representative sample for better understanding of factors that influencing e-commerce adoption among youth. Besides, the descriptive research also assists the researchers in defining the variability on dissimilar phenomena when the research on going which are appropriate for the large population studies to recognize the cause of phenomena (Goh 2017). Accordingly, in order to pertaining to each variable of this study, the descriptive research is embraced within the structured questionnaire. Then, the unit of analysis, which could be more than one usually used to test sample of any group of population. Meanwhile, the dependent variable as sample size is important to measure the significance of the hypotheses. Descriptive and Pearson's Correlation been used to show the results or observation were significant correlation or not. In analyzing all the data, the reliability analysis test has been used for this study which frequently applied to measure the consistency of the construct variable; perceived usefulness, perceived ease of use, perceived of trust and self- efficacy. The main purpose of reliability is to determine and identify the stability of the data gathered. Furthermore, the reliability test aimed for examining the data obtained from the research reliable or not. The research conducting the survey by using structure questionnaire to make the respondents easily answer and respond to the questions meanwhile easy for researchers also to obtain the demographic information as well as collecting information regarding the independent variables: perceived usefulness, perceived ease of use, perceived of trust and self-efficacy and the dependent variable; e-commerce adoption among youth in Kelantan. Throughout this study, the simple random method is selected to collect the sample and at the same time to suppress the large number of the survey quickly and cost efficiently. This sampling technique involves discovering the

respondents wherever the researchers could find them and randomly chosen from the population. This testing procedure would help to facilitate and congregating the reactions or information needed by the researcher as well as simply achieving and analyze the tested sample unit. The unit of sampling is the real element that researcher investigates. The sample size has anticipated of 384 youth who are representative, the whole population in this research and the Krejcie & Morgan (1970) table used to determine the sample size of population which suggested a minimum of 384 respondents will be sufficient to represents around 314,946 from the whole population.

4. Results and Findings

4.1 Data Analysis

The data that have been collected were analyzed by using Statistical Packages for the Social Sciences (SPSS) methods. In order to inform and understand the information, which helps to put into perspective, the statistical analysis in the research, questionnaire was used.

4.2 Actual Reliability Test

All the four variables that influenced the adoption of e-commerce are consistent as the coefficient standard which is between 0.6 - 0.9. Dependent variable that is adoption of e-commerce showed value excellent coefficient, which is 0.920. For perceived of trust, the value showed excellent coefficient which is 0.908 and same goes to independent variable which is self- efficacy are showed excellent coefficient value which is 0.928, perceived usefulness also showed excellent coefficient value which is 0.947 while for perceived ease of use also 0.947.

4.2.1 Result of reliability test

Variables	Numbers of Items	Cronbach's Alpha
Intention to use e-commerce	4	0.920
Perceived of Trust	4	0.908
Self-Efficacy	4	0.928
Perceived Usefulness	4	0.947
Perceived Ease of Use	4	0.947
Overall variables	5	0.977

4.3 Respondents' Profile

The total of respondent that had been answered the questionnaire was 384 respondents and the demographic profile are include of the gender, age, race, highest education and monthly income.

4.3.1 Respondents' profile

Respondent Profile	Classification	Frequency (n=384)	Percentage (%)
Gender	Male	164	42.7%
	Female	220	57.3%
Age	Between 20 – 22	75	19.5%
	Between 23 – 25	133	34.6%
	Between 26 – 28	118	30.7%
	Between 29 – 30	58	15.1%
Race	Malay	325	84.6%
	Chinese	33	8.6%
	Indian	17	4.4%
	Others	9	2.3%
Highest Education	SPM	131	34.1%
	STPM/Diploma/Matric	133	34.6%
	Undergraduate Degree	115	29.9%
	Postgraduate Degree	5	1.3%
Monthly Income	No Income	96	25%
	Below RM1000	15	3.9%
	RM1000 – RM1999	44	11.5%
	RM2000 – RM2999	128	33.3%
	Above RM3000	101	26.3%

4.4 Results of Descriptive Analysis

4.4.1 The Overall Mean Score on Each Variable and Dimension

Section Dimension		N	MEAN	SD
B	Dependent Variable			
	Adoption of E-Commerce	384	15.89	3.93
C	Independent Variables			
	Perceived of Trust	384	16.23	4.12
	Self-Efficacy	384	16.30	3.68
	Perceived Usefulness	384	17.28	3.79
	Perceived Ease of Use	384	16.70	3.91

There are four independent variables which are perceived of trust, self-efficacy, perceived usefulness and perceived ease of use. The result implies that mean value of all the variables range between 15.8 to 17.3. The respondents fully satisfied and agreed that perceived usefulness is the most influential factor among the other variables factor which the result shows mean value of 17.28. In addition, result depicted that perceived of trust is the lowest mean value of 16.23 among the other variables. The result showed that, the respondents accept the dependent variable, which is adoption of e-commerce influenced by all the independent variables with mean values of 15.8

4.4.2 Descriptive Analysis for Dependent Variable, Adoption of E-Commerce

Adoption of E-Commerce	N	MEAN	SD
My friends and family are using e-commerce	384	3.79	1.273
I like the feeling of using e-commerce	384	3.90	1.072
I want to be one of the e-commerce users	384	3.93	0.991
I will be using e-commerce in future	384	4.27	1.024

Dependent variable, which is adoption of e-commerce, comprised of five questions with the mean value of five (5) questions in adoption of e-commerce ranges from 3.7 to 4.3. The respondents felt that they will be using e-commerce in future is most influenced factor for adoption of e-commerce with mean value of (M=4.27, SD=1.024) followed by they want to be one of the e-commerce users with (M=3.93, SD=0.991). Meanwhile, the respondent has minimum satisfaction with their friends and families are using e-commerce, which has resulted mean value of (M=3.79, SD= 1.273).

4.4.3 Descriptive Analysis for Independent Variable, Factors that Influencing the Adoption of e-Commerce

Perceived of Trust	N	MEAN	SD
Reliable payment method	384	4.04	1.074
The ability to make sure the transaction between every party fulfilled	384	4.20	1.103
Good comments in the website	384	3.80	1.352
Trusted websites	384	4.20	1.103

In the independent variable of perceived of trust, consists of four (4) questions. The mean score of the four (4) questions in perceived of trust ranges from 3.8 to 4.2. The respondent agreed that the ability to make sure the transaction between every party fulfilled and also trusted website which has mean value of (M=4.20, SD=1.103), the highest among the rest and followed by reliable payment method with the mean value of (M=4.04, SD=1.074). The respondents assume that good comments and positive feedback in the website would influence the adoption of e-commerce which eventually resulted in lowest mean value of (M=3.80, SD=1.352).

4.4.4 Descriptive Analysis for Independent Variable, Factors Influencing the Adoption of e-Commerce

Self-Efficacy	N	MEAN	SD
The confidence to use the website and make transaction	384	4.10	1.070
The comments from family member or friends	384	3.93	0.993
Well-known e-commerce website or payment system	384	4.07	1.024
I am able to track my products during delivery process	384	4.20	0.972

In self-efficacy, it consists of four (4) questions. The mean score of the four (4) questions in self-efficacy range between 3.9 to 4.2. The result shows that the respondent thinks that they are able to track their products during delivery process which scored highest mean value (M=4.20, SD=0.972), and followed by, they agreed that, the confidence to use the website and make transaction with mean score of (M=4.10, SD=1.070). The respondents not fully satisfied with the comments from family member or friends who led to the lowest mean value of (M=3.93, SD=0.993).

4.4.5 Descriptive Analysis for Independent Variable, Factors Influencing the Adoption of e-Commerce

Perceived Usefulness	N	MEAN	SD
Save my time by purchase or sell online	384	4.44	1.048
To reach varieties of product	384	4.27	0.990
Making purchase or selling decision	384	4.20	1.007
Make comparison of product and prices	384	4.37	1.042

In perceived usefulness, it consists of four (4) questions. The mean score of the four (4) questions in self-efficacy ranges between 4.2 to 4.5. The result shows that by purchasing and selling online which scored highest mean value (M=4.44, SD=1.048) will save their time followed by they agreed that, making comparison of product and prices with mean score of (M=4.37, SD=1.042). The respondents not fully satisfied with making purchase or selling decision that led to the lowest mean value of (M=4.20, SD=1.007).

4.4.6 Descriptive Analysis for Independent Variable, Factors Influencing the Adoption of E-Commerce

Perceived Ease of Use	N	MEAN	SD
Easy to use and learn	384	4.27	1.024
Disbursed a little bit of time to learn and use	384	4.07	1.025
Shopping process is easier	384	4.23	1.080
Provide varieties of payment method and it is convenient	384	4.14	1.083

In perceived ease of use, it consists of four (4) questions. The mean score of the four (4) questions in perceived ease of use ranges between 4.0 to 4.3. The result shows that the respondent contemplates that e-commerce is easy to use and learn which scored highest mean value (M=4.27, SD=1.024), and followed by, they agreed that shopping process is easier with mean score of (M=4.23, SD=1.080). The respondents not fully satisfied with e-Commerce disbursed a little bit of time to learn and use which led to the lowest mean value of (M=4.07, SD=1.025).

4.5 Result Summary of Pearson Correlation Coefficient

4.5.1 Result Summary of Pearson Correlation Coefficient

Hypothesis	Result	Findings of Data Analysis
H1: There is positive relationship between perceived of trust and adoption of e-Commerce.	r = 0.915** p = 0.000 Very high positive	H1: Accepted
H2: There is positive relationship between self-efficacy and adoption of e-Commerce.	r = 0.933** p = 0.000 Very high positive	H2: Accepted
H3: There is positive relationship between perceived usefulness and adoption of e-Commerce.	r = 0.853** p = 0.000 High positive	H3: Accepted
There is positive relationship between perceived ease of use and adoption of e-Commerce.	r = 0.887** p = 0.000 High positive	H4: Accepted

Based on the result test, there is significant value between perceived of trust and adoption of e-commerce among adolescence in Kota Bharu. Correlation coefficient shows that there was a positive relationship with value 0.915 at a significant level 0.000. The adoption of e-commerce for individual is influenced by perceived of trust internally and externally. This is because when friend, family, relative which are so close to them thus the perceived trust of usage would increase. This result was significant with Nysveen et al. (2005) which individual can easily accept a certain system when they are felt the force of social pressure consecutively from influences by elders or friends. The relationship between self-efficacy and e-commerce adoption among youth are positive where the statistics show $p = 0.000 < 0.01$ at $r = 0.933$. The correlation between perceived usefulness and e-Commerce adoption among youth shows a high positive relationship with $r = 0.853$ at $p = 0.00 < 0.01$. Therefore, the H1 where the relationship between perceived usefulness and youth's adoption of e-commerce are accepted. The correlation between perceived ease of use and youth's adoption of e-commerce shows a high positive relationship with $r = 0.887$ at $p = 0.00 < 0.01$. Therefore, the H1 where the relationship between perceived ease of use and youth's adoption of e-commerce also accepted.

In 384 respondents, 220 respondents (57.3%) were female and another 164 respondents (42.7%) were male. Meanwhile, the majority of the respondents come from Malay ethnic which is around 325 respondents (84.6%), 33 respondents were Chinese (8.6%), 17 were Indian (4.4%) and the rest of the respondents were from others ethnic group (2.3%). The most frequent age group in this research was between 23 – 25 years old, with the 133 respondents (34.6%), 75 respondents (19.5%) of the respondents are aged between 20 - 22 years old, 118 were from the age group of between 26 – 28 years (30.7%). The lowest percentage among others group age of respondents came from the age 29 – 30 (15.1%). Then, the education of the respondents and a total of 131 (34.1%) of the respondents were SPM. The second group of education, STPM/Diploma/Matric, got the highest respondents

with 133 respondents (34.6%), undergraduate degree were 115 respondents (29.9%). Meanwhile, the lowest respondents were postgraduate degree with 5 respondents (1.3%). A majority of respondent earned income of RM2000 – RM2999 per month which 128 respondents (33.3%), 96 respondents (25%) of the respondents with no income per month, while 15 (3.9%) of the respondents earned below RM1000 per month. Nevertheless, it about 44 of them (11.5%) earned RM1000 – RM1999 and 101 of the respondents (26.3%) earned above RM3000

5. Limitation and recommendation

The limitation of this study concerns the data were collected from only Kota Bharu area even though Kota Bharu have more condense population as compared to other districts in Kelantan. Thus, the finding may not represent the whole view of intention towards e-commerce adoption among adolescence. It is suggested that similar studies would be encouraged in more particular districts in order to fully comprehend the true status in Kelantan. Future researchers can expand the sample collection to different provinces or parts of Kelantan for example youths from urban and rural areas. The whole study was conducted within the time constraint, which is insufficient to carry out proper data collection, analysis and interpretation. Due to the shortage or lack availability of time, it may be possible to say that some of the related and concerned aspects may be not being covered in this research. It is strongly recommended that future studies can attain a larger number of sample size could also be used to dig out more information for the research and the analysis should be supported with more reliable data.

6. Conclusion

In a nutshell, this research was to determine the persuasive factors that influencing e-commerce adoption among youth in Kota Bharu, Kelantan through the employment of the Technology Acceptance Model (TAM). The quantitative approach was employed in this research by distributed 384 questionnaires to the youths in Kota Bharu. A concentrated literature review was carried out to fulfill the research objective, to find the significance of the relationship between the variables and fulfill all the objectives by applying the relationship between the dependent variable, adoption of e-commerce among youth in Kota Bharu, Kelantan and the independent variables such as perceived usefulness, perceived ease of use, perceived of trust and self-efficacy, was investigated. As the findings for this research, there is a significant relationship between perceived usefulness, perceived ease of use, perceived of trust and self-efficacy towards adoption of e-commerce and perceived usefulness as the most factors.

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ORIENTASI KEUSAHAWANAN DAN PERTUMBUHAN PERNIAGAAN MILIK USAHAWAN IBU TUNGGAL

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Abstract: Kertas kerja ini bertujuan meneliti tahap dimensi orientasi keusahawanan (EO) dalam kalangan entiti perniagaan milikan usahawan ibu tunggal dan hubungannya dengan pertumbuhan perniagaan. Kajian ini menggunakan teknik survei bagi mendapatkan data. Seramai 196 orang ibu tunggal daripada sebuah Persatuan Wanita dan Ibu Tunggal telah dilibatkan sebagai responden kajian. Kesemua responden telah dipilih menggunakan teknik persampelan bukan-berkebarangkalian iaitu jenis persampelan bertujuan. Hasil kajian mendapati bahawa perniagaan ibu tunggal PWITUS mempunyai tahap dimensi orientasi keusahawanan yang tinggi dan orientasi keusahawanan (EO) didapati mempunyai hubungan positif yang signifikan dengan pertumbuhan perniagaan iaitu pada dimensi proaktif, mengambil risiko dan autonomi. Keaslian kajian ini terletak pada usaha menyasat satu segmen yang terdapat dalam kelompok besar usahawan wanita di mana ibu tunggal mempunyai ciri khusus yang berpotensi memberi impak dalam orientasi keusahawanan perniagaan yang diusahakan.

Keywords: Orientasi Keusahawanan; Pertumbuhan Perniagaan; Wanita; Ibu Tunggal

1. PENGENALAN

Wanita memainkan peranan penting dalam bidang keusahawanan dan pembangunan ekonomi masakini (Saidi *et al.* 2017; Ambepitiya 2016; Shah and Saurabh 2015; Mauchi *et al.* 2014; dan Jamali 2008). Pembabitan wanita dalam keusahawanan juga didapati menjadi faktor penyumbang kepada usaha membasmi kemiskinan di negara-negara mundur dan sedang membangun (Saidi *et al.* 2017; and Seshie-Nasser and Aduro, 2018)). Berikutan daripada peningkatan dalam bilangan wanita dalam bidang keusahawanan, maka lebih banyak kajian diperlukan bagi menambah khazanah ilmu berkaitan keusahawanan dalam kalangan wanita.

Kertas kerja ini bertujuan meneliti tahap orientasi keusahawanan dalam perniagaan milik ibu tunggal dan menganalisa hubungan orientasi keusahawanan dengan pertumbuhan perniagaan. Justifikasi memilih segmen perniagaan yang dimiliki ibu tunggal adalah kerana ibu tunggal adalah salah satu sub-segmen yang terdapat dalam populasi usahawan wanita. Kelompok ibu tunggal mempunyai ciri unit dan khusus yang sedikit berbeza dengan kelompok wanita yang mempunyai pasangan dan wanita bujang. Keadaan itu berkemungkinan memberi kesan bukan sahaja kepada hal ehwal diri dan keluarga mereka, tetapi turut memberi kesan kepada keadaan yang berlaku dalam operasi perniagaan yang diusahakan.

Secara perbandingannya, ibu tunggal mempunyai tanggungjawab yang lebih besar berbanding kelompok wanita bujang dan wanita berpasangan. Ibu tunggal mempunyai tanggungan yang lebih untuk diuruskan secara sendirian. Secara ideal dan dalam keadaan yang normal, usahawan daripada kategori wanita bujang mempunyai bilangan tanggungan yang lebih terhad, mempunyai lebih fleksibiliti dalam mengatur masa dan urusan kehidupan, manakala usahawan wanita yang dalam kategori berpasangan pula dapat berkongsi sebahagian daripada tanggungjawab dengan pasangan masing-masing. Hal yang demikian yang adalah selari dengan beberapa kajian berkaitan seperti Ab. Ghani & Hashim (2013), Nur Watee et al. (2017); Siti Rafiah & Sakinah (2013); Rusyda et al. (2011) dan Kotwal & Prabhakar (2009). Berdasarkan sorotan ke atas kajian-kajian tersebut, kelompok ibu tunggal didapati sinonim dengan masalah ekonomi, masalah psikologi dan emosi, masalah keluarga, cabaran membesarkan anak sendirian, stigma negatif dan kurangnya sokongan masyarakat. Sehubungan itu, ia memberi gambaran tekanan dan situasi negatif yang membelenggu kehidupan mereka. Keadaan tersebut dijangka berpotensi memberi kesan kepada cara mereka mengurus kehidupan dan entiti perniagaan serta pencapaian perniagaan/karier.

SOROTAN LITERATUR

Konsep orientasi keusahawanan telah dibina oleh Covin dan Slevin (1989), di mana perkara utama yang ditekankan dalam konsep tersebut ialah aplikasi konsep keusahawanan terhadap fenomena keusahawanan di peringkat organisasi perniagaan. Ini bermaksud ia adalah aplikasi ciri keusahawanan terhadap konteks organisasi berbanding isu peringkat individu usahawan (Basso et al. 2009). Menurut Covin dan Slevin (1989), orientasi keusahawanan (EO) adalah satu bentuk orientasi pengurusan strategik yang bersifat unidimensi di mana sesebuah firma perlu mencapai tahap yang tinggi dalam 3 dimensi keusahawanan yang membentuk EO sebelum layak dianggap sebagai berkeusahawanan (entrepreneurial). Tiga dimensi tersebut ialah inovasi, proaktif dan pengambilan risiko. Justeru sebuah firma yang berkeusahawanan ditakrif sebagai firma yang terlibat dalam inovasi produk-pasaran, mengambil bahagian dalam sejumlah risiko dan mendahului pesaing dalam melakukan inovasi iaitu proaktif, manakala firma yang tidak berkeusahawanan pula kurang melakukan inovasi, menghidari risiko dan hanya mengikut (meniru) jejak langkah pesaing berbanding menjadi pemula atau pencetus kepada sesuatu pembaharuan. Wales (2016) mengungkapkan EO sebagai penggayaan strategik (strategic posture) peringkat firma yang didominasi oleh dimensi inovatif, proaktif dan pengambilan risiko. Namun wujud perspektif berbeza mengenai dimensi dalam konsep EO dalam kalangan pengkaji (Wales 2016).

Isu mengenai dimensi EO sebenarnya telah lama diperdebat oleh tokoh-tokoh bidang. Menurut Wales (2016), perbincangan mengenai konseptualisasi EO kebanyakan didominasi oleh dua perspektif utama iaitu konseptualisasi; (1) Pemikiran Miller/Covin & Slevin yang melihat EO sebagai kombinasi daripada tiga dimensi iaitu inovatif, proaktif dan pengambilan risiko; (2) Pemikiran Lumpkin & Dess yang menyatakan EO adalah hasil daripada lima dimensi iaitu inovatif, proaktif, pengambilan risiko, *competitive aggressiveness* dan autonomi. Namun demikian dalam perbincangan dimensi EO, pengkaji seperti George & Marino (2011) telah mencadangkan konsep EO adalah sebuah konsep yang terbina daripada beberapa konstruk yang berkait antara satu sama lain dan pengkaji EO tidak boleh meninggalkan 3 dimensi teras EO seperti terkandung dalam perspektif Miller/Covin & Slevin (1989), iaitu inovatif, proaktif dan pengambilan risiko. Sebarang penambahan dimensi baharu tidak boleh mengeneipkan dimensi asas yang dianggap teras kepada konsep EO. Kajian ini telah menggunakan 4 dimensi yang terdiri daripada inovatif, proaktif, pengambilan risiko dan autonomi seperti terdapat dalam kajian Al Mamun et al. (2017). Justifikasinya adalah kerana kajian Al Mamun et al. (2017) mempunyai

latar belakang konteks yang hampir sama dengan populasi kajian ini iaitu dalam kalangan isi rumah berpendapatan rendah di negeri Kelantan. Hasil ujian keesahan instrumen yang dilakukan, mereka telah menemui item pengukuran yang terletak dalam 4 tema iaitu kreativiti dan inovasi, pengambilan risiko, proaktif dan autonomi. Justeru kajian ini telah memilih 4 dimensi yang sama untuk digunakan dalam kajian ini.

Dalam konteks entiti perniagaan milik usahawan wanita dalam kategori ibu tunggal, adalah dijangkakan perniagaan yang diusahakan mereka mempunyai EO pada tahap tertentu. Di samping itu, turut dijangkakan ada hubungan antara EO dan prestasi pertumbuhan perniagaan selari dengan sorotan kajian-kajian lepas. Contohnya, Zahra dan Covin (1995) mendapati wujud hubungan yang signifikan antara EO dengan prestasi organisasi perniagaan kecil. Selain daripada itu kajian Shuhymee & Abdullah (2013) dijalankan ke atas 143 buah firma PKS di Malaysia juga mendapati EO berupaya mempengaruhi pencapaian prestasi usahawan dengan menekankan kepada penerokaan dan mengeksploitasi peluang-peluang yang telah dikenal pasti ke atas produk dan pasaran baru. Kajian Rezaei & Ortt (2017) pula menunjukkan dimensi EO menunjukkan trend hubungan yang berbeza dengan prestasi mengikut fungsi-fungsi dalam firma. Justeru fungsi-fungsi berperanan sebagai perantara dalam hubungan EO dan prestasi keseluruhan firma. Umpamanya, kajian tersebut mengesan kewujudan hubungan positif di antara dimensi inovatif dan prestasi fungsi R&D; dan di antara dimensi proaktif dan prestasi fungsi pemasaran dan jualan. Manakala hubungan negatif wujud di antara dimensi pengambilan risiko dan prestasi pengeluaran. Oleh itu, dalam skop perniagaan milik usahawan ibu tunggal dijangkakan dimensi EO akan menunjukkan hubungan dengan pertumbuhan perniagaan.

METODOLOGI

Kajian ini menggunakan teknik survei yang dilaksanakan menerusi dalam talian. Soalselidik telah dibangunkan khusus bagi mengumpul data dan mengukur pembolehubah yang diperlukan daripada responden sasaran. Populasi kajian ini terdiri daripada usahawan ibu tunggal yang menganggotai Persatuan Wanita dan Ibu Tunggal Selangor (PWITUS) di Batu Caves selangor. Populasi kajian berjumlah 400 orang usahawan ibu tunggal seperti yang diberikan oleh pengurusan persatuan. Berdasarkan jumlah populasi sasaran yang diberikan, jadual penentuan saiz sampel Krejcie and Morgan (1970) telah digunakan bagi mendapatkan saiz sampel kajian iaitu seramai 196 orang. Teknik persampelan bukan berkebarangkalian iaitu jenis persampelan bertujuan telah digunakan bagi memilih responden kajian. Teknik tersebut digunakan kerana responden adalah bertaburan di pelbagai lokasi dan pengkaji perlu bergantung kepada bantuan Pengerusi persatuan untuk menyebarkan alamat capaian (link) survei kepada ahli-ahli yang telah dikenalpasti oleh pengurusan persatuan.

Soalselidik telah dibangunkan bagi mengumpul maklumat diperlukan iaitu terdiri daripada beberapa seksyen seperti demografi, maklumat perniagaan, pengukuran pembolehubah pertumbuhan perniagaan dan orientasi keusahawanan. Secara umumnya, pengukuran pembolehubah EO diperolehi dengan memberi sejumlah 20 item pernyataan berkaitan 4 dimensi proaktif (5 item), inovasi (5 item), pengambilan risiko (5 item) dan autonomi (5 item); serta pertumbuhan perniagaan yang terdiri daripada 7 item. Responden telah memberi maklumbalas berdasarkan skala Likert 1-5 yang ditentukan nilai skornya. Soalselidik yang dibangunkan telah diuji menerusi ujian pilot dengan 10 orang responden yang memiliki ciri yang sama dengan populasi sasaran kajian. Hasil ujian konsistensi dalaman yang dijalankan ke atas data ujian pilot didapati nilai Cronbach alfa yang diperolehi adalah baik iaitu berada di antara sela 0.762 sehingga 0.942. Data kajian telah dianalisis menggunakan teknik analisis deskriptif dan korelasi Pearson bagi mencapai tujuan kajian. Unit analisa kajian ialah perniagaan milikan usahawan ibu tunggal.

HASIL EMPIRIKAL

Demografi dan profil perniagaan

Jadual 1 menunjukkan profil demografi responden yang terlibat dalam kajian dan Jadual 2 menunjukkan profil entiti perniagaan responden kajian.

Jadual 1 Profil Demografi Responden

Item	Kategori	Kekerapan	Peratus (%)
Umur	26-35 tahun	30	15.3
	36-45 tahun	115	58.7
	46 tahun dan keatas	51	26.0
Pendidikan	UPSR	5	2.5
	SPM	104	53.1
	STPM	75	38.3
	Ijazah dan ke atas	12	6.1
Etnik	Melayu	144	73.5
	Cina	17	8.7
	India	34	17.3
	Lain-lain	1	0.5
Bilangan tanggungan	< daripada 5 orang	97	49.5
	5-10 orang	99	50.5
	11 orang dan lebih	0	-

Berdasarkan Jadual 1 didapati 58.7% responden usahawan ibu tunggal berumur di antara 36-45 tahun. Trend itu menunjukkan kebanyakan responden berada pada tahap umur yang sesuai untuk bertindak membesarkan perniagaan yang diceburi disebabkan pada sela umur tersebut individu lazimnya telah mencapai tahap kematangan kognitif dan kebijaksanaan pertimbangan yang paling optimum. Di samping itu umur tersebut adalah dianggap mempunyai tempoh masa yang mencukupi untuk bertindak mengembangkan perniagaan yang diusahakan sebelum mereka mencapai umur emas. Manakala daripada segi pendidikan kebanyakan (53.1%) responden mempunyai latar belakang pendidikan sehingga SPM. Daripad segi bilangan tanggungan, 49.5% respondent mempunyai tanggungan kurang daripada 5 orang dan sebanyak 50.5% lagi mempunyai bilangan tanggungan 5-10 orang. Justeru ia menunjukkan usahawan ibu tunggal terlibat menanggung tanggungjawab yang lebih berat bagi menampung keluarga masing-masing secara berdikari dan sendirian. Jadual 2 menunjukkan profil perniagaan mereka.

Jadual 2 Profil Perniagaan Responden

Items	Kategori	Kekerapan (n=196)	Peratus (%)
Modal semasa memulakan perniagaan	< RM 500	55	28.1
	RM 501-RM 1,000	107	54.6
	RM 1,001-RM 1,500	26	13.3
	RM 1,500-RM 2,000	8	4.1
Nilai aset kumulatif semasa memulakan perniagaan	< RM 500	34	17.3
	RM 501-RM 1,000	79	40.3
	RM 1,001-RM 1,500	61	31.1
	RM 1,500-RM 2,000	20	10.2
	> RM 2,000	2	1.0

Nilai aset kumulatif selepas 3 tahun memulakan perniagaan (anggaran)	< RM 500	10	5.1
	RM 501-RM 1,000	23	11.7
	RM 1,001-RM 1,500	85	43.4
	RM 1,500-RM 2,000	64	32.7
	> RM 2,000	14	7.1
Nilai aset kumulatif semasa	< RM 1,000	7	3.6
	RM 1,001-RM 1,500	21	10.7
	RM 1,500-RM 2,000	48	24.5
	RM 2,000-RM 2,500	79	40.3
	> RM 2,501	41	20.9
Purata Jualan Tahunan	< RM 10,000	49	25.0
	RM10,001-RM 20,000	34	17.3
	RM 20,001-RM 30,000	113	57.7
	RM 30,001 dan >	0	-
Purata Untung Tahunan	< RM 10,000	59	30.1
	RM10,001-RM 20,000	128	65.3
	RM 20,001-RM 30,000	9	4.6
	RM 30,001 dan >	0	-
Bilangan pekerja	1-2 orang	158	80.6
	3-4 orang	35	17.9
	5-6 orang	3	1.5
	7 orang dan lebih	-	-
Tujuan (harapan) memulakan perniagaan	Menjana pendapatan utama	172	87.8
	Menjana pendapatan tambahan	16	8.2
Menerima bantuan perniagaan daripada mana-mana agensi?	Ya	144	73.5
	Tidak	52	26.5

Berdasarkan Jadual 2 54.6% responden memulakan perniagaan dengan amaun modal yang kecil iaitu di antara RM501 to RM1,000. Ini menjelaskan bahawa perniagaan usahawan ibu tunggal tersebut cenderung kepada skala mikro sesuai dengan tujuan mereka untuk menjana pendapatan bagi menyara kehidupan. Ini dapat dilihat daripada jawapan responden mengenai tujuan (harapan) mereka berniaga di mana 87.8% berharap untuk menjana pendapatan utama daripada perniagaan yang diusahakan selain itu 73.5% responden mengakui ada menerima bantuan perniagaan daripada agensi kerajaan berkaitan.

Orientasi Keusahawanan

Kajian ini mempunyai lima pemboleh ubah bebas iaitu proaktif, inovatif, mengambil risiko dan autonomi.

Proaktif

Secara keseluruhannya, min diperolehi bagi setiap item adalah tinggi iaitu di antara 4.01 sehingga 4.08. Jadual 3 menunjukkan perincian skor min bagi item di bawah dimensi proaktif.

Jadual 1 Dimensi Proaktif

Item	Sangat Tidak Setuju	Tidak Setuju	Agak Setuju	Setuju	Sangat Setuju	Min
Perniagaan saya memiliki matlamat yang jelas dan kehadapan.	2 (1.0)	14 (7.1)	24 (12.2)	91 (46.4)	65 (33.2)	4.04
Wakil organisasi saya akan hadir ke kursus-kursus berkaitan perniagaan.	0 (0)	17 (8.7)	21 (10.7)	101 (51.5)	57 (29.1)	4.01
Organisasi saya sentiasa mengambil inisiatif terhadap peluang dalam pasaran.	0 (0)	19 (9.7)	26 (13.3)	78 (39.8)	73 (37.2)	4.05
Organisasi saya sentiasa mencari dan bekerjasama dengan pihak lain pada masa akan datang.	0 (0)	22 (11.2)	28 (14.3)	72 (36.7)	74 (37.8)	4.01
Organisasi saya sentiasa mengambil peluang terhadap bantuan yang ditawarkan.	0 (0)	20 (10.2)	32 (16.3)	56 (28.6)	88 (44.9)	4.08

Berdasarkan Jadual 3, pernyataan '*organisasi saya sentiasa mengambil peluang terhadap bantuan yang ditawarkan*' mendapat skor min tertinggi iaitu 4.08. Ini menunjukkan perniagaan usahawan ibu tunggal tersebut peka dan sentiasa menggunakan peluang yang disediakan bagi mengurus dan membina perniagaan mereka. Pernyataan yang mendapat skor min terendah ialah pernyataan '*sentiasa mencari dan bekerjasama dengan pihak lain pada masa akan datang*' dan pernyataan '*wakil organisasi saya akan hadir ke kursus-kursus berkaitan perniagaan*' iaitu masing-masing 4.01. Ini menunjukkan perniagaan tersebut sentiasa berusaha memperkasa kapasiti perniagaan menerusi kelebihan jaringan (network) dan kolaborasi dan pengumpulan pengetahuan/maklumat perniagaan.

Inovatif

Deskripsi tingkahlaku inovatif entiti perniagaan milikan usahawan ibu tunggal ditunjukkan di dalam Jadual 4.

Jadual 4 Dimensi Inovatif

Item	Sangat Tidak Setuju	Tidak Setuju	Agak Setuju	Setuju	Sangat Setuju	Min
Perniagaan saya sentiasa memperbaharui produk dari pelbagai aspek.	2 (1.0)	14 (7.1)	24 (12.2)	91 (46.4)	65 (33.2)	3.65
Organisasi saya sering memperkenalkan kaedah baru untuk memberi nilai tambah kepada produk.	0 (0)	17 (8.7)	21 (10.7)	101 (51.5)	57 (29.1)	3.52
Perniagaan saya mempunyai unit khas yang menjalankan Penyelidikan & Pembangunan (R&D).	0 (0)	19 (9.7)	26 (13.3)	78 (39.8)	73 (37.2)	2.98
Organisasi saya sering mengeksploitasi sesuatu yang baru.	0 (0)	22 (11.2)	28 (14.3)	72 (36.7)	74 (37.8)	3.68
Organisasi saya sentiasa memperbaharui strategi sebelum memasarkan produk.	0 (0)	20 (10.2)	32 (16.3)	56 (28.6)	88 (44.9)	3.95

Berdasarkan Jadual 4, pernyataan ‘organisasi saya sentiasa memperbaharui strategi sebelum memasarkan produk’ mendapat skor min tertinggi sebanyak 3.95. Manakala pernyataan ‘perniagaan saya mempunyai unit khas yang menjalankan Penyelidikan & Pembangunan (R&D)’ mendapat skor min terendah iaitu hanya 2.98 sahaja. Ini menunjukkan perniagaan usahawan ibu tunggal ada melakukan usaha tertentu bagi meningkatkan pemasaran produk mereka dengan melakukan pembaharuan. Justeru pembaharuan atau inovasi tertumpu kepada inovasi pemasaran yang melibatkan saluran penyampaian produk/perkhidmatan kepada pelanggan akhir. Selain itu skop inovasi yang dilakukan oleh perniagaan mereka tertumpu kepada jenis menokok (incremental) dengan “mengeksploitasi” sesuatu yang baharu (min kedua tertinggi iaitu 3.68) berbanding inovasi yang radikal. Perlakuan inovasi ini sejajar dengan skala perniagaan yang bersifat mikro dan aktiviti inovasi berlaku secara tidak formal dan skala kecil. Ini sejajar dengan skor min yang terendah iaitu 2.98 yang diperolehi bagi item berkaitan kewujudan unit khas yang menjalankan aktiviti R&D.

Mengambil risiko

Secara keseluruhannya, min diperolehi bagi setiap item adalah tinggi iaitu di antara 4.01 sehingga 4.14. Dapatan min tingkahlaku mengambil risiko bagi setiap item ditunjukkan di dalam jadual 5.

Jadual 5 Dimensi Mengambil risiko

Item	Sangat Tidak Setuju	Tidak Setuju	Agak Setuju	Setuju	Sangat Setuju	Min
Organisasi saya sentiasa bersedia untuk mengambil risiko yang bersesuaian.	0 (0)	16 (8.2)	32 (16.3)	83 (42.3)	65 (33.2)	4.01
Perniagaan saya sentiasa mencari peluang mengembangkan pasaran sedia ada.	0 (0)	16 (8.2)	33 (16.8)	65 (33.2)	82 (41.8)	4.01
Walaupun beberapa kali gagal, perniagaan saya tidak serik untuk mengambil risiko dan terus mencuba.	0 (0)	19 (9.7)	26 (13.3)	78 (39.8)	73 (37.2)	4.09
Organisasi saya sentiasa berfikiran rasional dalam membuat sebarang keputusan.	1 (0.5)	13 (6.6)	36 (18.4)	54 (27.6)	92 (46.9)	4.14
Organisasi saya sentiasa komitmen untuk mencapai pulangan yang tinggi.	0 (0)	15 (7.7)	34 (17.3)	59 (30.1)	88 (44.9)	4.12

Berdasarkan jadual 5, pernyataan ‘organisasi saya sentiasa berfikiran rasional dalam membuat sebarang keputusan’ mendapat skor min yang paling tinggi iaitu sebanyak 4.14. Ini menunjukkan pendekatan organisasi yang berhati-hati selari dengan konsep pengambilan sejumlah risiko dipertimbangkan (calculated risks) yang merupakan salah satu ciri keusahawanan. Pernyataan ‘perniagaan saya sentiasa mencari peluang mengembangkan pasaran sedia ada’ dan pernyataan ‘sentiasa bersedia untuk mengambil risiko yang bersesuaian’ mendapat skor min yang relatif terendah iaitu masing-masing 4.01. Ini menunjukkan organisasi perniagaan milikan ibu tunggal secara perbandingannya tidak begitu memberi penekanan kepada usaha mencari dan melebarkan skop ke pasaran baharu dan sebenarnya ia mencerminkan tahap mengambil risiko organisasi yang dilakukan secara berhati-hati dan waspada.

Autonomi

Secara keseluruhannya, min diperolehi bagi setiap item adalah tinggi iaitu di antara 4.03 sehingga 4.17. Dapatan setiap item di bawah dimensi autonomi adalah seperti dalam jadual 6.

Jadual 6 Dimensi Autonomi

Item	Sangat Tidak Setuju	Tidak Setuju	Agak Setuju	Setuju	Sangat Setuju	Min
Organisasi saya dapat menguruskan perniagaan dengan cekap.	0 (0)	9 (4.6)	45 (23.0)	67 (34.2)	75 (38.3)	4.06
Organisasi saya sering memperkenalkan dan menjayakan idea baru dalam perniagaan.	0 (0)	12 (6.1)	37 (18.9)	80 (40.8)	67 (34.2)	4.03
Organisasi saya mempunyai visi yang teguh.	0 (0)	12 (6.1)	36 (18.4)	68 (34.7)	80 (40.8)	4.10
Organisasi saya mempunyai kepimpinan yang baik.	0 (0)	11 (5.6)	38 (19.4)	64 (32.7)	83 (42.3)	4.12
Organisasi saya sentiasa menerima komen dan maklum balas dari pelanggan.	0 (0)	10 (5.1)	34 (17.3)	65 (33.2)	87 (44.4)	4.17

Berdasarkan jadual 6, pernyataan '*organisasi saya sentiasa menerima komen dan maklum balas dari pelanggan*' mendapat skor min yang tertinggi sebanyak 4.17. Ini menunjukkan keterbukaan organisasi dalam menerima input daripada pelanggan bagi peluang penambahbaikan berterusan. Manakala pernyataan '*sering memperkenalkan dan menjayakan idea baru dalam perniagaan*' mendapat skor min paling rendah iaitu 4.03. Ini menunjukkan perniagaan usahawan ibu tunggal cenderung menjadi pengikut kepada idea dan amalan perniagaan yang sedia ada dan tidak dapat membentuk pengaruh baharu dalam amalan pasaran.

Hubungan EO dan Pertumbuhan Perniagaan

Jadual 7 menunjukkan hasil dari ujian korelasi di antara semua pemboleh ubah iaitu proaktif, inovatif, mengambil risiko dan autonomi terhadap pertumbuhan perniagaan milikan usahawan ibu tunggal. Ujian korelasi Pearson dua ekor (*2-tailed*) dengan aras signifikan $P < 0.01$ telah digunakan bagi menilai hubungan-hubungan tersebut.

Jadual 7 Hubungan Orientasi Keusahawanan Dan Pertumbuhan Perniagaan

Pemboleh ubah	Nilai korelasi	Tahap Kekuatan Hubungan
Proaktif	.234**	Lemah
Inovatif	.199	Lemah
Mengambil risiko	.224**	Lemah
Autonomi	.222**	Lemah

Nota: **Kolerasi adalah signifikan pada tahap 0.01

Berdasarkan Jadual 7, terdapat hubungan positif yang lemah antara pemboleh ubah proaktif ($r=0.234$, $p=0.000$ $p<.01$), mengambil risiko ($r=0.224$, $p=0.000$ $p<.01$) dan autonomi ($r=0.222$, $p=0.000$, $p<.01$) dengan pertumbuhan perniagaan. Ini menunjukkan hubungan yang wujud di antara tiga pemboleh ubah proaktif, mengambil risiko dan autonomi adalah lemah pada aras signifikan 0.01. Manakala pemboleh ubah inovatif tidak mempunyai hubungan yang signifikan dengan pertumbuhan perniagaan.

Perniagaan adalah tidak harus sekadar untuk ditubuhkan dan dibiarkan pada tahap *status quo* sahaja tanpa pertumbuhan ke tahap yang lebih baik. Perniagaan milik usahawan ibu tunggal perlu melalui proses pertumbuhan sewajarnya selepas beberapa tahun ia ditubuhkan kerana ia bakal menentukan pencapaian harapan mereka sewaktu menubuhkan perniagaan tersebut - iaitu untuk menjana pendapatan utama dan tambahan bagi menanggung keperluan diri dan tanggungan secara mampan. Sekiranya perniagaan dibiarkan pada *status quo* selepas ditubuhkan, maka usaha menaik taraf sosio-ekonomi kelompok ibu tunggal khususnya dalam kategori B40 melalui medium perniagaan dan keusahawanan tidak akan berhasil. Hal demikian kerana perniagaan tersebut hanya bertindak menjana pendapatan yang sekadar “balik modal” dan memenuhi keperluan harian secara “kais pagi makan pagi kais petang makan petang”. Dalam konteks perniagaan skala mikro yang diusahakan oleh usahawan ibu tunggal terlibat, elemen EO yang penting bagi mendorong pertumbuhan perniagaan ialah dimensi proaktif, mengambil risiko dan autonomi.

Proaktif penting bagi pertumbuhan perniagaan skala mikro milik ibu tunggal kerana ia menentukan perniagaan tersebut sentiasa peka dan mampu merebut peluang-peluang yang ada disediakan samada melalui peluang kerjasama, kolaborasi dan bantuan-bantuan khusus. Ini kerana dengan kapasiti modal kewangan, sumber dan tahap pendidikan yang terbatas, sekiranya mereka tidak bertindak proaktif ia menyebabkan perniagaan tercicir daripada mendapat faedah percuma (*angel benefit*) yang disediakan.

Mengambil risiko penting bagi pertumbuhan perniagaan skala mikro. Hal yang demikian kerana risiko wujud bersama-sama dengan peluang. Namun dalam konteks perniagaan mikro milik usahawan ibu tunggal, ia perlu dilakukan dengan pertimbangan yang lebih rasional dan waspada kerana selain kesan risiko kepada perniagaan, ia harus diseimbangkan dengan kemungkinan kesan risiko tersebut ke atas kehidupan peribadi mereka. Ini kerana usahawan ibu tunggal perlu menanggung keluarga sendirian dan perniagaan tersebut merupakan sumber pendapatan yang penting dan dalam konteks perniagaan milikan tunggal pula tidak ada pengasingan antara liabiliti peribadi dan perniagaan. Justeru organisasi perniagaan harus bertindak rasional semasa mengambil risiko dan berkaitan dengan konteks perniagaan serta pasaran sedia ada di mana usahawan tersebut sudah arif/mahir mengenai selok beloknya.

Autonomi merupakan satu dimensi EO yang juga mendorong pertumbuhan perniagaan. Autonomi dalam konteks perniagaan mikro usahawan ibu tunggal bermaksud mempunyai keupayaan dan kuasa untuk menterjemah idea perniagaan atau visi sehingga terlaksana seperti dikehendaki. Justeru dalam konteks entiti perniagaan mikro milik usahawan ibu tunggal, maklum balas daripada pelanggan adalah sumber rujukan penting bagi memahami jangkaan (*expectation*) pasaran terhadap proses penyampaian nilai organisasi dan melakukan perancangan halatuju yang menepati kehendak semasa. Komen dan maklumbalas pelanggan adalah mudah diperolehi dan murah kosnya bagi usahawan ibu tunggal bagi mencari idea membina halatuju pertumbuhan perniagaan mereka. Seterusnya, kepimpinan yang baik dan visi yang jelas penting bagi

mempengaruhi seluruh ahli dan perancangan organisasi ke arah mencapai jangkauan dan visi yang diidamkan usahawan.

KESIMPULAN

Keusahawanan adalah salah satu platform menambahbaik taraf sosio-ekonomi wanita khususnya dalam kalangan ibu tunggal. Aktiviti keusahawanan yang diceburi membuka peluang mendapatkan pendapatan bagi menyara diri dan tanggungan mereka. Namun perniagaan yang diusahakan perlu bertumbuh sekiranya ia mahu dijadikan platform meneruskan kelangsungan hidup yang mapan bagi kelompok ibu tunggal terlibat. Justeru EO adalah penting bagi pertumbuhan perniagaan milik usahawan ibu tunggal, khususnya pada dimensi proaktif, inovatif dan autonomi. Usaha membasmi kemiskinan melalui medium keusahawanan perlu mengambil kira bukan hanya pada peringkat menubuhkan perniagaan tetapi yang lebih penting adalah untuk tersu mendorong pertumbuhan perniagaan selepas beberapa tahun ia ditubuhkan. Sebarang bantuan harus membina aspek EO pada perniagaan ibu tunggal agar mampu bertindak proaktif, berani mengambil risiko diperhitungkan dan berautonomi.

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Entrepreneurship and SMEs in Malaysia

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Abstract - “The crucial barometer of economic wellbeing is the continued highly level of creation of new and small firms in all sectors of the economy by all segments of the society.” (Small Business Association 1998: 12). This paper glances through innovation, SMEs their definition and entrepreneurship around the world and then closely sees their contribution in Malaysia. It offers a humble effort of putting together the relevant literature on entrepreneurship paving way for all the related stakeholders to gear up in the direction of its promulgation to achieve larger benefits for Malaysian economy and nation.

Keywords: SMEs, Entrepreneurship, Innovation, Malaysia.

Innovation and change go hand in hand as business environment is never static (Khandwalla 1977; Miller & Friesen 1982; Naman & Slevin 1993) and the essence of entrepreneurship is innovation (Schumpeter 1934). This change and its quick response can clearly be seen in small firms as compared to large firms which are slower in response due to their large structural limitations (Markman 2007). Furthermore, there is an agreement of the researchers, like Kirchoff (1994), Reynolds & White (1997) and others, that small innovative firm’s growth plays a significant role in creating new employment. These small and medium enterprises, SMEs, hinging on innovation, also play a significant role in any country’s economy regardless of being developed or underdeveloped.

In addition, it was clearly depicted by one of the studies, conducted by Markatou (2012) on Greek SMEs with respect to the innovation generation, that small firms of Greece are the principal contributor of granted patents and were found to be actively involved in contributing to economy and are the exporters to European Union, the Balkans and the Middle East countries. Thus, it shows that the small firms are likely to exhibit the essence of innovation which is also core to the phenomenon of entrepreneurship.

They, however, concluded by asserting the importance of SMEs in Greece. Furthermore, it was established that the SMEs are the main source of innovation and findings were offered to be used in the making of policies seeking innovation and aiming to fortify SMEs in Greece. It was, thus, confirmed that production and development of

innovation in Greece was mainly due to the SMEs operating in Greece. However, this is almost true for all the rest of the regions in the world as well.

Innovation has been considered as the major source of gaining competitive advantage and better stability for firms (Schumpeter 1942). Although Schumpeter attached innovation with large units but nowadays, mainly innovation has been associated with the perspectives of SMEs than the larger firms. Undoubtedly, larger firms are capable of taking advantage of big economies of scale yet, on the other hand, the SMEs contribution in economies has equally grown up. These SMEs are now responsible to embark quickly on change. They meet challenges through innovation, meeting new demands, bringing varieties, satisfying needs and tastes, embracing rapid change, coping obsolescence etc. more effectively, efficiently and rapidly than larger firms. Larger firms, somehow, are restricted due to their structure in order to respond change efficiently.

In addition, SMEs, around the world, have changed the face of the economies during the previous decades and are found to be the innovation and economic development generators; also are considered as the main source of employment generation, economic recovery and industrialization specifically in transitional economies (Djordjević et al. 2012).

However, these SMEs also face more hurdles as compared to the larger firms (Ahmad 2007); their failure ratio is also greater comparative to the bigger organizations (Storey 1994); are more and easily prone to the environmental fluctuations (Man & Lau 2005), dynamism and uncertainties (Khandwalla 1977; Miller & Friesen 1982; Naman & Slevin 1993) which could be the resultants of low customer base and relatively a less market share as compared to the larger firms (Stokes 2006). However, it is considerable that the main source of competence for the firm; and the core competence of the firm is the person entrepreneur himself/herself (Gibb 2005) thus the studies based on the person entrepreneur may likely to improve the SMEs contribution and the same is also the purpose of the current study.

On the other hand, this is also an open truth that those SMEs that are less likely to respond to change efficiently and are found reluctant in embracing innovation, bear more obsolescence chances in terms of their products/ services and or processes. Innovation, however, is about producing new and unique varieties of goods/ services, marketing techniques, production processes, managing businesses and dealing with clients/ customers. To some extent, it would be right to endorse that the SMEs embracing innovation quickly

are more successful and escalate their survival chances as compared to others (Markatou 2012).

However, an SME, generally, is a self-governing organizational body which is usually managed by its owner or partner owner; also has a comparatively smaller market share. Additionally, SMEs could belong to the realm of sole proprietorship/ partnership/ corporation or any other legal form. Moreover, mostly these SMEs are not fused as in companies and could be categorized as micro, small and or medium sized enterprises. A considerable thing is that these SMEs may not have abundance of resources as compared to larger firms. However, they are the innovation contributors and are the building blocks of any economy.

In addition, it is noteworthy that women usually tend to establish their own firms as they face a lot of hurdles in large organizations (Heilman & Chen 2003). Furthermore, the difficulty of maintaining work and family balance also lies hugely on women as compared to men (Stroh & Reilly 1999) and these barriers do not exist if one is the boss of one' own firm.

Small and Medium Enterprises (SMEs)

a. SMEs around the world

Interestingly, SMEs do not share the same size around the globe and same is truer for their recognition consideration. However, SMEs have been given importance and credit in the previous decades due to their potential to grow economy through employment generation and improving GDP and GNP. SMEs are thus making the whole world more resilient against unforeseen hazards. These SMEs are found comparatively ahead in coping worldwide challenges due to their inbuilt coping mechanism and responding ability to change abruptly.

According to United States International Trade Commission (2010) around 50% of private non-agricultural GDP was contributed by SMEs during last decade and importantly service sector played good role and contributed 79% of GDP. In USA, exports are also largely credited to these SMEs. They account for 99.9% of the 27 million private non-farm businesses in 2006 and employed almost half of the private non-farm workers. Interestingly, most of these SMEs had less than 20 employees yet found to be the biggest innovation sources. (United States International Trade Commission 2010).The US government has been relieving SMEs through cutting more taxes and also leveraging them through more

incentives. Furthermore, The US has a full fledged support program to enhance SMEs' trade contribution in country and out of the country in the form of exports. According to US Export fact sheet released by Export Statistics USA in May 2013, 89 % of the firms that exported goods to Colombia were Small and Medium-sized Enterprises (SMEs) with fewer than 500 employees (US Export fact sheet 2013).

SMEs are also the economy contributors in the whole Europe. They are the major source of innovation, jobs creation and economic wellbeing. A budget of €2.5 billion was fixed for improving entrepreneurship during the period of 2014 to 2020 in Europe by the European Commission in 2011(Enterprise Europe Network, European Commission). Furthermore, 'European Progress Microfinance Facility' (2010) was provided with the assistance of European Investment Bank Group to facilitate entrepreneurs around Europe by lending loans.

Moreover, according to annual reports by European Commission, 2012/2013 and 2013/2014, European SMEs employed 86.8 million people in the year 2012 and 88.8 million people in 2013 (EU 28). Furthermore, in the year 2012, 20 million European SMEs showed 66.5% of all European jobs in 2012 and 66.8% in 2013. Additionally, a net increase of 740,000 jobs is being forecasted by 2015. Interestingly, 99.8% businesses were reported as SMEs which were active in EU 28 (Muller et al. (2014) European Commission 2013/2014). However, Most of SMEs were micro-enterprises (92.4%) in the non- financial sector.

SMEs contributed 57.6% of the gross value added generated by the private, non-financial economy in 2012. Major share was of manufacturing and services sector jointly (make up 85% of all European SMEs) which produced €2.9 trillion of value added and employed 74 million people (European Commission, 2012/2013). In addition, 5.78 million SMEs belonged to the wholesale and retail sector and 93% of those employed less than 10 employees. 99.6% enterprises, out of 5.1 million enterprises (belonging to the manufacturing and the construction sectors) were SMEs (European Commission, 2012/2013).

SMEs contributed 58.1% of the value added produced by the private, non-financial economy in 2013. However, in 2013, the value added as produced by SMEs in EU 28 was reported to be €3,666 trillion (European Commission 2013/2014). Furthermore, the share of employment pertaining to micro, small and medium sized SME groups was found as 43%, 31% and 26% respectively. However, in the EU 28, the contribution of value added

by these three groups was 37%, 31% and 32% respectively in non-financial business sector ((Muller et al. (2014) European Commission 2013/2014).

In addition 92.2% out of 20,791,190 thousand enterprises in EU-27 were reported to be micro enterprises. However, small comprised of 6.5% and medium were only 1.1% which clearly depicts that usually the ventures are launched as micro and rarely grow up and convert them into small and medium and especially large firms. Therefore, the importance of this sector remains intact as only 0.2% was the share of the large firms (EuroStat 2013).

Although US had to face a greater blow as compared to the European Union by the 2008 crisis; as by the year 2010, persistently a downward SME trend was experienced and SMEs number was further reduced by 5%. However, Japanese economic performance was comparatively poorer; may be due to the global financial crisis and the Great East Japan Earthquake, the tsunami and the Fukushima nuclear power plant disaster affected the eastern regions of the country where about 10% of Japanese SMEs were situated. In addition, SMEs showed negative trends in terms of number and employment due to overall country's economic downturn (Report by European Commission 2012/2013).

In Canada, an increase of 22,000 small businesses was seen during 2008 and subsequent year. 98% businesses had 1-99 employees in 2012. SMEs' GDP contribution was 25%-41% (as of 2008); employed 7.7 million individuals and 78% of private jobs. SMEs contributed 41% in exports although a very small number of SMEs exported in the year 2011. 14% SMEs were women owned and 18% were equally shared by men and women (Industry Canada, Government of Canada, key small business statistics, 2013).

In addition, United Kingdom registers 99.6% SMEs share in the economy which is but less than other 99.8% of EU economies. However, it is so, as in UK large enterprises contribute more significantly. Besides, these MSMEs are the contributors of one fifth of the employment and value addition in UK, employing 5.9 persons on average as compared to 4.2 persons on average of European Union (SBS Fact Sheet 2010/2011, European Commission).

Russia has also registered a faster growth pace as compared to the European Union in terms of number of SMEs which grew in 2011 by 35% more than the year 2008 but SME employment, due to the restructuring of SME sector, faced decline (European Commission 2012/2013). France also makes up 99.8% share of SMEs which is the same as that of EU-27 but Germany makes up 99.6% which, for the economy like Germany, seems logical as

being the greatest economy where the micro sector is skewed towards higher ups. Furthermore, it is noteworthy that every fifth of the EU enterprises is a German one and on average employs three more persons than the average EU firm in 2010 (SBS Fact Sheet 2010/2011).

Interestingly, Brazil, during the period of 2008-2010 showed economic expansion and improvement. Divergent better trends were seen in SMEs' performance as compared to EU-27. Approximately 2% increase in value added for the year 2008-2009 was seen which further accelerated by around 40% in 2009-2010. Furthermore, a 5% annual increase since 2008 has been noticed in terms of SME number and employment generation (European Commission: Annual Report on European SMEs 2012/2013).

Indian SMEs are however continuously facing a rapid growth trend; 1.7% in 2008/2009 and 2.4% in 2010/2011; SME employment grew to 3.4% in 2010/2011 which previously was registered as 2.4% in 2008/2009 . Overall, economic crises have not prevented economies to grow through their economic generators named as SMEs which are still contributing in paving the success path of these nations (European Commission: Annual Report on European SMEs 2012/2013).

APEC (Asia-Pacific Economic Cooperation) is also not free from the effects of SMEs as these enterprises make up 90% of total businesses. They provide employment to the 60% of the workforce but only contributing 30% in the exports (Hung et al. 2011; Koe & Majid 2013). This could have been due to the abrupt global business change that prevailed in the recent past years which caused attacking inflation in 2008 converting into the financial crises and then recession and left SMEs on the blow of its jerks. Asia also registered a tremendously good share of SMEs in the countries like China 99.7%, Pakistan 90%, Hong Kong 98%, Malaysia 99.2% and Singapore 90% respectively in their economies and contributed significantly in the employment generation (ACCA report 2010).

Table 2.1 Number of enterprises by formality & segmentation in emerging markets
(in millions)

Total SMEs	365-445
Formal SMEs (included very small) (Registered with 5 or more employees)	25-30
Formal Micro Enterprises (Registered with 1-4 employees)	55-70
Informal/non-employer firms	285-345

Source: International Finance Corporation, World Bank Group, Report on Support to SMEs in Developing Countries through Financial Intermediaries, 2011

According to The Organization for Economic Co-operation and Development (OECD) more than 95% of business establishments were found SMEs contributed 60% of private sector employment (LUKÁCS 2005). Furthermore, in low-income countries, their contribution to GDP (see table 2.2) and employment (see table 2.3) are remarkable and can be seen in the figures below where informal sector has its maximum share (see table 2.1). In addition, even in the low income countries SMEs contribute 78% to its employment which indicates a very healthy sign.

Table 2.2 GDP share of sectors

GDP Contributory Sectors	Low Income Countries	High Income Countries
Residual	37	36
Informal	47	13
SME sector	16	51

Source: World Bank 2003 retrieved from a Report on Support to SMEs in Developing Countries through Financial Intermediaries, 2011.

Table 2.3 Employment contribution of SMEs

Income Levels of Countries	SMEs' employment contribution
Low income countries	78%
Low- middle income countries	67%
Upper- middle income countries	59%
High income countries	66%

Source: International Finance Corporation, World Bank Group, Report on Support to SMEs in Developing Countries through Financial Intermediaries, 2011.

In addition, Taiwan from Asia which is considered to be a successfully built country relies heavily on SMEs and same is true for Hong Kong. From the group of OECD countries, Republic of Korea is also a no other exception and already has started improving its SME sector since 1970s. Colombia's success is also credited to the rapid growth of the manufacturing SME sector. Furthermore, in Columbia, SMEs contribute 36% to all jobs and 63% to the industrial jobs (LUKÁCS 2005). Interestingly, overall, there is found a general agreement on the importance of SMEs for economic growth, employment generation, and innovation and thus are rightly considered as the backbone of economies.

It is thus evident from the above discussion that SMEs mostly make up 99.7% of businesses around the world and the rest 0.30% is shared by large organizations. These SMEs are further contributing 80% of economic activity and employment. However, this

SME share varies across the countries as according to the Organization for Economic Co-operation and Development (OECD), in the OECD region; more than 95% of enterprises are SMEs. Overall, registered SMEs with less than 250 employees represent more than two third of formal employment (LUKÁCS 2005). This ratio may be low in low income nations where a big informal sector exists. However, this, in any ways, does not diminish its importance.

b. SME development in Malaysia

“SME” has been defined differently by various countries in their own peculiar ways and set guidelines. The definition specifically encompassed sales or assets and headcounts. For instance, European Union definition states that SMEs are the firms with less than 250 persons and an annual turnover not exceeding 50 million euro, and/or an annual balance sheet total not exceeding from 43 million euro (Extract of Article 2 of the Annex of Recommendation 2003/361/EC). The Inter-American Development Bank definition outlines SMEs as with a maximum of 100 employees; less than \$3 million in revenue. World Bank definition proposes a maximum of 300 employees, \$15 million in assets and \$15 million in annual revenue (Gibson & Vaart 2008). African Development Bank delineates the maximum number of employees as 50, in Egypt number could be from 5 to 50 employees and in Vietnam it could be from 10 to 300 employees as set criteria for SMEs (Gibson & Vaart 2008). However, around the world SME's are considered as the organizations with up to 200/250/300... 500 employees.

Indeed, a standard definition is an important requisite to identify SMEs across sectors by size and operations. It helps working and implementation of policies more effectively and efficiently. Furthermore, it offers needful assistance to the focused groups and also helps maintaining a proper check and balance on their performance and output in terms of growth contribution in economy. Therefore, Malaysia also follows a set of guidelines named as SME definition proposed by National SME Development Council (NSDC).

National SME Development Council's (NSDC) recommended definition for SMEs has widely been acknowledged and implemented in the making of developmental policies and programs by various agencies, departments, financial institutions, ministries and regulatory authorities since 2005. It is noteworthy that NSDC is the chief authority to plan

the national policies with respect to the development of SMEs. However, NSDC is chaired by YAB Prime Minister with members from 16 ministries and major agencies.

The definition, 2005, includes: ‘Sales’ turnover of less than RM25 million or Full-time employees of less than 150’ (for manufacturing including agro-based and manufacturing-related Services) and ‘Sales turnover of less than RM5 million or less than 50 full-time employees (for Primary Agriculture and Services, including ICT).

However, in 2013, definition was reviewed due to several developmental changes occurred in business perspectives and a new definition was authorized by the council in 14th NSDC Meeting held in July 2013. Herein, the definition was redressed and presented as such that an SME would be considered as one fulfilling any one of the set standards; sales turnover or full-time employees whichever is lower. Detailed description is presented as under:

Table 2.4 Definition of SME through operational size

Enterprise’ Category	Manufacturing	Services & Other Sectors
Small	Sales turnover: 300,000-less than RM 15 million OR Full time employees from 5- less than 75.	Sales turnover: 300,000-less than RM 3 million OR Full time employees from 5- less than 30.
Medium	Sales turnover: 15 million – not exceeding RM 50 million OR Full time employees from 75- not exceeding 200.	Sales turnover: from RM 3million – not exceeding RM 20 million OR Full time employees from 30 to not exceeding 75.

Source: National SME Development Council, October, 2013

Sales turnover should not exceed RM 50 million OR the number of full time employees should not be more than 200 in case of manufacturing. However, in case of services and other sectors, sales turnover should not exceed RM 20 million OR the number of full time employees should not be more than 75. Furthermore, in case of micro enterprises across all sectors sales turnover should be less than RM 300,000 OR the number of full time employees should be less than 5 full time employees.

In addition, sales turnover should be from RM 300,000 to less than RM15 million OR the number of full time employees should be from 5-less than 75 full time employees for manufacturing related enterprises to be categorized as under small firms. However, in

case of services and other sectors' enterprises to be categorized as under small firms, sales turnover should be from RM 300,000 to less than RM 3 million OR the number of full time employees should be from 5 full time employees to less than 30.

Additionally, sales turnover should be from RM 15 to RM 50 million OR the number of full time employees should be from 75 full time employees to 200 for manufacturing related enterprises to be categorized as under medium sized firms. However, in case of services and other sectors' enterprises to be categorized as under medium sized firms, sales turnover should be from RM 3 million to not exceeding RM 20 million OR the number of full time employees should be from 30 full time employees to not exceeding 75.

It is also noteworthy that the businesses fulfilling any one of the set standards across the diverse operational sizes would be deemed as SMEs and the smaller size will be applicable to categorize the firm's size. Government has provided full support to SMEs and it could be reflected through the decision made here as for instance if a firm comes under the boundaries of microenterprises in terms of sales turnover but in terms of employment falls under the category of 'small' would be considered as a microenterprise which is itself in a sense a kind of facilitation offered from the side of Government.

In order to classify the varied sectors, NSDC recommended considering the Malaysian Standard Industrial Classification (MSIC– 2008) codes so that the data obtained from different providers of SME stats would be coherent and compared easily. Thus, manufacturing is referred to "physical or chemical transformation of materials or components into new products". Services, however, is referred to "all services including distributive trade; hotels and restaurants; business, professional and ICT services; private education and health; entertainment; financial intermediation; and manufacturing-related services such as research and development (R&D), logistics, warehouse, engineering etc."

Furthermore, 'others' referred primary agriculture, construction and mining and quarrying. In addition, perennial crops, cash crops, livestock, forestry and lodging, marine fishing and aquaculture make up primary agriculture. Construction sector would comprise of infrastructure, special trade, residential and non-residential construction.

'Sales turnover', mentioned in the definition, is referred to "total revenue including other incomes" and full time employees would be all "paid workers working for at least 6 hours a day and 20 days a month; or at least 120 hours a month.....include foreign and contract workers... excludes working proprietors, active business partners and unpaid

family members or friends who are working in the business and do not receive regular wages”.

It is also obligatory to get registered with Companies Commission of Malaysia (SSM) either under the Registration of Business Act (1956) or Registration of Company Act (1965) or Limited Liability Partnerships (LLP) Act (2012); or respective offices in Sabah and Sarawak; or respective statutory bodies for professional service providers in order to qualify for Government announced supports.

In fact, in countries like Malaysia, SMEs provide effective means for income distribution and economic growth (Abdullah 1999). Likewise, these SMEs help in triggering and promulgating private ownership, entrepreneurial skills, exports, trade, output and employment. Additionally these SMEs are flexible in nature and can adapt with the changing market environment quickly. Thus, it would be correct to say that SMEs are the backbone of industrial development in Malaysian economy (Saleh & Ndubisi 2006). This means that by growing success chances of SMEs, we can genuinely cultivate the chances for economic success. Therefore, SMEs success means creation of new jobs, more trade and ultimately good GDP.

Additionally, it has also been reported that 97.3% businesses are SMEs in Malaysia (Economic Census Report, Dept. of Statistics, Malaysia 2011). However these establishments in the country are mostly in the wholesale and retail trade, restaurants, accommodation, manufacturing and food. In addition, 93.8% out of total manufacturing companies were found to be SMEs (SMIDEC 2002) which produced 27.3% of total output and 25.8% to value-added which is likely to rise to 50% of total production in the manufacturing sector by 2020.

Fortunately, Malaysia has participated well in the industrialization boom and successfully converted itself into an industrialized economy through strategies like that of import substitution industrialization and export targeted strategies to become global competitors (Ching 2004). Government of Malaysia has already realized the importance of SMEs and started flourishing them through various incentives and support programs and this is vivid from 7th, 8th, 9th and 10th Malaysian Plans; and Second Industrial Master Plan (IMP2), (Government of Malaysia 2001; MITI 2005).

c. SME's GDP contribution in Malaysia

The past analysis clearly shows that the SMEs always played an important role in the economic stability of Malaysia even during financial crises. These SMEs also assisted economy in becoming resilient against shocks and depressions. According to The Secretariat National SME Development Council (2008), 87% of SMEs in Malaysia come from service SME sector. Furthermore, its share to the GDP was 38.3% in 1976 which rose in 2005 to 58.2%. Furthermore, the manufacturing sector share also improved from 22.1% in 1976 to 31.6% in 2005 (Aris 2007). According to the Department of Statistics, SMEs showed an average growth of 7.8% during 2005-08 as compared to 4.9% during the years of 2000 to 2004 and SME share to GDP rose from 29.4% (2005) to 31.4% (2008). It was also recorded as 32.5% in 2011 and 32.7% in 2012. Furthermore, SME GDP growth has steadily superseded the growth of the overall economy (SME Annual Report 2012/13).

In addition, the services sector always remained the main SMEs' growth contributory sector (Arham 2014). Its GDP share increased to 61.7% in 2012 whereas manufacturing sector accounted for 24.1%, agriculture 10%, construction 2.8% and mining and quarrying registered 0.2%. According to SME Corp., SMEs registered a peak GDP growth rate of 10.3% in 2007 but then started showing a declining trend due to global financial crisis since 2008 and the situation became more aggravated in 2009 (SME Annual Report 2012/13). Accordingly, initiatives, programs, surveys and stimulus packages were launched by SME Corp. to weed out the crises effects on SMEs. Furthermore, 53% from the RM15.6 billion were disbursed to 56,000 SMEs as at end-December 2009 and 76% of the funds were approved. Obviously, the establishment of NSDC, 2004, the policy makings, outcome based approach and their proper implementations played critical roles in its development. For the year 2012, SMEs largely showed a flourishing trend and an enriched contribution in GDP as compared to overall GDP growth. In comparison of overall GDP growth of 5.6%, SMEs GDP growth was registered at 6% (Department of Statistics, Malaysia in SME Annual Report 2012/13).

In the year 2013, Malaysian economy grew by 4.7% whereas the figure for 2012 was reported to be 5.6% and in the first half of the year 2014, it was reported to be 6.3%. As per the growth of GDP is concerned, it was reported as 6.3% for 2013 as compared to 6% in year 2012 and an exceeding SME growth was reported across all main economic sectors (SME Annual Report 2013/14).

d. SME's employment contribution in Malaysia

SMEs employment growth rate (6.4%) also exceeded than the large firms' employment rate (6%) in 2012 as total employment in both the sectors was enlarged. These findings were persistent with that of year 2011. Likewise, the SME employment contribution rose from 57.1% (2010) to 57.4% (2012) (SME Annual Report 2012/13).

Furthermore, SME employment contribution for the year 2013 grew by 6.3% as compared to the total employment growth which was reported to be 5.9% (SME Annual Report 2013/14). However, export contribution is relatively low which needs to be raised and necessary measures from the Government are being taken up accordingly. Additionally, National SME Development Council (NSDC) is the organizational body responsible for making policies for SME development and SMIDEC is the Central Coordinating Agency and the Secretariat to NSDC and has been renamed as SME Corporation Malaysia.

Table 2.5 SME's employment contribution

Year	Total Employment	SME Employment	Employment in large firms
2009	6,901,049	4,100,952	2,800,097
2010	7,684,537	4,389,823	3,294,714
2011	7,966,364	4,562,815	3,403,549
2012	8,460,971	4,854,142	3,606,829

Source: Department of Statistics, Malaysia 2013

e. SME development programs in Malaysia

SME Master plan (2012) is considered as 'game changer' and is aimed to accelerate the growth pace of SMEs in Malaysia. It has maneuvered the whole SME plan till the year of 2020 and set the target to make Malaysia a high income economy. According to SME Annual Report (2012/13) presented by National SME Development Council, 139 programs worth RM7.1 billion were employed, in the year 2012, by government bodies to assist more than 430,000 SMEs. These programs included access to financing 29%, human capital development 22% and market access and innovation and technology adoption 21%.

Innovation and technology adoption were considered as the most important determinant of SME performance by the SME Master plan and thus were primarily focused in SME Development Programs in 2012. Ministry of Human Resources (MOHR), through

its agencies, on the direction of Malaysian government launched 30 programs to develop human capital and enhance entrepreneurial skills and 42,725 Malaysian SMEs took benefit from them. Other Ministries and agencies also conducted programs like that of SME Mentoring Program executed by MITI through SME Corp; Small Projects under the Social Development Programme conducted through Jabatan Kebajikan Am, Kota Kinabalu; The Entrepreneurship Development for Orang Asli Community conducted through Jabatan Kemajuan Orang Asli (JAKOA) under the Ministry of Rural and Regional Development (MRRD) and so on and so forth.

In addition, the SME need for market access was also focused by the government and 29 programs amounting RM 91.3 million were launched in 2012 and thereby 28,100 SMEs participated. Furthermore, Government in the same year worked hard in the area of infrastructure and implemented 10 diverse programs and 3,932 SMEs took benefit. Moreover, SME development programs were continued in the year 2013 like 2012 along with new programs and were fairly employed by numerous Ministries and Government agencies. These outcome based programs focused on the highlighted six areas of the SME Master plan and stress was given on programs' implementation and results' tracing.

The year 2013 also exhibited government commitment with SMEs and is manifested from the launch of 154 programs amounting to RM18.4 billion. Out of total, 139 programs in 2013 (with monetary obligation of RM9.9 billion) were Government owned. However, government, in collaboration with private sector, also aimed at implementing 15 programs amounting RM8.5 billion. This was a remarkable altruistic step to strengthen SMEs so that the promise with the nation and the dream of becoming a 'high income nation' by 2020 could be kept alive and necessary steps could be taken for timely realization of the dream. In order to overcome the hurdles, the Government devoted an increase of three times amount i.e. RM400 million, compared to the prior year. This action was taken to implement 25 programs to cater 5,736 SMEs in the focus area of innovation and technology.

Government further allocated RM139.9 million to develop and enhance entrepreneurial and their employees' human capital to cater market changing demands and launched 28 programs to help creating value. Almost 42,081 SMEs were projected to take part in those programs. In addition, like 2012, Government continued to allocate financial aid to help SMEs getting better market access and assigned RM78.7 million; launched 20 programs for helping 45,212 SMEs (especially in export sector). Furthermore, Government

continued strengthening infrastructure in the 2013 as well and aimed to assist SMEs through 14 programs amounting RM 92.2 million and set to assist 1074 SMEs.

Furthermore, for the year 2014, a total of 154 programs were launched with financial obligation of RM 13.3 billion. Out of which, 133 programs were launched and implemented by the government with financial obligation of RM 7 billion. These programs were aimed to benefit 484,000 SMEs. Additionally with private sector, the Government also carried out 21 more programs with RM 6.3 billion (SME Annual Report 2013/14). This all shows the altruism of the Government in line of supporting SMEs and promoting entrepreneurship, thereby speeding up the process of economic growth. However, still there is a very important thing which is missing in above discussion and is worthy of full attention. This missing part is about the 'women' participation in entrepreneurship, SMEs around the world and in Malaysia, which will be now followed up in the discussion.

Issues and Challenges of Refugee Entrepreneurship in A Selected Hosting Country

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Abstract - The global economy has faced a significant wave of challenges and obstacles in the development of societies both in developed and developing countries. One of the essential solutions to raise the standard of living of poor communities is to improve the economic and financial situations of these communities. In line with this, the financial and economics challenges of refugees around the world have also been highly debated with high regards on the conditions, influence and impact towards the hosting countries. As the economic and financial obstacles of refugees in the hosting countries have posed significant challenges on their economies, this study aims to examine the extent to which Syrian refugees involvement in small business and entrepreneurial activities would serve as solution to the challenges faced in the hosting country, particularly in Egypt. Specifically, this study inspects the economic and financial conditions of Syrian refugees in Egypt, identifies the issues and challenges facing Syrian refugees in carrying out businesses, assesses the financial supports from government and non-government institutions for Syrian refugees who are involved in SMEs, and recommend solutions to the problems faced by Syrian refugee entrepreneurs in Egypt. To achieve these objectives, the researcher has sourced secondary data, and the data collected were analyzed using descriptive analysis. This study finds that the financial assistance and other business supports provided to Syrian refugees are insufficient to finance their basic needs. Besides, the study also finds that the main issues and challenges facing Syrian refugee entrepreneurs in Egypt are lack of Egyptian government support and lack of sufficiency in the implementation of non-government institution projects related to SMEs. This study ends with several recommendations, hence provides crucial insights on the issues and challenges amongst Syrian refugees in Egypt, which can be generalized to other refugees' conditions in various hosting countries around the world.

Keywords: *Refugee Entrepreneurship, SMEs, Financial well being, Syrian Refugees, Egypt*

1. Introduction

The word "economy" is a dominant word when transacting in both local and international between different people and governments; this is because the economy is currently the lifeline to the outside world due to the financial issues faced by all countries regarding the scarcity of resources and rise of world's prices of goods and services. The rising cost of raw materials and production has resulted in various challenges facing the world's economy and large companies in both developed and developing countries. To solve these challenges, Small and Medium Enterprises (SMEs) have been playing enormous roles in this regard, SMEs have attracted economists attention in various countries around the world for their tremendous and significant roles in promoting economic activity in multiple areas, such as providing job opportunities for the unemployed, providing the goods and services needed by the society, etc. This is so, particularly in a low-income community. Also, SMEs have contributed to the development of exports of goods and services in developed countries through the creation of intermediate goods needed by large enterprises from abroad.

According to a report by Asia-Pacific Co-operation (APEC) in the year 2010, SMEs represent more than 90% of the total companies in Asia-Pacific (Mohammad, 2012). In various economies of the world, the demand for small and medium enterprises is more when

compared to other projects. In the U.S. for example, most of the businesses are classified as SMEs as they are accounting for half of the gross national product of the country. Whereas, 90% of the SMEs in Thailand employed more than 60% of the workforce (Veskaisri et al., 2007).

Recently, the world economy is expanding the scope of SMEs from perceiving SMEs as business activities that involve only rural and low-skilled individuals into more significant business and entrepreneurial opportunities for the young generations, university graduates, women, minorities, and as a mean of financial independence for refugees around the world. A large number of refugees, mainly Syrians who are residing in several host countries, such as Jordan, Lebanon, and Egypt, are suffering from financial instability, insecurity, and securing jobs that would generate income to cater for their families' expenditures. Being financially independent is the biggest challenge faced by the refugees for their sustainability and survival in the hosting countries.

Despite the continuous supports by the hosting governments and other humanitarian institutions, it heartening that these supports have not reached the level that would make the Syrian refugees safe and secure, especially in the host countries that are experiencing various economic and political turmoil, such as Lebanon, Jordan, and Egypt. Therefore, it is essential to highlight the solutions that can help Syrian refugees to obtain suitable employment opportunities that will ensure financially independent and stable livings in the host countries. In this case, it is envisaged that SMEs could contribute significantly to raise the income and living standard of the Syrian refugees; at the same time, it would enhance the economic activities and productivity of the host country, Egypt in this case. Therefore, this study examines the possibility of providing Syrian refugees in Egypt with a better life via their involvement in entrepreneurial activities and SMEs, significantly to improve their living standard and moral stability.

2. Background of the Study

Egypt is one of the richest countries concerning resources, such as agriculture, industry, and tourism. The Egyptian economy has contributed in various aspects to the achievement of appropriate rates that help the growth of the Gross National Product (GDP). Also, the remarkable development in infrastructure, transportations, communications, energy, skilled labour, banks, and stock markets, have contributed to the development of the investment climate in the country (Creative Associates International Report, 2014). According to a study by the Central Agency for Public Mobilization and Statistics (CAPMAS, 2017), however, the average per capita income of Egyptian is 1,050 Egyptian pounds (\$58) per month. This is due to the increment in the poverty rate to 35% compared to the previous six years.

Since a decade now, Egypt has been facing many political, economic, and tourist unrest; this is apart from the low rate of foreign currency and other obstacles in different aspects. As a result, the Egyptian authorities have adopted a package of reforms in various sectors to contribute to the development of the Egyptian economy in a better way. In 2017 for example, the authorities proposed the VAT law, a free-floating currency, increased interest rates to resist inflation, cut energy subsidies twice, and move towards borrowing from international bodies, such as International Monetary Fund (IMF), World Bank, and others, to obtain funding that will contribute to the development of the economy (Mohamed, 2018). To follow up with the results of these reforms, Daily News Egypt surveyed a group of economists and industry leaders who have sighted the reality of the Egyptian economy in the present and future, especially in 2018. Among the feedbacks provided includes the

expectations that the inflation rate would fall to 14% and gradually decrease by 2% to 4%. Most of them agreed that the growth rate would be high in 2018, but expect real growth rates to range from 4.5% to 5.5%, which are less than the targeted 7% by the government. Experts also agreed to put pressure on the government to accelerate the implementation of these reforms to obtain a high rate of revenue and improve the efficiency of government spending. Accordingly, the government has adopted this monetary policy to reduce the growth of aggregate demand and control inflationary pressures, which are an essential factor to eliminate the Egyptian economic stagnation (Mohamed, 2018).

2.1 SMEs in Egypt

Micro, small, and medium enterprises are the lifeblood of any economy. Based on this, many governments and state are concerned about the role of these entities in the economy because they contribute significantly to economic and commercial growth in the country. Despite their importance, there are several challenges and obstacles to their development. Some of these challenges are the low level of technology, limited high skilled labour amongst the SMEs in Egypt. Besides, most of these SMEs prefer to obtain funding through informal methods, such as borrowing from alternate credit associations, relatives, and friends, then receiving it from formal ways because of the complexity and long-term requirements. Furthermore, they must be registered as an official commercial entity in the Egyptian Commercial Registry before they can be considered for formal borrowing (Creative Associates International Report, 2014).

As reported by EL Said et al. (2013), 2.5 million of SMEs in Egypt account for about 75% of the workforce and non-agricultural companies. However, SMEs do not rely on financial services provided by the banks, with only 50% of them dealing and benefiting from these services due to the various obstacles and constraints faced in obtaining the required funding. Similarly, Egyptian Banking Institute (EBI) conducts a study in 2010 to examine the factors that determine access to obtaining adequate financing by the SMEs in Egypt and the banking problems that prevent these companies from providing them with financial needs. The result of this study shows that legal form, employment, sales cycles, and economic activity have a significant impact on the availability of banking facilities. It was also found that the smaller the firm is, the lower is the possibility of obtaining funds from the banks.

In 2013, the total number of Egyptian companies operating in the ICT sector increased by 11.4%, reaching 5644 companies that comprise of 77.36% IT companies, 15.15% value-added services, and 7.49% telecommunications. However, the number of newly established SMEs has declined by 21.5% due to the political and economic problems facing Egypt. In addition, many SMEs in Egypt are competitive enough to enter into the international market. Institutions need to upgrade managerial and technical capabilities that make them more effective in regional and global markets (Hashem, 2015).

To sum up, the development of the national economy depends heavily on the promotion of the spirit of innovation and SMEs, which are regarded as essential factors for the development and modernization of various sectors. Therefore, supporting those who have established their businesses through the provision of managerial and organizational competencies could contribute to their success tremendously.

2.2 The Syrian Refugees in Egypt

Ayoub (2016) conducts a study to monitor the situation of the Syrian refugees since their arrival in Egypt in 2011 until August 2013 and reports that the Syrian crisis has displaced nearly 9 million of Syrians, three million of whom have fled to neighbouring countries, and 6.5 million are internally displaced. The countries that have received the largest number of refugees are Lebanon, Jordan, Turkey, and Egypt. In Egypt, the number of refugees is much lower than in neighbouring countries. Among these countries, Egypt has faced a series of political and economic disturbances that resulted in a fragile economic situation, which directly and indirectly affected the situation of Syrian refugees in Egypt.

According to the UN High Commissioner for Refugees (UNHCR, 2018), the number of registered Syrian refugees is 128,507. However, the actual number as reported by the Regional Refugee and Resilience Plan (3RP, 2018/2019) is over 500,000 Syrian refugees in Egypt. This discrepancy is due to the substantial number of refugees who are not formally registered under the UNHCR (Known as Asylum Seeker). Another reason is due to the historical immigration that encouraged Syrians to move to Egypt in 2011 through their commercial and family relations.

The arrival rate of refugees reached its peak in April 2013, and the rate began to decrease due to the imposition of some restrictions related to visas by the Egyptian authorities from January 2011 to May 2013. The refugee registration rate in UNHCR was meagre because some of the Syrians are not registered and do not saw any needs for that because the Egyptian government provides extensive facilities; though some of the Syrians who arrived early obtained their permits to invest and start a business that improves their economic condition. According to economic and social studies carried out by UNHCR in 2013, a large number of Syrian refugees in Egypt have been classified as high risk due to political changes and restrictions imposed on Syrians in 2013. This has increased the rate of registration of Syrian refugees with UNHCR to receive UNHCR's protection (Ayoub, 2016).

In Egypt, refugees and asylum seeker (applicant to be a registered refugee with UNHCR) are allowed to work only under certain conditions if they can get an employer to take care of them and issue a work permit. Still, they often do not get work permits except those who have high qualifications as compared to the Egyptians. Consequently, low or middle-level workers cannot obtain a work permit quickly. Moreover, high unemployment rates in Egypt have made the Egyptian government impose such restrictions to protect the domestic labour market. Thus, most of the refugees go to the informal sector that possessed many obstacles and problems related to salaries and ill-treatment by employers, leading to the increase in the level of instability among the refugees (Ayoub, 2012).

Thus, self-employment in the form of operating small business activities is the solutions used by the refugees to seek financed independently to survive in the host country. Since investigating the issue of financial survival of refugees is less common in the literature, this study aims to fill this gap by examining the economic and financial conditions of Syrian refugees in Egypt. In this case, the issues and challenges faced by the Syrian refugees in operating small business and financial supports from government and non-government institutions in Egypt are investigated.

3. Analysis and Findings

This study aims at examining the financial and economic conditions of Syrian refugees in Egypt, identifying the issues and challenges that Syrian refugees faced in doing business in

Egypt and assessing the financial support from government and non-government institutions for Syrian refugees involved in SMEs in Egypt. The study used descriptive analysis for a survey obtained from 688 Syrian refugees residing in Egypt. The descriptive analysis is categorized into two phases: the first phase focus on the personal information of Syrian refugees, business-related training attended, and information about the financial assistance received. This information contributes to the understanding of the extent of the involvement of Syrian refugees into self-employment and business activities. This information contributes to the knowledge of the importance of the participation of Syrian refugees into self-employment and business activities.

The second phase of the descriptive analysis provides comprehensive information regarding the ongoing achievement, issues, challenges and feedback on the business activities of the Syrian refugees. The survey has been carried out as a follow-up and monitoring tool for ongoing business performance. Such information is highly crucial as it assesses the current performance and explores the potential room for improvement and rectification of issues and challenges faced.

2.3 Phase I Data Analysis and Findings

Phase I describes the personal information and training in four cities (6th of October, Cairo, Obour and 10th of Ramadan) for selected families from SGRF foundation. In this phase, the respondents are divided into two sections; the first section is approximately 465 respondents who got the approval to be under the consideration or potential of receiving a grant. The second section is around 173 respondents who were rejected at the beginning of a livelihood project due to specific reasons such as their financial and economics are relatively stable, severe not to do business, having high debts, having grants from other organizations. Also, there 50 Egyptians respondents were involved due to the Egyptian law.

The general information of the Syrian refugees (465 refugees) was considered as potential to receive grants under the livelihood project. From the 465 Syrian refugees surveyed, the majority ageing between 25 to 45 years old (n=344, 74%), followed by those between 46 to 59 age (n=66, 14.2%) and the lowest respondents are between 18 and 24 of age (n=55, 11.8%). This indicates that the majority of the adult Syrian refugees are highly involved in business activities as compared to younger generations who are under 25 years old.

As for the gender, a balanced proportion of male (252 out of 465, 54.2%) and female (n=213, 45.8%) who are involved in the business activities for supporting their families. In terms of the location, the highest numbers of respondents (n=190, 40.9%) who are engaged in a livelihood project stay in 6th of October city because many Syrian refugees are staying there.

The majority of the businesses are categorized under the production (poultry shop, cooking, sweets, etc.) with 234 respondents (50.3%) from the total of 465 Syrian refugees surveyed, followed by 165 respondents (35.3%) in the service sector(driver, educational centre, sewing shoes, etc.) and the lowest portion in the retail (clothes, mobile repair shop, etc.) around 57 (12.3%).

Regarding educational levels, the education levels of the respondents are fluctuating substantially from the primary school to the high school. This portrays challenges in giving business training or coaching for such groups with a vast education gap.

Majority of the respondents (n=173, 37.2%) are operating their businesses as home-based, followed by shops (n=103, 22.2%) and finally, other types of companies (n=20, 4.3%). This identifies that home-based is a preferred type of business among Syrian refugees in Egypt.

Apart from the above general information of the Syrian refugees who are considered as potential to receive grants, a score ranking is also made based on the extent of the need for financial assistance. This score is evaluating the financial status of the refugees, and it is measured based on several standards such as a family/individual without any source of income, or insufficient income. The study finds that 120 (25.8%) respondents receive a score of 11, which indicates the need for financial assistance and qualifies them for obtaining the grants for their businesses.

In addition to the assigned score, business grant approval is also subjected to several other indicators such as the refugees' attendance to two pieces of training known as core training and business plan training as well as submission and approval of their business plans. The attendance of training and submission of the business plan are crucial determinants of the approval given on the receipt and amount of business grant. Besides, core courses training is a required course for all Syrian refugees involved in livelihood projects. Core skills training package includes basic financial literacy, negotiation skills, communication skills, time management, team working and building, persuasion skills, work productivity skills, labour law in Egypt and so on. The result indicates that core courses training is crucial to improve the core skills and general skills for all Syrian refugees regardless of whether they will receive the business grant or not. The majority attended because they prefer to improve their skills and get grants quickly (n=327, 70.5%). Business plan training is also conducted as a two-day training program, and it is offered to those who are accepted under the livelihood project. Three hundred seventy-eight Syrian refugees (81.3%) from those who attend the business plan training have submitted their business plan.

From the results, the study shows that the majority of those who attend business plan courses are entitled to receive the grant, which is ranging from 3000 to 8000 Egyptian points. The highest number of grants, which is 8000 Egyptian points received by six families only (1.3%) and the majority of Syrian refugees received an amount of 4500 Egyptian points (n=74, 15.9%). In addition to this, 307 respondents have been receiving the grant from the 465 Syrian refugees surveyed (66%).

2.4 Phase II Data Analysis and Findings

Phase II describes the following of the businesses which have been granted by livelihood projects using monitoring tools. This tool is called a follow-up tool to monitor the process of the business, whether it succeeds or not. Phase II discusses the issues and challenges beyond the current business which have been running by the accepted respondents. According to the data available showed that the total number of the monitored respondents is approximately 445 respondents with more details as following in the next sections.

The next part explains the information obtained on the business progress and related issues from the follow-up and monitoring activities. The study shows that the majority of respondents received financial assistance for business growth in the form of grants with the amount of USD4000 (21.1%), followed by USD3500 (17.1%). These two highest amounts were received from 170 respondents, from 286 valid responses received. About 48.5% (n=216) of them have started their business, and most of them (n=133, 29.9%) are operating it as a home-based business. Furthermore, about 30.1% (n=134) of the monitored

respondents express the satisfaction of their business operations. The remaining 11% (n=49) indicates that they are dissatisfied with their businesses for several reasons.

Regarding information related to business income, 22.7% (n=101) indicated that they are generating business income at the amount between USD100 to USD700, and only 1.1% (n=5) are earning more than USD2000 from their businesses. In terms of the spending pattern of the business income, about 31.5% (n=140) of the respondents revealed that the main channel of their business income is towards covering their basic needs including food and shelter. This is followed by reinvesting them into another business (n=27, 6.1%), and finally, the least portion goes to savings (n=1, 0.2%). In the case of the income deficit, the most commonly used mode of recovery is borrowing, either from family members or others (n=82, 18.5%).

Respectively, the follow-up and monitoring activities explore the issues and challenges that Syrian refugees faced in doing their business. The highest number of respondents who faced difficulties is 99 (22.2%), and 82 respondents (18.4%) do not face any challenges. This result indicates that there are difficulties that the Syrian refugees faced in doing business, as follows:

1. Insufficient capital.
2. Illness of worker or family member.
3. Problems with the partner.
4. Family emergencies/responsibilities.

The Syrian refugees who face difficulties in their business activities provide essential feedback on the type of support they need as illustrated. These include more access to finance, marketing, increasing the capital, guidance and so forth. From the 445 respondents 42 respondents (9.4%) have mentioned that they need financial support and 30 respondents (6.7%) said that they need more marketing-related assistance for their businesses followed by those 22 respondents who stated that they have insufficient capital and expect more support in increasing their business capital. The lowest response was towards the need for guidance in managing their businesses (n=4, 0.9%). This result indicates that the businesses are at the risk of failure unless the stipulated assistance is continuously provided for their business growth and survival in the long term.

4. Conclusions and Recommendations

This study aims to examine the financial and economic conditions of the Syrian refugees residing in Egypt, identifying their business-related issues and challenges, assessing the extent of financial and other forms of supports made available to them by the government and non-government institutions, and offering relevant recommendations in rectifying the current problems to enhance their involvement in SMEs in Egypt.

In term of the business-related trainings and financial grants for the Syrian refugees, the available data indicated that 465 Syrian refugees got approved to receive benefits from the livelihood project. In comparison, 173 Syrian refugees were rejected for several reasons. Furthermore, adults with Syrian refugees are more involved in the project compared to younger generations due to their interests and skills. Also, the researcher finds that every family must have more than one person working in the market or having additional working hours to have a good income due to the high volume of basic needs. Cortes (2004) found

that refugees have to work longer hours to obtain appropriate income for covering the basic needs of the family. Livelihood project has been expanded to several areas, such as 6th of October, Cairo, 10th of Ramadan and Obour, where the majority of Syrian refugees are staying. Moreover, Syrian refugees in Egypt can work in several sectors, such as production, services, and retail, and they can do business in these sectors easily.

This study also indicates that the education level can be a challenge for those who are uneducated because they are required to attend training and courses in stages before receiving grants to do business. Besides, the majority of Syrian refugees are eager to participate in trainings and courses since trainings related to the business are vital for those to do business in the future. The low level of education among the refugees and Egyptians is one of the weaknesses that effect the business in Egypt (Creative Associates International Report, 2014).

It was also found that grants can be given easily and refugees must pass through step by step to obtain the grant for doing business, including interview, training, developing a business plan, approval and receive of grants. Furthermore, the grants obtained to carry out businesses by Syrian refugees from the livelihood project are between 3000-8000 Egyptian points. This suggests that the budget for small business in Egypt is not high; the grants are made available for the Syrian refugees' financial freedom to cover their basic needs; also, it is designed to make some savings to improve the business gradually in the future.

Follow up, and monitoring activities are critical to know the progress of the business and to discover the challenges faced by the entrepreneurs. The respondents who received financial assistance from the livelihood project have responded positively or negatively based on their situations; that is, whether they are satisfied or dissatisfied with their businesses. Following their responses, a large number of respondents are satisfied with their businesses, and they are growing up their businesses for a better life. Even-though those who satisfied with their business among Syrian refugees still faced with some difficulties or their businesses failed. According to the result of this study, the capital provided for business by the livelihood project was low based on the respondents' responses. This indicates that there are still some issues or challenges beyond the project; in fact, one of them suggested that the support from livelihood project is not enough to generate more income for Syrian refugees; some of them also stated that the capital provided is insufficient and there is need for other types of support, such as guidance, marketing, etc. Rosenberg (2016) found that financial support for Syrian refugees' businesses cannot be an alternative for obtaining a good income. Still, instead, it needs other kinds of support such as skill-building, vocational training and guidance. Besides, the reason why some businesses failed or triumph is not only connected with the business itself, but due to other factors, such as health-related problems, family emergencies, and educational responsibilities (fees and expenses paid for children).

The economic and financial conditions of Syrian refugees have even become more difficult due to the deterioration in the Egyptian economic situation, despite such in the Egyptian market, especially clothing factories and restaurants. The most critical challenges faced by the Syrian refugee are education, health, visas, the deterioration of the Egyptian economy, and the rise in the prices of essential commodities. Moreover, the Egyptian economic deterioration had led to instability in the decision-making of the government towards the Syrians in Egypt. This has reduced the Egyptian government support for Syrian refugees in SMEs. Hosting governments such as Egypt face pressure and challenges in providing health care, education and social services to refugees, especially when this support is mainly at a

low level of care (Sak et al., 2017). The support for Syrian refugees in small and medium enterprises is only offered by non-governmental institutions, especially humanitarian institutions, such as UNHCR, SGRF, and other organizations.

Among the suggestions received from interview sessions conducted in this study include: to contribute in the provision of facilities and licenses for the establishment of projects, such as livelihood projects supported by international humanitarian organizations, to provide suitable employment opportunities for Syrian refugees formally to help them not to rely on humanitarian aid alone and to increase the level of support offered by the international organizations to facilitate the provision of programs such as SMEs.

Overall, this study finds that some of the Syrian refugees residing in Egypt have adequate sources of income to meet their basic needs; they have the financial and economic freedom to provide a secure and stable life. Syrian businesses in Egypt and Turkey have boosted new sectors and hired both host nationals and Syrians and Allow Syrians to start businesses; facilitate access to available industrial infrastructure (UNDP, ILO and WFP, 2017). However, a large proportion of Syrian refugees are faced with many challenges and difficulties, especially with regards to financial and economic matters. Many Syrian refugees are unable to obtain suitable and formal employment in the Egyptian market because of the legal restrictions imposed by the Egyptian government by not allowing them to work officially except in sporadic cases, such as lack of Egyptian expertise in some areas. Curtis et al. (2016) find that the unemployment rate is very high in Egypt, and this has prevented Syrian refugees from obtaining employment opportunities officially because of the difficulties faced by the Egyptians themselves. Besides, Syrians in Egypt are faced with the challenges related to considerable expenses for education, health, and other aspects, such as to meet basic needs. Ayoub (2016) finds that access to health and education services in Egypt is very restricted even though refugees are legally entitled to these services. Thus, the costs of health and education have increased as much as the restrictions.

This study finds that SMEs can contribute significantly to secure financial and economic stability for Syrian refugees in Egypt, but need greater support from the government. The Egyptian government support for small and medium enterprises is limited only for Egyptians. The Egyptian government support for Syrian refugees is only for approving the implementation of livelihoods projects through non-governmental organizations.

Furthermore, non-governmental organizations play a significant role in providing appropriate support to small and medium enterprises in Egypt. In addition, non-government organizations have contributed significantly to the development of the Egyptian economy by raising the level of employment of Egyptian and Syrian labour forces. This helps to fight poverty and unemployment in the Egyptian market. Moreover, the Syrians that are participating in SMEs have also contributed to the development of the Egyptian market through the exchange of experiences and skills between the two communities in an optimal manner.

This study has also revealed that the number of projects that contribute to supporting the livelihoods of Syrian refugees in Egypt is small, and it is limited only for livelihood projects implemented by non-governmental organizations. The non-governmental organization's concern more for reaching many beneficiaries as much as possible without focusing on adequate financial and economic support. Two essential aspects found for the success of the Syrian refugees' small and medium enterprises in Egypt are access to appropriate funding

and efficiency in the implementation of these projects. The relevant financing is through the provision of financial and other support, such as training and monitoring the process of the projects and to overcome the difficulties faced in carrying out businesses. This has contributed significantly to reach the financial and economic stability of the Syrian refugees in Egypt. This has resulted in high efficiency in the implementation of businesses through professional and administrative support, helped employers to reach the Egyptian market with high efficiency, and provided high-quality marketing methods. This also contributes to the success of businesses.

Based on the findings of this study, the following recommendations are offered:

- Improving the local and national abilities across the region by providing the protection, socio-economic services, boosting to solutions, and increasing opportunities for positive impact (Regional Refugee and Resilience Plan (3RP) (2020 - 2021).
- In Lebanon, Syrian refugees need to have a breath to move out from unsafe places and uniform the right to enter Lebanon and not refool them back to Syria, provide temporary protection, facilitate the housing policies and revive the access to work for Syrian refugees to survive.
- In Jordan, the Jordan government, should facilitate legal work opportunities by allowing Syrian refugees to work and contribute to the Jordan economy. And the government shall encourage Syrian refugees to continue working in various sectors as many claimed that Jordan received huge humanitarian aid packages for refugees. Besides, the Jordan government should invest the human resources and high skilled refugees to develop the country as well as strengthening the relationships between Jordanian communities and Syrian communities.
- In turkey, turkey has executed an entirely appropriate approach towards Syrian refugees. The response to the Syrian refugee crisis helped refugees with food, water, and other types of assistance. However, due to the less hope in finding solutions to the Syrian problem, a considerable number of Syrian refugees stay outside of the camps. The government should find out a strategy to meet these refugees' needs by any assistance, such as providing work permits, education, financial aid, and so on. Moreover, the Turkish government has a complete control process to help Syrian refugees. It is better to partner with UN agencies or NGOs to provide useful and generous assistance and protection inside and outside of camps, so government shall facilitate humanitarian agencies to deploy their services towards Syrian refugees.
- Raising awareness and encouraging the development of Syrian administrative, professional abilities, and skills to establish businesses that contribute to improving the economic and financial conditions of Syrian refugees in Egypt. This can be done through governmental and non-governmental supports for small and medium enterprises. Non-government organizations play an essential role in providing more services to Syrian refugees in Egypt. This should be in the Egyptian government's interest, especially in the improvement of Syrians' skills and developing the economic and financial conditions (Rosenberg, 2016).
- To realize its vision of creating more jobs and boost the economy, the Egyptian government must design policies that are more demand-driven and inclusive, strengthen its

partnership with the private sector, move towards higher-value-added services, leverage on foreign skills and expertise, strengthen coordination among various government entities, make use of the latest technology, and set quantifiable targets and monitoring progress. The Egyptian government should move towards a fairer and more competitive economy using appropriate market mechanisms to generate equal opportunities and create jobs supported by building institutional capacity and developing market players' skills (Nasr and Pearce, 2012).

- The Egyptian government should raise the level of support and invest in Syrian refugees' capabilities and expertise in the development of the Egyptian economy. The government should also include the refugees in small and medium enterprises to support the Syrian refugees' economic and financial stability in Egypt.
- There is a need for more support for non-government organizations to combat the challenges and difficulties faced by Syrian refugees by raising the level of financial and technical supports to solve all problems encountered by Syrian businesses in Egypt.
- The information technology industry in Egypt is in great need of qualified experts. Therefore, the provision of training related to information technology should be regarded as a critical priority (Creative Associates International Report, 2014; El Kabbani & Kalhoefer, 2011).
- Many Egyptian companies are small and lack the maturity to compete globally. Capacity-building activities for SMEs to strengthen their management and technical capabilities are needed and will help equip them to compete effectively in the regional and international markets (UNCTAD, 2010). This indicates positively towards the improvement of SMEs among Syrian refugees in Egypt.

To conclude, based on the previous discussion, it is clear that Syrian refugees have negatively and positively affected the hosting countries, so the global community shall consider the Syrian refugee's situation and build equitable responsibility-sharing and revive a worldwide effort to prevent the Syrian refugees' crisis from a humanitarian disaster.

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The Influence of Entrepreneurial Orientation on SMEs Performance in Ghana with Social Capital as a mediator and Government Support Policies as moderator.

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Abstract. The primary aim of this current study is to propose a research framework on the influence of Entrepreneurial Orientation (EO) on SMEs performance in Ghana with Social Capital (SC) as a mediator and Government Support Policies (GSPs) as moderator. The study reviewed existing literature pertaining EO, SC and GSPs by using the five EO dimensions of Lumpkin and Dess, (1996) to ascertain the mediating and moderating role of SC and GSPs in relation to SMEs performance in Ghana and used measures of SC, and GSPs. A questionnaire will be administered to 380 registered SME-owners of Ghana based on Ghana Statistical Survey, (2016) using simple random sampling technique, and the data will be analysed by the Partial Least Square-Structural Equation Modelling (PLS-SEM) software. This study is hinged on the resource-based view and the social capital theories stressing the need for SMEs to focus more on their unique internal and external resources that existed within their social capital network based on their reciprocal relations. This novel study would further provide new insight to practitioners to understand and appreciate the role of SC in explaining and GSPs in promoting the EO of SMEs performance relationship.

Keywords: Entrepreneurial orientation, social capital, government support policies, resource base view theory, social capital theory.

1 Introduction

Performance is viewed as how firms achieve their set target or objectives and differs in business or managerial research and other fields of study on the value that customers obtain from firms. Operationalizing performance has therefore been the norm in academic research and often seen as relative (Mihaela, Herciu, 2017; Aladejebi, Olufemi, 2018). To SME owners, performance means differently and varied measures are also used to measure performance like, profitability, growth, market value and sales growth (e.g. Mihaela, Herciu, 2017; Zimon, 2018; Wiklund, 1999; Gopang, et al., 2017). Evidently, there are no precise measures for SMEs performance (Combs et al., 2005; Nasip, et al., 2017) and studies are at times conducted either by using objective or subjective measures or both to measure performance (Hayat, et al., 2019; Bamfo, & Kraa, 2019).

The performance of SMEs is vital and is at the heart of all managerial-decision making because, they stand the possibility of creating more jobs as well as reducing the high level of unemployment and contribute to the GDP of the local economy largely at the informal level where most entrepreneurial activities flourish. Despite the vast contributions of SMEs and the benefits derived from them in the world however, their performance especially in Ghana and most developing countries are inhibited by a number of obstacles but not exhaustive like; inadequate access to finance; little market opportunities; weak institutional

capacity, low level of technology usage, limited demand for local products and services; less motivated staff; and lack of access to business information (Ezie, & Danjuma, 2016; Abor, & Quartey, 2010; Abdullahi, et al., 2016; Owusu, 2019).

Globally, about 99% of all businesses are SMEs contributing about 60 to 70 per cent of informal jobs in various sectors of the economy especially in the OECD countries (OECD, 2017; Owusu, 2019; Hongyun, et al., 2019; Nasip, et al., 2017) and based on the ILO, (2017) report, SMEs have also increase the employment rate since 2003 to 2016 across 132 countries with full-time workers in SMEs which increased from 79 million to 156 million. Yet, there are predictions that there will be a minimum of 5.3 million to a maximum of 24.7 million reduction of employment as a result of Coronavirus (COVID-19) pandemic (OECD, 2020). And in Africa, SMEs constitute 90% and in Ghana, SMEs form about 92% of all firms with most of them employing between 1-5 employees and are making various contributions to Ghana's GDP (e.g. Abor, & Quartey, 2010; Adjei, 2012; Sekyi et al., 2014).

Again, SMEs are not just considered as the engines of economic growth but the fuel or lubricant that keep developed and developing economies on their toes running without a halt. However, the failure rate of SMEs is higher compared to large firms (Bloch & Bhattacharya, 2016; Lo, Wang, Wah, & Ramayah, 2016). This makes SMEs easily fold up with most potential entrepreneurs not interested in starting a business every year in some developing countries (Hoque, Siddiqui, Awang, & Baharu, 2018). Likewise, SMEs in Ghana lack international exposure and the growing external competition prevents them from creating and strengthening their market share (Asare, 2014). They also lack the ability to expand and create more jobs and are conservative about their growth and employment creation prospects, with almost a third of entrepreneurs not ready to employ anyone except only 47% of the SMEs who are prepared to hire from one to five staffs in five years (GEM, 2013).

More so, SMEs lack managerial skills and cannot absorb the cost of human resources and training, network with other business partners to meet other resource constrains like large business do and paramount among them been lack of entrepreneurial orientation or skills (Egena, et al., 2014; Alimo, 2015). The extant literature show that firms that adopt EO are able to perform better than SMEs that do not and is vital in entrepreneurship and strategic management (Miller, 1983; Palmer et al., 2019; Semrau, et al., 2016; Wales et al., 2013). With EO, SMEs are more likely to achieve their performance targets than those not, and create more jobs because EO gives way for entrepreneurial choices and activities to thrive and help SMEs in opportunity identification and proper use of resources (Dess & Lumpkin 2005; Mason, et al., 2015; Carree, & Thurik, 2010; Ezie, & Danjuma, 2016).

Two theoretically, two views emerged on EO thus, the one and multi-factor dimensions of Miller (1983) and Lumpkin and Dess, 1996) respectively. The uni-dimensional view EO as a three-factor or composite model made of, innovativeness, proactiveness, and risk-taking of Covin and Slevin, (1986) and contrary to that, Lumpkin and Dess (1996), viewed EO as having five dimensions where competitive aggressiveness and autonomy have been added to Miller's assertion of EO, and that not all the five dimensions must manifest to depict SMEs performance, which suggest the need for more studies using the five EO model with mediating and or moderating variables that relate to the internal and external features of SMEs in other forms of businesses and countries to appreciate how each of the variables affect SMEs performance and help reduce confusing descriptive and normative theory building if all the five (5) EO dimensions are not used (e.g. Lumpkin & Dess, 2001; Wiklund

& Shepherd, 2005; Pett & Wolff, 2010; Mahmood & Hanafi, 2013; Alembumamah, 2015; Gathenya, et al., 2011; Mason et al., 2015; Koe, 2013; Zahra, 2008; Arshad et al., 2018; Rezaei, & Ortt, 2018; Ibrahim & Abu, 2020). For an enhanced and sustainable performance of SMEs, they need not only financial capital and human capital (i.e. business training and management skills), but also, they need to develop, promote and use appropriate forms of SC networks and access other support like government support policies (Tundui & Tundui, 2013).

With the use of SC theory in addition to the resource-based view (RBV) theory that offer SMEs the ability to utilise rare and valuable resources that are difficult for other firms to replicate and substitute (Barney, 1991), it will help SMEs to make use of their internal and external networks to boost their resource base capabilities (Brush & Chaganti, 1999; Brush & Chaganti, 1999). SC helps to explain the EO of SMEs and is also vital for entrepreneurial activities as, entrepreneurship is a socio-economic activity that relies on social context and entrepreneurs are also products of their social environs and the existence or lack of social networks affect SMEs performance in acquiring resources without which SMEs cannot perform well (Anderson & Miller, 2003; Kaberia Kanini & Stephen Muathe, 2019). SC also helps to explain the EO and SMEs performance relationship to outperform their competitors (Acheampong et al., 2018; Barr, 2000; Boohene, 2018; Ofori and Sackey, 2010; & Chirico and Salvato, 2008), though several studies have treated SC and EO separately which gives room for further studies using SC as a mediating and or moderating variable with other variables in other sectors of the economy and countries (Quinetta, et al., 2012; Uzzi et al., 2003; Hongyun et al., 2019).

Furthermore, proper adoption of EO and SC, with government support policies serving as a booster, will also enhance the performance of SMEs. With the high failure of most SMEs, it requires government and other institutions support to help sustain their performance which governments all over the world have been doing to promote their survival and performance. The study of Ghura, Harraf, Li, and Hamdan, (2019) emphasised that entrepreneurial actions of people is enhanced based on the official and unofficial institutions that subsist within a particular country or community. And Hamdan, Khamis, Al Hawaj, and Barone, (2019) stressed the need for governments and other institutions to keep supporting entrepreneurship activities since that play a significant role in the economic growth of every country. This support Saberi, and Hamdan, (2019) on the Gulf Cooperation Council (GCC) countries revealed that governmental support has positive and significant moderating effect on the relationship between entrepreneurship and economic growth. However, there is less studies on the moderating role GSPs on the EO and SC on SMEs performance relationship. For instance, with government support to SMEs in develop and developing countries like India, South Korea, Taiwan and China are reaping massively from the SMEs sector (Kusi, Opatu, & Narh, 2015), South Africa, and the United Arab Emirates with their enviable economic status (Onuoha, 2012) but the same cannot be said about Ghanaian SMEs. These countries also experience reduced poverty levels, unemployment, and economic well-being due to the presence of vibrant and reputable SMEs (Onugu, 2005; Eniola & Entebang, 2015).

This study seeks to ascertain the influence of EO on SMEs performance by integrating SC, EO and GSPs to ascertain whether earlier studies on the effect of EO on SMEs performance are based on other reasons like the scales of EO dimensions used, differences in geographical area and sector of the business or is it the research design/the sample size used, or varied ways of measuring performance or what? Or is culture an attribute of how EO impact SMEs performance (Knight et al., 2003), or is there low use of SC and less GSPs to

SMEs in Ghana that might cause their underperformance? This current study seeks to fill this empirical and knowledge gaps and expansion of theory using the five EO dimensions with measures of SC, and GSPs like, free or subsidized training to SMEs, access to capital and other resources, linkages to market partners, regularization, and monitoring in relation to SMEs performance.

2. Literature Review

This section discusses briefly related literature of this study and presents the research framework indicating the interrelationship of the key variables and how that matches the objectives and hypothesis of this current study as shown by Figure 1.

2.1 Performance

There are many definitions of performance depending on the particular field of study. In one breadth, performance is regarded as the maximum benefit that patrons of a business obtain from the SME (Wu, 2009). In another sense, performance is considered as a means of achieving stakeholder interests in a more superior way than competitors (Gathungu, Aiko, & Machuki, 2014). Efficiency and effectiveness have also become popular ways of defining performance in manufacturing and services areas like, finance, and marketing where studies of Atalay, Anafarta, and Sarvan, (2013) and Kombo, K'Obonyo, and Ogotu, (2015) also used five key measurements consisting of reliability, quality, product price or cost, and flexibility to define business performance. And in many instances, operationalising performance has been the norm and also an unresolved issue in academic research and is often seen as relative where entrepreneurs or SME owners considers performance in terms of financial and non-financial measures such as, profitability, growth, market value, return on capital, value addition, customer satisfaction and retention, leadership style and sales growth (e.g. Mihaela, 2017; Gupta & Batra, 2016; Zimon, 2018; Anggadwita & Mustafid, 2014; Wiklund, 1999; Sheehan, 2013; Gopang, et al., 2017).

2.2 Social Capital

Social capital Social capital (SC) as a concept originated from sociology and mean differently in various spheres of study like sociology, anthropology, politics, economics and entrepreneurship on SMEs and EO studies (Alguezaui & Filieri, 2010; Salehuddin, 2009). SC is defined as how individuals or SMEs are able to take advantage of available resources or information within or outside other individuals or firms network based on trust relationships or social ties, they had with them and (Nahapiet, & Ghoshal, 1998) termed as the sum total of resources within social networks of individuals as a result of the relationships that exist between them (Bourdieu, 1980) while Adler et al., (2002), defined SC as the relationship that exist between individuals and businesses that adds value to the members who belong to the network of relationships.

According to Nasip, et al., (2017, p.382) SC is a term that 'includes norms, values, orientations, networks and social relations governing behaviours and interactions among individuals.' Studies revealed that though SC exist among members of a particular group, it cannot be owned by individuals within the network, and may also differ even in the same network due to the individual differences of members within and outside the social network (Roel Rutten et al., 2010; Yu, & Junshu, 2013).

Empirical varied views emerged on SC whether as three dimensions or what, thus structural, relational, and cognitive social capital (Nahapiet & Ghoshal, 1998) Wei-ping Wu, 2008) while others use constructs or dimensions of SC, with other researches indicating bridging SC and bonding social capital as reported by Francesc Xavier Molina-Morales and Martínez-Fernández (2010). Again, other studies used Putnam (2000) viewpoint of SC under two thus, the “bridging social capital” based on linkages or bonds formed across varied social groups, while “bonding social capital” is the kind of social network that flourishes among similar social groups. Putnam added that bridging SC has positive impact on SMEs/firms growth and performance than bonding SC which at times has negative impact on the growth and performance of SMEs.

Furthermore, Franco, Haase & Pereira., (2016) study revealed that whether using dimensions or bridging social capital they all deal with loose or weak ties social capital within networks. That is a kind of distant relationship of people or a network that links persons from wide range of groups, like people within the same work or workmates, acquaintances, people coming from different socio-cultural backgrounds and communities, past work mates or associates known and unknown. This makes it difficult to specifically state that SC involved dimensions or measures which shows they all operate based on trust relationship that subsist between firms which consists of people from different social capital networks that are either formal or informal (Yu, & Junshu, 2013), and can be extended to other SME-owners or managers of financial institutions within or outside the firm’s network (Franco, Haase & Pereira, 2016; Jordan, 2015). This further affirm that SC is hinged on relationships that exist at various levels of social interaction in trust and reciprocal relations. As a result, this study uses measures of social capital to represent SC based on trust and reciprocal relations.

2.3 Government Support Policies For SMES

Governments all over, always and have always indicated that SMEs or private sector businesses serves as the engine of economic growth with several support policies with the aim of promoting their performance in one way or the other and their presence also bring about economic independence to many people (Hogue, 2018). Again, Eniola, and Entebang, (2015) are of the view that, entrepreneurship and by extension SMEs survival in developed and developing countries is necessity as well as the presence of GSPs for SMEs survival and performance which also vary from country to another and in developed economies than developing ones as a result of the presence of various socio-political and cultural reasons that exist between local and multinational businesses within a particular country available to people regardless of ethnicity, religion, and level of education can have access to for their business (Zaato, Ismail, Uthamaputhran, & Owusu-Ansah, 2020).

Governments provide support policies to SMEs in the form of financial and non-financial services that is most times administered through other institutions like good rules and regulations with tax holidays or other tax exemptions, subsidising training cost or services meant to improve upon the human resource capacity of SMEs, making it easier for SMEs to have access to capital and other resources, promotion of partnership or linking owners of SMEs with other partners as well as offering continuous monitoring and evaluation of beneficiary SMEs, and the provision of consultancy services to help SMEs normalize among others will lead to a significant improvement on their performance (Leste, 2014; Eniola, & Entebang, 2015; Dimitris, 2004; Stuart, 2009).

2.4 Entrepreneurial Orientation

Entrepreneurial orientation is considered as appropriate way of describing how entrepreneurial SMEs are in the field of entrepreneurship and management (Wiklund et al., 2009; Morris et al., 2008; Kreiser et al., 2002) since the introduction of EO by Miller in 1983 to mean how innovative, risk-taking and proactive SMEs are in launching new businesses, and have been broadened by Lumpkin and Dess's (1996) to include competitive aggressiveness and autonomy or the ability of SMEs to act independently. Lumpkin and Dess added that EO connotes the processes, methods, practices, and decision-making styles that lead to new entry of businesses and Zahra, Sapienza, and Davidsson (2006) also defined EO as the rules and norms used in decision making. These variations in definition of EO may be attributed to the particular discipline in which EO is applied and also led to two perspectives.

Regardless of the two viewpoints of EO, literature revealed that EO influence SMEs performance (e.g. Kraus, et al., 2018; Sok, et al., 2017; Lumpkin & Dess, 2006). Likewise, Miles and Snow (1978), Lumpkin and Dess, (1996), Fadda, 2018; Lumpkin and Dess, 2006) indicated that EO positively influence SMEs performance and helps them to survive in any business environment (Palmer et al., 2019; Semrau et al., 2016; Wales et al., 2013), and is vital in entrepreneurship and strategic management (Morris & Kuratko, 2002; Palmer et al., 2019).

According to Stubberud, (2014), extensive studies of EO used the unidimensional construct of EO thus, innovativeness, risk-taking and proactiveness as compared with the multidimensional which may give better reflection of the individual elements of EO and how they impact SME performance. This study which adopts the five EO dimensions supports Covin et al. (2006) which posits that, future researchers should make use of the multidimensions of EO on SMEs performance as that will offer varied results for further interpretations of the individual dimensions of EO and how they reflect on other aspects of the economy and countries. This will also help reduce confusing in building false theories if all the five (5) EO dimensions are not used (Rezaei & Ortt, 2018; Lumpkin, & Dess, 2001). Additionally, out of 51 reviewed papers by Rauch, Wiklund, Lumpkin, & Frese (2009), almost 37 of the total reviewed papers were conducted using the uni-dimensional model of EO with the remaining 14 papers conducted using the multi-dimensional factor model of EO. This support the view that most studies used the uni-dimensional factor than the multi-dimensional factor model. The five EO dimensions of this study are further elucidated as.

2.4.1 The effect of entrepreneurial orientation on SMEs Performance

2.4.1.1 Innovativeness in SMEs

Innovation differs from academia and entrepreneurs, and in this study, innovation is considered as the willingness and ability of SMEs to be involved in adding value to existing products and services, adopts technology and active involvement in coming out with new course of action (Nasip, et al., 2017). Innovation among SMEs is necessary because of the increasing changes in the global markets where firms are always involved in competition to come out with new products/services to meet changing customer needs and to survive in business (Gunday et al., 2011).

Innovativeness is also the ability of SMEs to carve out new ideas leading to new or improved ways of doing things and products and or services through experimentation or feasibility study and is a vital characteristic of SMEs or entrepreneurs (Rauch, et al., 2009; Landstrom, 2005; Lomberg et al., 2017), and also considered as a vital component of EO by prior studies

(Covin & Slevin, 1989; Lumpkin & Dess, 1996; Milovanovic & Wittine, 2014). The continuing emergence of new products and services to meet the changing needs of customers in the world of business is therefore attributed to entrepreneurs or SMEs constant use of their innovativeness and impacts the performance of SMEs (Lyon, Lumpkin, & Dess, 2000; Wiklund, 2006; Giudici & Reinmoeller, 2013). This study therefore expects innovativeness to have a positive effect on SMEs performance with the hypothesis that.

H1a: Innovativeness has positive effect on SMEs performance.

2.4.1.2 Risk taking by SMEs

Risk-taking is termed as the propensity of an individual to embark upon well calculated decisions or risk taking in venturing into an already existing or new ventures and commitment of resources and or is not risk adverse in committing resources to execute a business idea that other SMEs are afraid of. In this changing business milieu where SME-owners or managers are required to make uncertain decisions, the element of risk-taking cannot be alienated from this and are required to take calculated risks to reduce their exposure to harsher business surprises (Morris, Kuratko, & Covin, 2008). Again, risk taking is considered part and parcel of SMEs as they commit resources to execute projects at times with no known returns, and their ability to venture into unexplored businesses or markets (Walter, Auer, & Ritter, 2006; Lyon, Lumpkin, & Dess, 2000).

Risk-taking has been considered as a vital attribute of EO and often used when determining the extent of entrepreneurship within SMEs based on their propensity to making entry into new markets and use untested technologies through risk-taking and positively influenced performance (Lumpkin & Dess, 1996; Piraala, 2012; Dess & Lumpkin, 2005). Again, studies proved that SMEs involved in modest or calculated risk taking achieve high performers compared with those having very low levels or shun risk taking (e.g. Kreiser, Marino & Weaver, 2002; Otieno, Bwisa & Kihoro, 2012). This buttressed the generally accepted rule that, risk taking firms are able to secure superior growth and long-term profitability compared with those that avoid risk (Yang, 2008; Wang & Poutziouris, 2010; Ahimbisibwe & Abaho, 2013) and is congruent with SMEs performance. This study operationalized risk-taking as how committed SMEs are to undertake well calculated decisions or risk-taking in launching into an already existing or new business and the willingness to commit resources to execute a business idea that other SMEs are afraid of venturing (Nasip, et al., 2017). Hence, the hypotheses that.

H1b: Risk-taking has positive effect on SMEs performance.

2.4.1.3 Proactiveness of SMEs

Proactiveness is how SMEs take initiatives uncommon to their competitors and strive to become leaders in their business with new products and or services to meet the needs of their customers at any particular time (Miller, 1983). Proactiveness helps SMEs to seek for opportunities and look ahead in taking initiatives uncommon to their competitors to become pace setters by providing new products and services to meet customers' needs under any given situation (Miller, 1993) and always strive to be leaders and not reacting to advances of other firms (Covin & Slevin, 1989).

Lumpkin and Dess, (1996) indicated that proactiveness at the SME level is attributed to the firm coming out with a number of initiatives of new products or services to meet the changing needs of people and has positive influence on performance. Likewise, SMEs that are proactive can create first-mover advantage, target market segments, charge high prices, and "skim" the market ahead of their competitors (Zahra & Covin, 1995). Therefore, proactive firms are the ones that control the market with new products and services and also

launch their products and services in other new markets ahead of their competitors and influence the performance of SMEs and proposes the hypothesis that.

H1c: Proactiveness has positive effect on SMEs performance.

2.4.1.4 Competitive Aggressiveness in SMEs

Competitiveness aggressiveness in SMEs is defined as how ready SMEs are to overcome their competitors, respond quickly to competitors and are also able to make advances that counteracts their competitor's efforts (Lumpkin & Dess, 2001). Lumpkin and Dess's (1996), in emphasizing competitive aggressiveness in SMEs as suggested by Miller termed it as SMEs ability to "beat their competitors to the punch" Lumpkin and Dess (1996:139), and is also seen as "the type of intensity and head-to-head posturing that existing and new entrants often need to compete with their rivals" (Lumpkin & Dess, 2001:433). SME with this characteristic can challenge its competitors to enter the market and with the aim to outperform them. According to Lyon, Lumpkin, and Dess (2000:1056) competitive aggressiveness in SMEs is also seen as "the tendency of SMEs to assume a combative posture towards rivals and to employ a high level of competitive intensity in attempt to surpass rivals." As a result, this study posits that.

H1d: Competitive aggressiveness has positive effect on SMEs performance.

2.4.1.5 Autonomy in SMEs to business/work environments

Autonomy is seen as how SMEs independently or in a team take action to bring into reality a business or an idea to a successful completion (Lumpkin, et al. 2009). Autonomy among SMEs will promote entrepreneurial behavior and boost their performance, and stimulate idea generation in identifying opportunities devoid of any hindrances which is key to promoting entrepreneurship (Kusumawardhani, McCarthy, & Perera, 2009; Lumpkin & Dess, 1996).

Similarly, with autonomy in SMEs, employees are given the opportunity to help achieve the firm's objective through creativity without any interference (Arshad, et al., 2014; Coulthard, 2007), and is a vital EO characteristic for improving the performance of SMEs that lead to the introduction of new products and better ways of doing things (Duru, Ehidihamen, & Chijioke, 2018; Lumpkin & Dess, 1996) and hypothesise that.

H1e: Autonomy has positive effect on SMEs performance.

2.4.2 The relationship between social capital and SMEs Performance

Social capital plays significant role on SMEs performance and may defer from one kind of business and the growth level and place of the SME all these factors may determine how SC will impact SMEs performance (Pratono, & Mahmood, 2014). Rodrigo-Alarcón et al., (2018, p.9) reported that, SC may be termed as "the sum total of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit." Similarly, Lins, et al. (2017) indicated that SMEs SC is at times considered as a form of insurance plan for SMEs and investors in times of economic crisis for assurance. More so, SC help SMEs discover opportunities and use of scarce resources available to network members (Davidsson, & Honig, 2003).

Social capital is observed as an essential resource for SMEs performance over their competitors and help SMEs in identifying and making judicious use of opportunities, easy access to information and make it possible for the discovery of entrepreneurial opportunities faster than others (Adler & Kwon, 2002; Elfring & Hulsink, 2003; Manev, Gyoshev, & Manolova, 2005; Shane & Venkataraman, 2000). Again, SC also offer SMEs the

opportunity to have sustained network relationship with their suppliers, ease resource acquisition and impact their performance (Davidsson & Honig, 2003). Evidence abound that SMEs can make good use of their external and internal social networks to acquire relevant skills and in the application of their EO and enhance performance (Zheng, 2010; Boso, et al., 2013), and hypothesise that:

Hypothesis 2: Social capital has positive effect on SMEs performance.

2.4.3 The mediating effect of SC on the relationship between EO and SMEs Performance

Social capital is paramount in EO and help SMEs to have access to finance, make use of resources judiciously, remain competitive in business, and hence plays a positive and significant role on EO and SMEs performance (Huang, 2016; Jordan, 2015). Prior studies indicate that SC facilitates SMEs performance (e.g. Nahapiet & Ghoshal 1998; Salina Daud & Wan Fadzilah Wan Yusoff, 2010; Carey, Lawson, & Krause 2011) and play a positive and significant role on the relationship between EO and SMEs performance. With good SC networks SMEs will be good at identifying business opportunities a characteristic of an EO (Agyapong, et al., 2017; Ahmadian & Abdolmaleki, 2018). However, several studies treated SC and EO separately without a close examination of their interrelationships (Stam and Elfring, 2008; Alguezaui, & Filieri, 2010; Hongyun et al., 2019; Rodrigo-Alarcón et al., 2018). This study expects that SC will play a significant and positive mediating role on the relationship between EO and SMEs performance *with the hypothesised that:*

Hypothesis 3: Social capital positively mediates the relationship between EO and SMEs performance.

2.4.4 The moderating effect of GSPs on the relationship between SC and SMEs Performance

SMEs with high SC will help entrepreneurs to access government support policies to their advantage towards their business performance. Even though SMEs all over the world are hyped as the engine and lubricant for every economic growth, there is limited literature on the moderating role of GSPs and its interrelationship with social capital and entrepreneurial orientation on SMEs performance and in Ghana. Few related studies like Maria Saberi, Allam Hamdan, (2019), revealed that GSPs significantly moderates entrepreneurship and economic growth of SMEs and that, GSPs to new and existing SMEs like good policy regulations, access to capital, and technological transfer among other policies are good to SMEs. Again, Shu, et al., (2019) studies in the Republic of China and Hogue, (2018) in Bangladesh shows that GSPs moderates EO on the performance of SMES and with limited empirical studies in Africa and Ghana in particular (Eniola & Entenbang, 2015).

Furthermore, Leste, (2014) study on GSPs on SMEs performance demonstrates that, though government policies did not moderate the EO of SMEs and suggested for more studies in different regions and countries. Likewise, Cai, Jun, and Yang, (2010) study stated that SMEs with good relationship with government and other institutions can have access to financial and non-financial support and will consequently improve their performance, and as SMEs establish regular interactions with officials that administer GSPs, they can have access to vital information to their benefit, access resources not known by their competitors and acquire new management skills as well as do collaborative planning with government officials for their survival in the midst of business uncertainties, and also link up with trading partners, hence making significant improvement on their performance (Cai, Jun, & Yang, 2010). This study envisages that the financial and non-financial GSPs will boost SMEs performance and in Ghana and posits that.

H4: GSPs positively moderates the relationship between social capital and SMEs performance.

2.4.5 The Relationship between entrepreneurial orientation and social capital of SMEs

This subsection discusses how the five dimensions of EO relates with social capital in order to arrive at the hypothesis to be tested under this subsection as below.

2.4.5.1 Relationship between innovativeness and social capital of SMEs

Choi and Williams (2016) argued that SMEs with innovative mindset enhance their growth by acquiring new skills and adopt the use of technology to handle unpredictable market situations. Innovative SMEs promote their social ties with other firms, and make them more creative and innovative in coming out with new products and services (Zahra & George, 2002). Further, Wu, Chang, and Chen, (2008) proved that SC mediate innovation on the performance of SMEs. Thus, higher levels of SC have positive and significant impact on the innovativeness of SMEs and also lead to the introduction of new products and services (Hsieh and Tsai, 2007). Additionally, the trust in relationship also motivate people within the SME to work toward new innovative ideas and make members to open up to convert novel ideas into successful ventures to the firms benefit and is considered as a vital requirement for creating innovation within a firm (Lavado et al., 2010; Subramaniam & Youndt, 2005).

Furthermore, SC mediate the intra-organisational relationship of SMEs outcomes of growth and innovation performance and creates innovation spirit among SME-owners and their staff level of innovation and enhance the effect of SC on EO and SMEs performance (Maurer, Bartsch, & Ebers, 2011; Farsi, Rezazadeh, & Najmabadi, 2013). This unique study suggest that the innovativeness of SMEs will have a positive effect on their social capital and thereby boost their performance and hypothesise that.

H5a: Innovativeness has positive effect on social capital.

2.4.5.2 Relationship between risk-taking and social capital of SMEs

According to Lumpkin and Dess (1996) SMEs are considered as people “venturing into the unknown” to connote the risk taking of SMEs. This stems from the fact that apart from the monetary risk of entrepreneurs, they are also often involved in emotional and social risk in executing their business ideas (Lumpkin & Dess, 1996). Literature agree that most entrepreneurs SME-owners or entrepreneurs are not risk adverse or they engage in higher risk-taking than non-entrepreneurs, as their businesses are less structured and operated under high level of uncertainties with less possibilities (Bears, 1982; Owoseni, & Adeyeye, 2012). This means that SMEs are usually involved in much risk-taking and also are committed to investing huge amount of their resources into projects with uncertain returns, and are also venturing into markets that are unfamiliar to their competitors based on their ability to take risk with SC networks to venture into ventures that other people shun and impact SMEs performance. In the body of knowledge, a dearth of empirical literature exists on the effect of SC on risk-taking on SMEs performance, a gap this novel study seeks to fill and proposes the hypothesis that:

H5b: Risk-taking has positive effect on social capital.

2.4.5.3 Relationship between Proactiveness and social capital of SMEs

According to Lumpkin and Dess (1996), SMEs that are committed to be proactive, be able to forecast the expectations of prospective customers and markets, such SMEs will be able to marshal resources together to meet their market demands faster and better than their opponents. This means that SMEs that are proactive should also invest more on their social capital or capacity building thus, working on both their material and non-material resources like the human resource capability to be able to identify timely business opportunities to satisfy present and future market needs (Bature, et. al., 2018). More so, SMEs that are proactive and use their social networks properly, they will be able to influence policy makers

in terms of their decision making, set pace for the market based on their market share (Tang et al., 2014), adopt technology usage and are also abreast with technological changes (Hao & song, 2016).

More so, social capital networks will allow the flow of valuable information or knowledge sharing in and outside of SMEs, increase their strategic assets, and facilitate processes that will enable SMEs to behave in a more proactive and innovative manner to meet their resource needs and boost performance (Luo, 2003; Walter et al., 2006). This will also help in the exchange of new business ideas, technological know-how, and other opportunities and skills not known by their competitors (Kogut and Zander, 1992), novel business ideas and other opportunities and skills not known by their competitors and plays a greater role in promoting the social capital of SMEs (Walter, et al., 2006; Rajennd, 2016). This current study therefore wishes to test the hypothesis that:

H5c: Proactiveness has positive effect on social capital.

2.4.5.4 Relationship between Competitive Aggressiveness and Social Capital of SMEs

Evidence shows that through good social capital network ties based on trust and sharing of resources, and vision among stakeholders, SMEs are able to obtain the necessary resources, support, information and knowledge, otherwise inaccessible to them and that may make them more competitive in the business environment (Saha, & Banerjee, 2015). Though, there is a paucity of studies regarding social capital and competitive aggressiveness of SMEs, this study seeks to fill this gap that competitive aggressiveness will have a positive effect on SMEs social capital and poses the hypothesis that:

H5d: Competitive aggressiveness has positive effect on social capital.

2.4.5.5 Relationship between Autonomy and social capital of SMEs

A study of Cooke, (2007) indicated a positive impact of social capital on SMEs autonomy or their ability to act independently and on their performance since social capital is based on resource embeddedness and will help SMEs to continuously work together in the community of mutual benefit which is at times at low or no cost to SMEs and motivate them to seek for autonomy to launch or explore other business ventures through their social capital networks. As SMEs make good use of this vital feature of EO, this study envisages autonomy to have a positive effect on the social capital of SMEs performance and in Ghana and posits that:

H5e: Autonomy has positive effect on social capital.

2.4.6 The moderating role of GSPs on the relationship between EO and SMEs Performance

Since 1970s, governments all over the world have realized the enormous role that SMEs play in developing of economies and have supported SMEs with various support policies based on their vital role (Mohamad, & Ku Ishal, 2016; Allan O'Connor, 2013; Minniti & Lévesque, 2008; Hannon, 2006; Martinez, Levie, Kelley, Sæmundsson, Schøtt, 2010). The use of GSPs as a moderating variable also support the contingency theory that shows better relationship between two variables on a third variable, help to reduce any possibility of misleading inferences and provide a “more precise and specific understanding of their interrelationship” (Rosenberg, 1968. p. 100). This theory therefore relates with firm performance and assist in the advancement of theory in management sciences (Rauch, et al, 2008; Alhunity, Mohamad, & Ku Ishak, 2016). This study seeks to add to fill the gap on the scarce or limited empirical literature on the moderating role of GSPs on the individual dimensions of EO as below.

2.4.6.1 The moderating role of GSPs on the innovativeness of SMEs

Regarding the role of GSPs in promoting the innovativeness of SMEs, Jordan, Aulbach and Linowes (2013) is of the view that government interventions such as training, exposure to market and other business partners among other support services may inspire SMEs to adopt new ways of doing things as well as opportunity identification and acquiring the necessary resources to execute their ideas and have effect on their performance. Likewise, Nakku, Agbola, Miles, and Mahmood, (2020) study revealed that GSPs have moderating effect on innovativeness and lead to SMEs performance and Alhnity, Mohamad, and Ku Ishak, (2016) added that there is a relationship between the Jordanian Government's intervention and the innovativeness of SMEs. Though other studies may indicate that GSPs as other researchers may posit that GSPs may weaken the innovativeness and productivity of SMEs as they over depend on government for support (Idris, 2012; Cheng, Hu, Xu, Zhang, & Fan, 2017; Ismail, & Zakaria, 2018). This study therefore posits that.

H6a: GSPs positively moderates the innovativeness of SMEs

2.4.6.2 The moderating role of GSPs on the risk-taking of SMEs

Based on Nakku, et al, (2020) study on the interrelationship between SME government support programs, entrepreneurial orientation, and performance from a developing economy perspective, it discovered that GSPs have a moderating effect on the risk taking of SMEs and the study of Asgary, et al., (2020) also demonstrate that GSPs help SMEs to overcome their internal and external risks which is at times too much for them to bear since they are not able to manage risks like large businesses do. This risk could be in the form of a global or local risk considered as "an uncertain event or condition that, if it occurs, can have huge negative effect on lives and businesses" (World Economic Forum 2019, p. 100). More so, Alhnity, Mohamad, and Ku Ishak, (2016) study indicated that the Jordanian Government's interventions had positive and significant influence on the risk-taking of SMEs performance. This study seeks to affirm or refute the available findings with the hypothesis that.

H6b: GSPs positively moderates the risk-taking of SMEs

2.4.6.3 The moderating role of GSPs on the proactiveness of SMEs

In Song et al., (2015) study, it revealed that government support to SMEs in the form of tax exemptions, provision of financial services, monitoring and evaluation help SMEs to be more proactive and ready to take advantage of other business opportunities and impact their performance. Dai, and Si, (2018) also revealed that SMEs that are proactive will be able to quickly assess the effectiveness of GSPs and identify which areas will help them to meet their performance targets as well as enhance their proactiveness based on the connections they had with government institutions that provide support services and may go a long way to improve upon their growth and performance. More so, in Alhnity, et al, (2016) study disclosed that there is a relationship between the Jordanian Government's intervention and the proactiveness of SMEs performance. This study proposes the hypothesis that.

H6c: GSPs positively moderates the proactiveness of SMEs

2.4.6.4 The moderating role of GSPs on the competitive aggressiveness of SMEs

On the moderating role of GSPs on the competitive aggressiveness of SMEs, the findings of Nakku, et al, (2020) from a study on the interrelationship between SME government support programs, entrepreneurial orientation, and performance from a developing economy perspective summarised that GSPs have a moderating effect on the competitive aggressiveness of SMEs and on their performance. Again, Eniola, and Entebang, (2015) argues that governments implementation of new and business fostering policies particularly

to SMEs had significant and positive effect on the competitive aggressiveness of SMEs. As a result of the enormous benefits that SMEs may enjoy from GSPs including expert advice and referrals from government institutions, investments in technology, and sound management practices, among others will make them more competitive aggressive in any business environment and have influence on their performance. This study assumes a positive and significant moderating role of GSPs on the competitive aggressiveness of SMEs and therefore proposes that.

H6d: GSPs positively moderates the competitive aggressiveness of SMEs

2.4.6.5 The moderating role of GSPs on the autonomy of SMEs

Nakku, et al, (2020) report that GSPs have moderating effect on the autonomy of SMEs. It is expected that the financial and other non-financial interventions of government in the form of support policies towards SMEs survival and performance may also make them more capable to act independently or in autonomy making GSPs play a moderating role on SMEs autonomy and performance. There may however be contrary views that GSPs may hinder SMEs autonomy or do not moderate or hinder their entrepreneurial freedom (Leste, 2014; Eniola, & Entebang, 2015). Nonetheless, this current study expects GSPs to boost the autonomy of SMEs in Ghana and to test for this possibility, the study suggests that.

H6e: GSPs positively moderates the autonomy of SMEs

2.5 Research Framework

This research framework is based on the main variables of the study thus; entrepreneurial orientation (EO), social capital (SC), government support policies (GSPs) and SMEs performance (SMP) and how they interrelate as below.

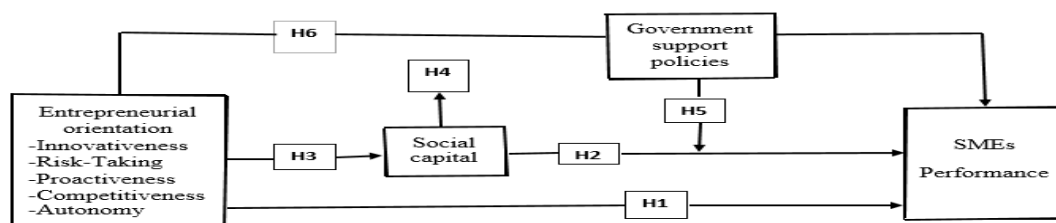


Figure 1. Research framework of the study

3 Research Methodology

In this study, data will be collected from SME-owners or their selected staffs or managers chosen to represent them in this study. As a quantitative study based on positivism approach, a structured questionnaire developed using 7-point Likert scale will be used as the measuring instrument and will personally be administered to 380 SME-owners operating in the services and manufacturing sectors of Ghana by the researcher and three other research assistants. The list of SMEs will be obtained using Ghana Statistical data of (2016) along with assistance from the Ghana National Board for Small-scale Industries (NBSSI). A cross-sectional research design will be used in this study where data will be collected at once in an unrestricted manner.

The research instrument will be designed in English language on which the SME-owners/managers or selected employees will be invited to respond to. Before undertaking the data collection from the SME-owners, a pilot study will be conducted after the

questionnaire have first been validated or pre-tested from experts in academia, practitioners, and other stake holders before carrying out pilot study using 30 respondents to ascertain the validity and reliability and to obtain initial insight on how SMEs in Ghana implement entrepreneurial orientation, social capital and government support policies towards their performance.

This study will adopt all the five EO dimensions of Lumpkin and Dess, (1996) thus, proactiveness, innovativeness, risk-taking, competitiveness aggressiveness and autonomy or the ability of SMEs to act independently. Each of the dimensions of EO and the mediating and moderating variables as well as the dependent variable under scale of measurement will be measured using the seven-point Likert scale on measures which have been tested by prior researchers as valid and reliable.

Finally, the data will first be inputted manually into the Statistical Package for Social Sciences (SPSS) Version 26.0 software to process and compute the collected data and later analysed using the SMART-PLS-Structural Equation Model (SEM) which is a predictive software in determining the effect of each of the key variables such as entrepreneurial orientation, social capital, government support policies on the SMEs performance relationship of this study. Following this, hypothesis will be developed to test the relationship of the variables via the PLS - Structural Equation Modelling (SEM) technique and the detail results will be provided in the various sections of the study.

4 Conclusion

The significance of SMEs cannot be over emphasized and has been alluded by various governments and several stakeholders involved in the SMEs sector of any nation since their success will enhance the economic wellbeing of people as well as boost the economic development of countries like Ghana in terms of job creation, economic growth and reduce unemployment. Based on previous studies, this study sought to ascertain the mediating and moderating role of social capital and Government support policies to determine how SC explain as well as how GSPs boost the EO and SMEs performance relationship in Ghana. This novel study is anchored on two theories; thus, the RBV and SC theories to explain the need for SMEs to make good use of their unique internal and external resources that exist within their social capital network relationships to access the financial and non-financial GSPs towards improving their performance. This study will provide empirical significance first to the owners of SMEs in Ghana to appreciate EO, how their SC networks best explains their EO and how they can use that to garner resources from their own internal and internal networks to their advantage, and from policy makers like government and non-governmental organisations with vested interest in the survival, growth and performance to introduce more good and sustainable policies to promote the growth and performance of existing and new businesses, and finally to practitioners to understand the vital role of SC networks which will cause their EO to flourish and how GSPs can also serve as a catalyst to the EO and SC on SMEs performance relationship. This study will also fill the knowledge and empirical gaps relating to this topic, contribute to theoretical advancement in academia and in the field of entrepreneurship management, and finally make suggestions for further researchers that can validate this proposed framework.

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SUB-SESSION 4

CREATIVITY AND INNOVATION

SOLID SOAP FROM CRUDE PALM OIL FOR COTTAGE INDUSTRY SMALL BUSINESS

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ABSTRACT - Global demand for soap is increasing rapidly especially in the cosmetic industry. Major productions of commercial soap usually contain a lot of preservative and additive that might cause harm to health. This study aims to manually extracted crude palm oil (CPO) and to make soap from different ratio of crude palm oil (CPO) and refine palm oil (RPO). In this study, five soap formulation were representing the ratio of CPO in the soap consist of 100%, 75%, 50%, 25% and 0%. The soaps were analyzed for alkalinity and hardness. For alkalinity, the pH of soap samples was ranged from 10.18 to 10.48 in vary ratio of CPO. The hardness of prepared soap did not influence by the ratio of CPO and RPO. We concluded that the manually extracted CPO able to produce for making soap in cottage industry small business.

Keywords: solid soap, palm oil, pH, hardness.

1. Introduction

Cottage industry is referring to a small-scale, decentralized manufacturing business often operated out of a home rather than a purpose-built facility. It produce various household items using locally available raw materials and are always for their own use or livelihood. Cottage industry is associated with of handicrafts, artistic work in wood and metal, amateur artworks and rural artistry. Recently, the cottage industry has expanded to the urban area (Shoma 2019; Tasneem & Biswas 2014)

Nowadays, the global demand for soap is increasing rapidly especially in the cosmetic industry. The Federal Food, Drug, and Cosmetic Act (FD&C Act) defines cosmetics by their intended use, as “articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body for cleansing, beautifying, promoting attractiveness or altering the appearance (Smolinske 2018))

Soaps are cleaning agents that are usually made by reacting alkali such as sodium hydroxide (NaOH) and potassium hydroxide (KOH) with naturally occurring fat or fatty acids. The reaction produces sodium salts of these fatty acids, which improve the cleaning process with the addition of water. The combination able to lift away greasy stains from skin, hair, clothes, and others. As a substance that has helped clean bodies as well as possessions, soap has been remarkably useful. Sodium hydroxide is usually being added into bar soap formulation, meanwhile, potassium hydroxide is used for liquid soap production (James et al. 2007; Nagendran et al. 2000).

Oil palm produces two types of oil which are crude palm oil (CPO) and palm kernel oil (PKO). CPO is extracted from fibrous mesocarp or the fleshy part of the fruit while PKO

comes from the kernel at the fruit's core. CPO is a type of vegetable oils. It is cholesterol-free and semi-solid at room temperature. CPO is deep orange red in color due to the high content of natural carotenes. CPO is the rich source of carotenoid and vitamin E which offer natural stability against oxidative deterioration. Palm oil can be fractionated into liquid (olein) and solid (stearin) components. In the market, soaps are usually made from palm olein (refined palm oil). The fractionated process to make the palm olein causes some important nutrients in the palm oil is eliminated (Gee 2007)

Thus, the objectives of this study were to extract and produce soaps from different ratio of CPO as well as to determine physicochemical properties and sensory attributes of soap prepared from CPO for a cottage industry.

2. Material and Method

2.1 Extraction of crude palm oil (CPO)

The extraction of CPO has followed the in-house technique as described by Poku (2002) with some modification. Fresh palm fruits were obtained from a local oil palm farmer and cleaned under running tap water to remove dirt's. Fruits were cooked in hot water for one hour to soften a pulp and manually separated from kernel. Then, the pulps were pressed using mechanical pressor to obtain crude palm oil and clarify to obtain crystal-clear red crude palm oil (CPO). The CPO was kept at room temperature until use for making a soap.

2.2 Preparation of solid soaps

The preparation of soaps has followed the formulation and method as described by Majestic Mountain Sage's (MMS) lye calculator with some modifications (<https://www.the-sage.com/lyecalc/>). Five soap formulation were prepared, i.e., soap A, 100% CPO; soap B, 75% CPO + 25% RPO; soap C, 50% CPO + 50% RPO; soap D, 25% CPO + 75% RPO and soap E, 100% RPO. Lye solution was prepared by dissolving 6.7 g of sodium hydroxide (NaOH) pellets in 15 ml of distilled water. The mixture was stirred gently until it is fully dissolved. Set aside the solution for a few minutes to lower the temperature. Fifty (50) grams of CPO, RPO and its mixture were weighed and heated at 40 °C and a lye solution was into a heated oil. The oil or its mixture were stirred vigorously for 15 minutes until becoming traces and filled into a soap mold. A towel was laid around the soap mold to trap heat and facilitate the saponification process and allowed soap to solidify at room temperature for 2 days. Then, a solid soap was removed from a mold and placed at good ventilation place for curing and drying process. After 4 weeks, soap was subjected for determination of physicochemical properties.

2.3 Alkalinity test

Alkalinity (pH value) of soaps were determined by the method as previously describes (Dalen & Mamza 2009; Warra et al. 2011). Briefly, 10 g of soap was weighed and dissolved in 100 ml distilled water. This was made 10% soap solution and then determined using a pH meter. The electrode of the pH meter was rinsed using distilled

water before being inserted into the solution. The reading of pH was taken in triplicate for each sample.

2.4 Texture profile analysis

The hardness of soap was tested using CT3 Texture analyzer (Brookfield Engineering Labs. Inc, USA) using TA39 cylinder 2mm D, 20 mm L probe. The test was repeated three times for each sample by pressing the tips of texture profile analyzer on the surface of the soap. The result shown on the screen was recorded. The texture profile analysis (TPA) was set based on the following parameters: pre- test speed 2.0 mm/s, test speed 10.0 mm/s, post-test speed 2.0 mm/s, target mood distance 10 mm and trigger load 5 g.

2.5 Statistical analysis

The experimental data were analyzed using one-way ANOVA. The data were reported as means \pm standard deviation and the $p \leq 0.05$ was considered significant.

3. Results and discussion

3.1 Soap formulation

The soaps prepared in this studied were depicted in Figure 1. The soap color was ranging from deep yellow to white. The yellow color is due to the presence of carotene derived from CPO (Gee 2007; Nagendran et al. 2000).

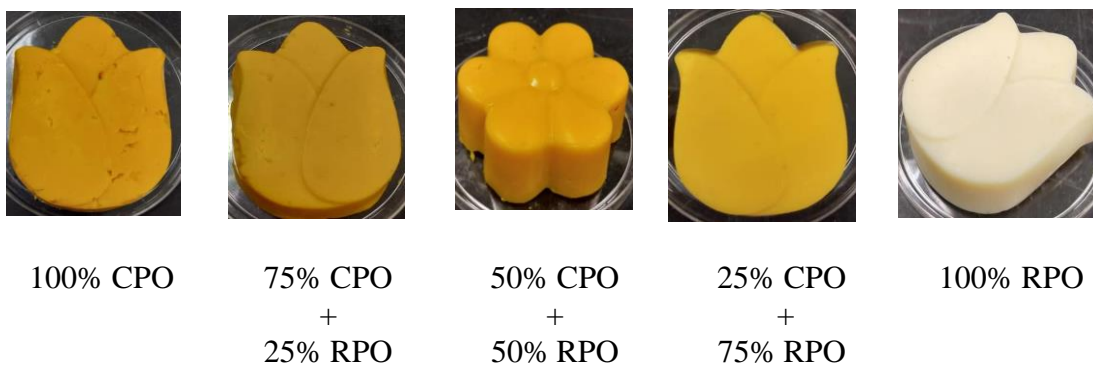


Figure 1: Soap from Crude palm oil (CPO) and refine palm oil (RPO)

3.2 The pH of soap

The pH scale measures how acidic or basic a substance is. The pH scales range from 0 to 14. The pH level ranging 7 is considered as neutral, pH above than 7 will consider as basic or alkaline and pH below 7 is acidic. (Griffin 2018). The pH value of all soap samples were ranging from 10.18 ± 0.071 to 10.48 ± 0.075 and categorized as an alkali condition. Soap A (10.48 ± 0.08) which contained 100% of CPO had higher pH value, followed by soap D (10.37 ± 0.01), soap E (10.34 ± 0.04), soap B (10.34 ± 0.05) and soap C (10.18 ± 0.07). Soap A which contained 100% of CPO had the highest pH value compared to others due to incomplete alkali hydrolysis resulting from the saponification process (Mak-Mensah & Firempong, 2011).

This is because, during soap preparation, the addition of 100% CPO to the lye (sodium hydroxide) solution, makes the soap formulation to thicken in a few seconds and difficult to be stirred. Hence, the formulation could not be completely mixed together. However, all the soaps still considered as safe to be used since the pH level for all the samples were in the normal pH range for handmade soaps which were ranged from 9.00 to 10.0. This pH helps to gently clean the skin (Tarun et al., 2014). Generally, handmade soaps were categorized as an alkali. This is because alkaline substance in soap help to neutralize the body's protective acid mantle that acts as a natural barrier against bacteria and viruses. Healthy skin has a pH around 5.4 to 5.9 (Mak-Mensah & Firempong, 2011).

3.3 Hardness of soap

Soap texture profile analysis (TPA) was carried out using CT3 texture analyzer in order to determine the hardness of soap bar (<https://texturetechnologies.com/application-studies/soap-bars-puncture>). Hardness is an important attribute to soap as it is able to determine the shelf life. Good quality bar soap will have a longer shelf life. Result was showed that the hardness score of soap samples was ranged from 788.89 ± 120.38 g to 1083.56 ± 91.63 g. Soap D (1083.56 ± 91.63 g) which contained 25% of CPO had highest hardness value followed by soap E (1062.222 ± 304.88 g), soap A (975.22 ± 244.93 g), soap C (879.22 ± 125.31 g) and soap B (788.89 ± 120.38 g).

ANOVA analysis was indicated that the hardness of soap is not significant with ($p > 0.05$). The hardness of soap was influenced by the type of oils used. In this study, both CPO and RPO used in soap formulation were extracted from the same source. Thus, the hardness of the soap sample was not significantly difference between each other. Generally, the hardness of soap was influenced by a few factors such as the type of oils used in the soap formulation. The softer oils such as olive, sweet almond and canola are used in preparation of soft soap; and also requires more time to harden (Bramble, 2012).

Next, soaps that are made from hard oils such as palm, coconut and beeswax are required a shorter time to harden. Next, usually after the soap hardened, it will be left for several weeks to cure before being used to allow excess water to evaporate. Curing creates a firmer bar that will last long longer. Besides, the amount of super fat used in the making process also will influence the hardness of soap. Super fat is defined as remaining oil that does not turn into soap by lye. Extra oil will create a gentler bar, but it can also make the bar softer. To create a firmer bar and gentle to skin, an average super fat use in soap recipe is about 1-7% of super fat. However, if the too much super fat use is, it will create more "free-floating" oils in the soap (Bramble, 2018).

4. Conclusion

Collectively, based on data of pH and harness, solid soap that made from manually extracted crude palm oil able to use for cottage industry small business.

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SUB-SESSION 5

ENTREPRENEURSHIP
EDUCATION

Does Personality Traits and Entrepreneurship Education Kindles Entrepreneurship Intention Among Undergraduate Students? A Literature Review

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Abstract - The paper examined whether individual personality traits (Innovativeness INN, Locus of Control LOC, Need for Achievement NAC, Self-Efficacy SEF, Tolerance to Risk TOR) and Entrepreneurship Education (ETE) plays any role in igniting the passion of Entrepreneurship Intention (EI) among university undergraduate students in Nigeria. It's on record that the course of Entrepreneurship was introduced and made mandatory to all students in Nigeria tertiary institutions some years back in order to tackle the menace of graduate unemployment bedeviling the country. In doing this, the paper adopt the theoretical perspective by extensively reviewing several studies conducted on this regard to determine the relationship and effects of the said variables on students entrepreneurship in intention.

Keywords: Entrepreneurship Education, Opportunity Recognition, Personality Traits, Undergraduate Students.

1. Introduction.

According to Martin and Ingrid, (2001) it is indeed difficult for several aspiring entrepreneurs to achieve their initial expectations because of huge number of failure recorded among start-ups. Right opportunities identification and selection for the establishment of new businesses are among the most essential abilities of a successful and vibrant entrepreneurship (Timmons, et al. 1987). Opportunity recognition connotes the ability of an individual or firms based on their previous knowledge and experiences to identify new ideas, goods, services, raw materials, markets and organizing methods for profitable formulation of new means, ends, or means–ends relationships (Baron, 2006; Phillips & Tracey, 2007). Lumpkin and Lichtenstein (2005, p.457) concurred that opportunity recognition entails “the ability to identify a good idea and transform it into business concepts that add value and generate revenue”. Thus, Shane and Venkataramn (2000) opined that ‘without opportunities there is no entrepreneurship’. Hence in this paper opportunity recognition is considered synonymous with entrepreneurial intention (Baručić, & Umihanić, 2016; Shahbani, Bakar & Azmi, 2017).

Creation of a new venture is a multifarious, idiosyncratic process that begins with aspiration by a potential entrepreneur that consist of assembling several resources that may not be necessarily at the disposal and control of the entrepreneur (Venkataraman & Sarasvathy, 2001). Opportunities are said to be available when an individual displays distinct understanding of unusual opportunities and act to grasp them. That action of his led

to ‘entrepreneurial rent’; while failing to act result to entrepreneurial loss (Alvarez & Barney 2000).

An important questions continuously being discussed in the field of entrepreneurship is “why entrepreneurs recognize opportunities that nonentrepreneurs fail to recognize”. Dyer et al. (2088) argued that largely, differences in social networks, personality traits, and cognitive styles are the factors that predict individual opportunity recognition ability. Individuals with entrepreneurial traits are success driven, and are more likely to partake in the relevant opportunity recognition and exploitation that leads to accomplishments (Kerr, Kerr & Xu, 2018; Lim, 2018; Wasdani & Mathew, 2014); and individual’s traits suggest their desire to perceive and pursue potential opportunities (Wang, Ellinger & Wu, 2013). Gartner (1990, p.27) concurred that “Entrepreneurs are distinguished by their propensity to recognize opportunities”. Short et al., (2010) stated that ‘a potential entrepreneur can be enormously creative and hardworking, but with the absence of proper identification of opportunities, entrepreneurial activities cannot take place’ (pp.40). More so, literature affirms that establishment of an entrepreneurial firms is an outcome of individual decision and traits (Herath, 2014). Hence, individual level of these traits plays a dominant role in the success of his new venture. Individuals possessing certain traits have a greater level of inclination to entrepreneurship than those who do not possess them (Shane et al. 2003). For long, the entrepreneurship literatures has recognized entrepreneurship traits as potential means that enhance entrepreneurs competitive advantages and boost their innovative performance (De Carolis & Saporito, 2006; Herath, 2014). Traits like self-confidence, innovativeness, need for success, locus of control and risk taking had been documented as important factors that form good entrepreneurship skills that enable opportunity recognition (Stevenson et al 1985; Fairlie & Holleran, 2012; Wang, Ellinger & Wu, 2013; Kerr, Kerr & Xu, 2018; Lim, 2018). Examining traits influencing entrepreneurial motivations in multiethnic and multicultural society like Nigeria is pivotal in comprehending entrepreneurial intentions among individuals; since the personality of entrepreneur is basically what predict his behaviour and reaction towards the business environment (Ayoade, Ogunnaike & Adegbuyi, 2018; Palladan & Ahmad, 2019).

There is little evidence in the literature to suggest that the combination of these traits (innovativeness, locus of control, need for achievement, self-efficacy and tolerance to risk) have been studied together in order to test how they co-relate to determining the opportunity recognition ability of undergraduate students in Nigeria. Thus, such an oversight repudiates researchers, practitioners as well as policymakers the ample opportunity of comprehensively understand how the knowledge of entrepreneurship could shape the behaviour of individual potential entrepreneur.

More so, several studies suggest that access to relevant information plays a tremendous role on opportunity recognition. Entrepreneurs actively sought for information through publications that aid them to recognize more business opportunities (Hills & Shrader, 1998). Lim (2018) argued that previous empirical and anecdotal studies portrayed knowledge on entrepreneurship as a cognitive resource for entrepreneurship; hence linking knowledge with other entrepreneurial factors warrants further empirical investigations. More so, Siegel and Renko (2012) opined that still unclear in the literature, are the mechanisms through which knowledge boosts opportunity recognition in entrepreneurship. Hence, the paucity of studies that moderate the effect of personality traits on opportunity recognition creates a literature gap (Lim, 2018).

Theoretical background

This section highlights the broad concepts of personality traits, entrepreneurship opportunity recognition and how entrepreneurship education enhance the relationship. The personality traits covered here are innovativeness, locus of control, need for achievement, self-efficacy and tolerance to risk. Narrow personality traits have been recognized as good predictors of industrious behaviours as well as agile actions of entrepreneurs (Llewellyn & Wilson, 2003). These narrow traits herein were deliberately selected because they are found to predicts better outcome of entrepreneurship intentions than the broad traits like Extraversion and Conscientiousness (McAdams, 1992; Rauch & Frese, 2007; Fairlie & Holleran, 2012; Leutner, Ahmetoglu, Akhtar & Chamorro-Premuzic, 2014; Fayolle & Liñán, 2014; Liñán & Fayolle, 2015). This couple with limitations associated with the Big-5 framework in coherently describing entrepreneur portrait (Kamfer, 1992; Rauch, 2014; Kerr, Kerr & Xu, 2018).

However, there is also counter argument suggesting that psychological traits of individuals are stable, hence exposure to external interventions cannot alter them (CobbClark & Schurer, 2012). Scholars like Llewellyn and Wilson, (2003) equally cast doubt on the projecting power of psychological traits on entrepreneurial opportunity recognition. However, it is imperative to quickly explain that in contrast to the present study, findings from the aforementioned studies were heavily rooted on the big five personality attributes (Fayolle & Liñán, 2014; Liñán & Fayolle, 2015).

Innovativeness

In general view, innovativeness connotes how individual respond to new things (Goldsmith & Foxall, 2003). Innovative capabilities of an individual come to bare when he develops personal mastery that comprise of intellectual and social capital (Littunen, 2000). Gregoire and Shepherd, (2012) opined that innovativeness on its self cannot serve as an end but add to entrepreneur's drive in exploiting more opportunities. A sustainable entrepreneurship development is achieved when innovative initiatives gradually empowers the entrepreneurs to discover and exploit available opportunities through their creativity by creating/modifying new products or services. Extant literature suggest that in their quest for opportunity exploitation, entrepreneurs after discovering an opportunity, they prepare decision templates on which to act upon, that contains the novel and creative ideas related to what they want to exploit (Wood & Williams, 2014).

Innovativeness has been affirmed by prior literature to facilitate courage, risk-taking, flexibility as well as intrinsic motivation in entrepreneurial activities (Lorenz, Ramsey & Richey Jr, 2018). These factors and others, according to Debic et al, (2015) have been found to be part of an entrepreneur job assignments Laden by uncertainty and constrained by limited resources, entrepreneurs as opportunity exploiters need to be creative and agile. Auersweld, (2009) further posited that innovation lead to value creation, a platform that offer solutions through a systematic combination of capabilities that consist of products, processes and technology.

Locus of Control

Locus of Control (LOC) is the degree of how an individual exercise control over his life (Karabulut, 2016). People with higher internal LOC believe that their actions can control thier environment, hence they tend to take risks by grabbing opportunities through the creation of new business ventures. An individual that possess internal LOC believes that their lives is control by their own decisions, while on the contrary a person with external LOC accept that the true factors that control his life are fate, chance or other environmental

feature beyond his control. People with internal LOC have confidence and believe that they have control over outcomes that affect their lives through their own effort, ability and skills, instead of believing that external forces control these outcomes.

Previous studies reported posited relationships between internal control and entrepreneurial opportunity recognition (c.f. Gartner, 1985; Perry, 1990; Shaver & Scott, 1991). On the other hand, studies indicates that entrepreneurs possess grater level of locus of control than non-entrepreneurs (Brockhaus et al., 1986; Hansemark, 1998; Mueller & Thomas, 2001), and businesses that survive for three or more years must have had individuals with higher locus of control behind them (Horwitz 1986).

Need for Achievement

Need for Achievement originated from the works of McClelland (1985) “acquired-needs theory”. The notion was initially promulgated by Murray (1938), and later enhance and propagated by McClelland (1961). According to Kerr, Kerr & Xu, (2018) the need for achievement connotes individual’s desire for meaningful accomplishment, mastering of skills, and success in challenging goals. Scholars had argued that entrepreneurs need to possess high need for achievement, since establishing a new venture from the scratch suggests individual capability or ability to swim amid difficult terrain in putting together system responsibilities that are diffuse. Need for achievement has equally been pointed as one of the fundamental elements influencing individual actions in a place of work.

Prior literatures have discovered that a high level of need for achievement facilitate venturing into entrepreneurship for opportunity recognition. Mueller and Thomas (2000) discovered that entrepreneurs from Switzerland possess higher need for achievement than entrepreneurs from the United Kingdom, indicating the trait differs across countries and cultures. In their own part, Stewart and Roth (2007) posits from their meta-analysis that entrepreneurs demonstrate greater level of achievement motivation than managers irrespective of country they came from. More so, other researchers recognized the link that exist between the need for achievement and venture performance. For example, Collins et al. (2004) and Rauch and Frese (2007) observed that both projective and self-reported indicators of achievement motivation influences entrepreneurial intentions and performance.

Self-Efficacy

Self-efficacy relates to individuals’ conscious beliefs that by using their own abilities and capabilities they can carry out a particular task (Bandura, 1986). Self-efficacy connotes one’s “belief that he can perform tasks and fulfill roles, and is directly related to expectations, goals and motivation” (Cassar & Friedman, 2009). Normally, individuals tend to avoid tasks which they have low self-efficacy on; while giving more emphasis on tasks they believe they have higher level of self-efficacy (Forbes, 2005). Several studies had hypothesized the strongness of personal self-efficacy on entrepreneurship intention and growth. Literature on self-efficacy in the context of entrepreneurship posts that the variable can predict individuals’ intentions of starting a new venture (Krueger & Brazeal, 1994; Luthje & Franke, 2003; Pittaway et al., 2010; Radipere, 2012). More so, literature also asserts that high level of self-efficacy is associated with work-related performance (Stajkovic & Luthans, 1998), growth of small business (Baum & Locke, 2004), lecturers job performance (Palladan, 2018), as well as career choice (Lent & Hackett, 1987).

Those individuals who want to venture into entrepreneurs must see themselves as capable and psychologically equipped in order to function properly and remain motivated. Numerous intention-based models theories were developed supporting the effectiveness of self-efficacy, e.g. Ajzen’s (1991) planned behaviour theory, as well as Shapero’s (1982)

model of entrepreneurial event are good examples. Empirical results suggesting positive relationships between entrepreneurship self-efficacy and opportunity recognition were equally documented. Students from three business study programs were surveyed by Chen et al. (1998) and found that self-efficacy is more pronounced on entrepreneurship students in field of management, marketing and financial management than other students from psychology and management. Again, Chen et al. (1998) also discovered that self-efficacy trait enhance entrepreneurs innovation and risk-taking abilities.

Tolerance to Risk

Another important trait that predict opportunity recognition is entrepreneur's tolerance to risk. Ahmed, (1985) define propensity to risk-taking as ability to handle uncertainties and the degree of readiness to bear them. In their quest for success, entrepreneurs take on significant risk for them to achieve high growth. Karabulut (2016) stated that tolerance to risks is an essential trait for entrepreneurs to succeed. As anybody else, entrepreneurs shoulder the burden of taking care of their families as well as other responsibilities, yet they decide to take the risk by investing their resources to establish their own ventures. This could not be possible without element of risk tolerance. Schumpeter argued that entrepreneurs take risks when making decisions, and that risk taking attitude is what makes him different from managers or employees (Iversen et al, 2008). Jain and Ali (2013) concurred that risk taking is a psychological variable reflecting entrepreneur's ability to accept calculated risks and realistic challenges.

Prior empirical and anecdotal literatures posits that the risk taking propensity of an entrepreneur is a key factor to understanding his drive for opportunity recognition and exploitation (Gürol & Atsan, 2006; Tang & Hull, 2012). In their study, Sánchez, (2011) discovered that risk taking influences entrepreneurial intention. Drawing from sample of Swedish SMEs, Naldi, et al. (2007) also confirm that risk taking is a distinct dimension of entrepreneurial orientation in family businesses and has positively correlation with innovation and pro-activeness. Covin and Slevin, (1991) in their model described entrepreneurship as a dimension of strategic posture represented by business enterprise risk-taking propensity in terms of tendency competitive aggressiveness, pro-activeness, and reliance on product innovation.

Entrepreneurship Education Enhance Personality Traits

Entrepreneurship education has been defined by Wilson (2009) as the development of behaviours, competencies and attitudes that individual will apply during his career as an entrepreneur. Considerable number of literature affirms the import and relevance of entrepreneurship education in modelling behaviours related to entrepreneurship (c.f. Fretschner & Weber, 2013; Liñán & Fayolle, 2015; von Graevenitz, Harhoff & Weber, 2010). Equally important to note is that the success of such educational programmes is contingent to individual's acquiescent entrepreneurial traits (Radipere, 2012; Weber, 2013). Again, in addition to the essentiality of entrepreneurship education programs across campuses, individual differences and characteristics are also essential toward entrepreneurship opportunity recognition ability (Hsu & Powell 2014); since psychologist are on the agreement that everything individuals does depends on his mental processes (Costa, Santos, Wach & Caetano, 2018). Hence, the linkage between entrepreneurship and aforementioned traits buttresses the argument that entrepreneurs possess unique attributes (Zhao & Seibert, 2006; Carland, Hoy, Boulton, & Carland, 2007). Weber, (2013) and Ndofirepi, (2020) further affirm that upon all the essential roles that entrepreneurship education plays in modelling entrepreneurship related behaviours, the success of the programme depends on the traits harbored by individuals.

Radipere, (2012) further argued that one's openness to entrepreneurship supports depends upon his psychological traits. Thus, Hansemark, (2003) posits that people endowed with traits like need self-efficacy, innovativeness, locus of control, risk taking and need for achievement have been perceived to be more agreeable to certain entrepreneurship education outcomes like boosting of opportunity recognition ability. Some domain experiences like contacting with case studies and other entrepreneurial academic related activities have also been found to be crucial in developing entrepreneurial mindsets (Politis 2005; Krueger 2007). Krueger and Brazeal (1994) and Nowiński et al., (2019) opined that entrepreneurship knowledge enhance their confidence and increase the level of their self-efficacy, which subsequently affect their perception on entrepreneurship and foster their ability to recognize opportunities. In their study, Nowiński et al., (2019) discovered that entrepreneurship education has succeeded in enhancing women's intention to partake in entrepreneurship despite their low entrepreneurship self-efficacy

More so, findings from Dickson, et al. (2008) suggest positive relationship between entrepreneurship education and individual choice to become an entrepreneur as well as entrepreneurship education and entrepreneurial success. Study by Saini and Bhatia (1996) equally disclosed that entrepreneurs that took a training on entrepreneurship portrayed higher level of performance in job creation and sales; in comparison to those that did not.

Conclusion and Recommendations

This study highlight the relevance of personality traits to entrepreneurial research which had "initially falsely assumed that personality research did not offer it anything useful" (Frese & Gielnik, 2014: 414). Though not empirically, tested, the study proved that personality traits – innovativeness, locus of control, need for achievement, and self-efficacy tolerance to risk predict entrepreneurship intention among undergraduate students. Not only that, the role of entrepreneurship education in boosting the relationship between the aforementioned traits and entrepreneurship Intention was also established. The study recommend for educators to focus more on learning contents that feeds and sustains the students need to pursue meaningful life goals through entrepreneurial opportunity recognition. Lastly, practical teaching strategies including the use of mentors, advisors and role models could also be of great help.

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An Examination of the Status of Entrepreneurship Education and Entrepreneurship Education Programmes in Malaysia

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Abstract This study examines the status of entrepreneurship education (EE) in Malaysia and entrepreneurship education programmes (EEPs) offered by Malaysian public and private higher education institutions (HEIs). This study replicates and extends the research by Maritz et al. (2015) and Maritz et al. (2019). The study expands a nascent archetype regarding an iterative and systematic open-ended emergent enquiry, together with data collection from Malaysian HEIs. Findings suggest significant emergence of EE (programmes and research) in Malaysia, despite EEPs being sparsely distributed across HEIs in the bottom half of Table 1. The top 10 HEIs (12% of all HEIs in Table 1) accounted for 35% of all EEPs. Findings are subject to the availability and accuracy of information and documents available on official websites of HEIs. This limitation has been mitigated with telephone and email inquiries and other sources of information. The findings provide critical grounding and inferences on the status of EE and EEPs in Malaysia for researchers, practitioners, HEIs, governments and other stakeholders. This study is first of its kind on emergent enquiry into the status of EE in Malaysia and EEPs offered by 19 public HEIs and 67 private HEIs in Malaysia.

Keywords: Entrepreneurship education, entrepreneurship education programmes, Malaysia, public and private HEIs.

1. Introduction

Entrepreneurship education – programmes and research in entrepreneurship – is increasingly viewed as a source of economic growth and revitalisation (Hägg & Gabrielsson, 2019; Maritz et al., 2019), consequently receiving growing attention from academics, practitioners and policy-makers. This study uses the term entrepreneurship education (EE) from a startup perspective focussing on venture creation and an enterprising perspective focussing more broadly on personal development, mindset, skills and abilities (Jones, Matlay, & Maritz, 2012; Maritz & Donovan, 2015; QAA, 2018). Recent developments include entrepreneurship ecosystems and institutional contexts in the development of EE (Looi & Klobas, 2020; Roundy, Brockman, & Bradshaw, 2017; Spigel, 2017), particularly regarding the growth and interest in entrepreneurship education programmes (EEPs) (Jones et al., 2012; Maritz & Brown, 2013; Maritz, Jones, & Shwetzter, 2015; Maritz et al., 2019).

However, research on EEPs is a young and fragmented field, identifying specific contexts, frameworks, models and components that such EEPs should encompass (Nabi, Liñán, Fayolle, Krueger, & Walmsley, 2017; Neck & Corbett, 2018). Global specific contexts have resulted in sparse research on EEPs within country perspectives, even more so when comparing multiple higher education institutions (HEIs) within country contexts and perspectives (Ahmad & Buchanan, 2015; Belitski & Heron, 2017; Kuratko & Morris, 2018; OECD/EU, 2018). Furthermore, research on EE is usually centred on students, outcomes, pedagogy and content of individual EEPs (Fayolle & Gailly, 2008; Hägg & Gabrielsson, 2019), as opposed to comparison among multiple EEPs (Maritz et al., 2019).

The integration of EE and EEPs in the context of Malaysia suggests two main patterns. First, this study identifies the body of knowledge regarding the scholarship of EE related to Malaysia. Second, this study provides inferences of EEPs offered by Malaysian public and private HEIs. These two distinct, yet related research gaps form the rationale for this study. New insights from this study provide a neoteric approach to the distribution of EEPs in Malaysia, resulting from government, NGO and privately funded HEI initiatives.

This study commences with a review of entrepreneurship education in Malaysia, followed by replication and extension of research by Maritz et al. (2015) and Maritz et al. (2019) in the form of a quantitative examination of EEP offerings by public and private HEIs in Malaysia. In the Findings and Discussion section, this study provides outcomes of the quantitative component; concluding with implications and suggestions for directions of future research in this rapid-changing environment. To provide contextualisation, this study provides inferences regarding the current COVID-19 pandemic, as this research was conducted at the peak of the pandemic; mindful of the uncertainty and devastating economic woes associated with COVID-19 pandemic.

Scholarly research on entrepreneurship education in Malaysia

This section provides a review of prominent, recent and emerging literature on entrepreneurship education in Malaysia.

Entrepreneurship should be promoted as a viable, satisfying, dignified, rewarding and valued career option. Entrepreneurship education can also hedge against unemployment when supply of jobs in the labour market shrinks. Given these touted benefits of entrepreneurship, it is desirable to attract the young and the educated to choose opportunity-driven (choice) entrepreneurship as a career. Entrepreneurship researchers have persistently endeavoured to understand motivational differences between entrepreneurs and non-entrepreneurs, with respect to their decision to become entrepreneurs.

Using values theory as a theoretical lens in an endeavour to distinguish latent entrepreneurs from non-entrepreneurs prior to their emergence, a survey in a Malaysian private university revealed that self-direction significantly predicts undergraduates' entrepreneurial intentions for new venture creation (Looi, 2018). Self-direction is the most consistent predictor of entrepreneurial intention in a number of prior research using various samples. A cross-cultural comparative study (Looi, 2019) surveyed 355 Malaysian entrepreneurship undergraduates to examine whether the same values are needed for intention to start a business no matter what culture an individual is from. Two key insights emerged. First, self-direction and stimulation are salient motivational factors of entrepreneurship undergraduates' entrepreneurial intention over and above the demographic control variables. In other words, psychological motivations (self-direction

and stimulation) rather than economic motivations (achievement and power) drive Malaysian entrepreneurship undergraduates' entrepreneurial intention. Second, in the context of Malaysia, ethnicity (specifically Malay or Chinese) does not moderate the relationship from self-direction and stimulation to entrepreneurial intention. The empirical evidence from analysing 378 matched business undergraduates from Malaysia, Indonesia and China suggests that different salient values motivate business undergraduates' entrepreneurial intention in different national contexts. Specifically, self-direction and stimulation values shape Malaysian and Indonesian undergraduates' entrepreneurial intention, whereas achievement values shape Chinese undergraduates' entrepreneurial intention (Looi, 2020). Understanding values as contextual motivations for an entrepreneurial career contributes to our understanding of the interaction between process and context to avoid the problem of overgeneralise results across heterogeneous settings within and across studies.

A review of entrepreneurship education in Malaysia published from 2010 to 2020 suggest that Malaysian scholars investigated various entrepreneurship education topics such as readiness for entrepreneurship education (Othman, Hashim, & Ab Wahid, 2012), inclusion of entrepreneurship education (Ahmad, 2013), dimensions of social entrepreneurship (Othman & Ab Wahid, 2014), entrepreneurship education practices (Yusoff, Zainol, & Ibrahim, 2015), with effectiveness of entrepreneurship education receiving more research attention (Din, Anuar, & Usman, 2016; Mohamad, Lim, Yusof, & Soon, 2015; Mohamed, Rezai, Shamsudin, & Mahmud, 2012; Zainuddin & Mohd Rejab, 2010).

Nasip et al. (2017) found innovativeness, self-confidence, propensity to take risk, need for achievement and tolerance for ambiguity positively affect undergraduates' entrepreneurial intention in a public HEI. Farooq et al.'s (2018) study of fresh business graduates from two public HEIs revealed that social support positively influences entrepreneurial intention (but Table 5 indicates otherwise) and this relationship is fully mediated by attitude, subjective norm and perceived behavioural control. Although their literature review discussed four dimensions of social support, it was operationalised as a single dimension with four items. Othman and Tengku Muda (2018) investigated the impact of emotional intelligence on undergraduates' entrepreneurial career choice in three public HEIs. Of the four dimensions of emotional intelligence, only emotion management and social skills are significant predictors. Che Embi et al. (2019) analysed 257 undergraduates from a public HEI and found leadership skill, need for achievement, tolerance of ambiguity and risk-taking propensity positively affect entrepreneurial intention. However, the negative effect of self-confidence on entrepreneurial intention was strangely attributed to entrepreneurial exposures of students from different geographical settings.

Ooi et al.'s (2011) findings suggest that university's role to promote entrepreneurship, entrepreneurial curriculum and content, gender, working experience and mother's occupation predict students' inclination towards entrepreneurship in three public HEIs. Ahmad and Buchanan's (2015) review of entrepreneurship education in 20 Malaysian public HEIs reveal that although entrepreneurship as a general subject is common, entrepreneurship as a major programme or concentration is offered in only five public HEIs. They identified challenges mainly in institutional-industrial linkages, present teaching and assessment methodologies, financial support and on-going curriculum reform. Mustafa et al.'s (2016) results indicate that proactive personality and perceived concept development support are predictors of undergraduates' entrepreneurial intention in a private HEI. Perceived concept development support refers to business development ideas, knowledge to start a new business and introduction to entrepreneurial role models

provided by university to motivate undergraduates to push through their ideas and pursue a career in entrepreneurship. In summary, prior work either focussed on public or private HEIs, instead of a more holistic picture of both public and private HEIs.

Methods

This study is in essence a replication and extension of Maritz et al. (2015) and Maritz et al. (2019). This study provides a nascent archetype regarding iterative open-ended inquiry (Edmondson & McManus, 2007) to provide inference on the status of EEPs in Malaysia. To inquire into the current status of EEPs offered in Malaysian public and private HEIs (colleges and polytechnics are excluded), data were collected from two distinct groupings of Malaysian HEIs, consisting of public and private HEIs, by browsing their official websites. The lists of accredited universities and university colleges in Malaysia as published on the website of the Ministry of Higher Education, Malaysia, are available in Appendix 1. First, data on full programmes, major and minor specialisations in entrepreneurship and subjects about and related to entrepreneurship offered by business faculties/schools or other faculties/schools were collected. Next, this study collected data on entrepreneurship subjects offered outside of full programme, major or minor specialisation in entrepreneurship, which included university- compulsory, faculty- compulsory or programme core and elective subjects. Technical and Vocational Education and Training programmes (TVET), online courses, distance learning, research mode programmes at post graduate level and franchise degrees are excluded. Lastly, this study collected data on entrepreneurship centres. These official websites were accessed between March 2020 and July 2020 (i.e., during enforcement of movement control order in Malaysia as a cordon sanitaire preventive measure against the spread of Covid-19). This method of data collection is constrained by the amount of information each HEI posted on their official websites. To mitigate this limitation, this study supplemented information unavailable on official websites of HEIs by email and telephone inquiries, referring to student guidebook available outside of official websites of HEIs and other sources.

The classification of entrepreneurship programme (full, major or minor), entrepreneurship subject (about or related to) and points allocation system were adopted from Maritz et al. (2019). Full programme and major specialisation in entrepreneurship consist of title and subjects within the domain of entrepreneurship, for example, Bachelor of Entrepreneurship and Innovation with Honours or Master of Applied Entrepreneurship. Under this points allocation system, full programme in entrepreneurship (with eight or more about and related to entrepreneurship subjects) will score six points, major specialisation (with four to seven about and related to entrepreneurship subjects) will score four points, non-entrepreneurial programme with at least four about or related to entrepreneurship subjects will score two points. In addition, two points will be awarded for subject about entrepreneurship (i.e., direct entrepreneurship subject, such as Fundamentals of Entrepreneurship) and one point awarded for subject related to entrepreneurship (i.e., indirect entrepreneurship subject, such as Creativity and Innovation). To illustrate, a HEI offering eight subjects about entrepreneurship would score 6 points (for being a full programme with eight subjects about entrepreneurship), plus 16 points (eight subjects about entrepreneurship \times 2 points for each subject). Another HEI offering eight subjects related to entrepreneurship would score 6 points (for being a full programme with eight subjects related to entrepreneurship), plus eight points (eight subjects related to entrepreneurship \times 1 point for each subject). For entrepreneurship subjects offered outside of full programme or major specialisation in entrepreneurship, two points will be awarded for subject about entrepreneurship and one point awarded for subject related to entrepreneurship. The subject classification about and related to entrepreneurship is consistent with startup and enterprising perspectives mentioned in the Introduction section.

After data collection and points allocation, Table 1 was developed to organise the points. For entrepreneurship subjects offered outside of full programme or major specialisation in entrepreneurship, points awarded for subject about entrepreneurship and subject related to entrepreneurship are grouped under Others in Table 1. The number of HEIs reported in Table 1 (86) is smaller than the number of HEIs surveyed (20 public HEIs and 91 private HEIs) because some HEIs do not offer any entrepreneurship subject nor have any entrepreneurship centre. A ranking mechanism in descending order was applied to assess the levels of entrepreneurship engagement by various HEIs in terms of total points scored. Because this study replicates and extends research by Maritz et al. (2019), it adhered to national equivalence issues such as sample equivalence, data collection equivalence and data analysis equivalence (Coviello & Jones, 2004).

4. Findings and Discussion

Data consisted of quantity or extent of identified EEP offerings, as opposed to quality and impact, which paves the way for future research. Data primarily entailed EEPs consisting of full programmes, major and minor specialisations in entrepreneurship, subjects about entrepreneurship (direct relation to entrepreneurship), subjects related to entrepreneurship (indirect relation to entrepreneurship), others (subjects about and related to entrepreneurship offered outside of full programme, major or minor specialisation in entrepreneurship) and entrepreneurship centres (inclusive of entrepreneurship research centres, accelerators, incubators and entrepreneurial ecosystems). The data were systematically coded and quantified.

The points scored by each HEI are summarised in Table 1 in descending order. However, the table should not be viewed as a ranking mechanism, but as a means to provide inference as to the variety of EEP offerings across Malaysian HEIs. According to the Ministry of Higher Education of Malaysia, there are 111 HEIs, consisting of 20 public HEIs and 91 private HEIs. This study identified 86 HEIs in Malaysia offering EEPs, made up of 19 public and 67 private HEIs. Public HEIs are primarily funded by the Malaysian Government, whereas private HEIs are primarily funded by collaboration partners, such as State funding, community funding, enterprise/business funding and international satellite arrangements.

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Table 1 Entrepreneurship Education Programmes in Malaysian HEIs

Rank	HEI	Type*	Full programme (6)	Major specialisation (4)	Minor specialisation (2)	Subject about (2)	Subject related to (1)	Others	Ent. centre	Total points
1	University Malaysia Kelantan	PU	12	24	2	40	3	6	6	93
2	Universiti Kebangsaan Malaysia	PU	12			26	6	2	2	48
3	HELP University	PR	12			30	3			45
4	Universiti Teknologi MARA	PU	12			28	2		2	44
5	Universiti College of Islam Melaka	PR	6	4		24	3	3		40
6	Lincoln University College	PR	6			24		5		35
7	Limkokwing University	PR	6			12	2	14		34
8	Universiti Malaysia Sabah	PU	6			18		6	2	32
9	University Teknologi Malaysia	PU		4		6	2	15	4	31
10	Sunway University	PR	6	4		12	4	2	2	30
11	Universiti Teknikal Melaka Malaysia	PU	6			16		7		29
12	First City University College	PR	6			16	1	6		29
13	DRB-Hicom University	PR	6			20	2			28
14	Taylor's University	PR	6			16		2	4	28
15	Universiti Tun Abdul Razak	PR	6			14	3	5		28
16	Universiti Kuala Lumpur	PR	6			14	3		4	27
17	Widad University College	PR	6			16	2	3		27
18	Perlis Islamic University College	PR	6			18	2			26
19	Tunku Abdul Rahman University College	PR	6			16	1		2	25
20	University of Wollongong Malaysia	PR		8		16	1			25
21	Universiti Putra Malaysia	PU		4		6	2	10	2	24
22	UCSI University	PR		4		12	1	4	2	23
23	Universiti Utam Malaysia	PU	6			12	2		2	22
24	Universiti Malaysia Perlis	PU		4		8	1	5	4	22
25	Universiti Sultan Azlan Shah	PR	6			12	3	1		22
26	Binary University	PR	6			14	1			21
27	International University of Malaya-Wales	PR	6			12	3			21
28	University College Sabah Foundation	PR	6			12	3			21
29	Poly-Tech MARA University College	PR		4		10	1	4		19
30	Universiti Tunku Abdul Rahman	PR		4		8	3	2	2	19
31	Kuala Lumpur Metropolitan UC	PR	6			8	4			18
32	Infrastructure University Kuala Lumpur	PR		4		10		3		17
33	Universiti Tenaga Nasional	PR		4		12	1			17
34	Asia School of Business	PR		4		8			2	14
35	Heriot-Watt University Malaysia	PR						12	2	14
36	Curtin University Malaysia	PR		8		2	3			13
37	Multimedia University	PR						10	2	12
38	Wawasan Open University	PR		4		4	3			11
39	University of Cyberjaya	PR						10		10
40	Genovasi University College	PR						9		9
41	Universiti Tun Hussein Onn Malaysia	PU						6	2	8
42	Meritus University	PR						8		8
43	Veritas University College	PR						8		8
44	Universiti Pendidikan Sultan Idris	PU						5	2	7
45	University Sains Islam Malaysia	PU						5	2	7
46	Open University of Malaysia	PR						7		7
47	Universiti Sains Malaysia	PU						6		6
48	Universiti Malaysia Pahang	PU						4	2	6
49	International Islamic University of Sultan Abdul Halim Mu'adzam Shah	PR						6		6
50	Management and Science University	PR						4	2	6
51	Nottingham University Malaysia	PR						4	2	6
52	Asia e University	PR						5		5
53	University College of Yayasan Pahang	PR						5		5
54	University of Malaya	PU						4		4
55	Universiti Islam Antarabangsa Malaysia	PU						2	2	4
56	Universiti Sultan Zainal Abidin	PU						2	2	4
57	Albukhary International University	PR						2	2	4

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58	Asia Pacific University of Technology and Innovation	PR						2	2	4
59	City University	PR						4		4
60	International Islamic University College of Selangor	PR						4		4
61	Manipal GlobalNxt University	PR						4		4
62	Nilai University	PR						4		4
63	Raffles University	PR						4		4
64	Saito University College	PR						4		4
65	University of Reading	PR						4		4
66	Asia Metropolitan University	PR						3		3
67	Islamic University of Malaysia	PR						3		3
68	MAHSA University	PR						3		3
69	Quest International University	PR						3		3
70	University College of Technology Sarawak	PR						3		3
71	University Malaysia Sarawak	PU						2		2
72	Universiti Pertahanan Nasional Malaysia	PU							2	2
73	AIMST University	PR						2		2
74	Al-Madinah International University	PR						2		2
75	Berjaya University College	PR						2		2
76	International Centre for Education in Islamic Finance	PR						2		2
77	Inti International University	PR						2		2
78	KPJ Healthcare University College	PR						2		2
79	Malaysia University of Science and Technology	PR						2		2
80	Manipal International University	PR						2		2
81	Southern University College	PR						2		2
82	Twintech International University College of Technology	PR						2		2
83	University College of Agrosience Malaysia	PR						2		2
84	University Malaysia of Computer Science and Engineering	PR						2		2
85	University of Selangor	PR						2		2
86	University College Geomatika	PR						1		1
Total points			168	88	2	532	71	303	68	1232
Total count			28	22	1	266	71	34		

* PU - public university; PR - private university

This study commences the EEP commentary by identifying the most prolific measure of EE (in this study), that of full programmes in entrepreneurship. Overall, there are 28 full programmes in entrepreneurship distributed across only 24 HEIs (28 percent of all HEIs in Table 1). Of the 24 HEIs, only four have two full programmes in entrepreneurship, the balance have only one full programme in entrepreneurship. These full programmes in entrepreneurship all have entrepreneurship in their title and consist of a minimum of eight subjects about or related to entrepreneurship. Titles for these full programmes in entrepreneurship include, for example, Bachelor of Entrepreneurship and Innovation with Honours, Bachelor of Technopreneurship with Honours, Master of Entrepreneurship and Innovation and Master of Applied Entrepreneurship. Next classification is major specialisation in entrepreneurship. These major specialisation in entrepreneurship mostly have entrepreneurship in their title and consisting of four to seven subjects about or related to entrepreneurship. This study identified 22 major specialisations distributed across 15 HEIs (17 percent of all HEIs in Table 1). Only three HEIs have multiple major specialisations in entrepreneurship, including one HEI offering six major specialisations in entrepreneurship – University Malaysia Kelantan. Next classification is minor specialisation in entrepreneurship, representing those programmes that do not have entrepreneurship in their title, but have more than four subjects about and related to entrepreneurship. Only one HEI is in this classification – Universiti Malaysia Kelantan. As such, Universiti Malaysia Kelantan is the only HEI offering full programme, major specialisation and minor specialisation in entrepreneurship. Thus, it is no surprise that Universiti Malaysia Kelantan ranks well ahead of other HEIs in Malaysia with regard to proliferation of EEPs.

At the HEI level, only nine out of 20 public HEIs offered entrepreneurship programmes, consisting of nine full programmes, nine major specialisations and one minor specialisation in entrepreneurship. Out of these 19 entrepreneurship programmes, only three full programmes in entrepreneurship are offered at master level and the rest at bachelor level. Private HEIs offered 19 full programmes and 13 major specialisations in

entrepreneurship, in greater number than public HEIs, possibly reflecting the growing market demands for EEPs.

Although full programme and major specialisation in entrepreneurship have entrepreneurship in their titles, purportedly to produce entrepreneurs but the subjects offered differ, suggesting different definitions of EE and its purposes (Liguori et al., 2018) by different HEIs. As such, the differences in scope, objectives and methodologies are likely to result in nuance differences in learning outcomes. This phenomena is consistent with the notion of heterogeneity nature of entrepreneurship (Shepherd, Wennberg, Suddaby, & Wiklund, 2019; Wiklund, Nikolaev, Shir, Foo, & Bradley, 2019) and the "Blind Men and the Elephant" (Gartner, 2001).

Next measure identifies distribution of entrepreneurship subjects. This study identified a total of 266 subjects about entrepreneurship and 71 subjects related to entrepreneurship under full programmes, major and minor specialisations in entrepreneurship, spread across 36 HEIs (42 percent of all HEIs in Table 1). It is no surprise to see multiple subjects about entrepreneurship attributed to those HEIs with full programmes or major specialisation in entrepreneurship. There are also many subjects about and related to entrepreneurship offered outside of full programme, major or minor specialisation in entrepreneurship, suggesting the emergence of entrepreneurship as a major subject in business education. At a deeper level, this finding seems to reflect the prevalent values of Malaysian society (GEM, 2018; Looi & Khoo- Lattimore, 2015). Etzioni (1987) suggests that, *ceteris paribus*, the higher the level of legitimation in a society, the more the educational system will educate and train entrepreneurs.

The top ten HEIs (12 percent of all HEIs in Table 1) contributed 41 percent of subjects about entrepreneurship. Subjects about entrepreneurship included titles such as Entrepreneurship, Introduction to Entrepreneurship, Fundamentals of Entrepreneurship, Entrepreneurial Creativity and Innovation, Entrepreneurial Finance, Entrepreneurial Leadership, Entrepreneurial Marketing, Entrepreneurial Skills, Agribusiness in Entrepreneurship, Applied Entrepreneurship, Contemporary Entrepreneurship, Corporate Entrepreneurship, Global Entrepreneurship, International Entrepreneurship, Real Estate Entrepreneurship, Social Entrepreneurship, Technology Entrepreneurship, Technopreneurship, Legal Issues in Entrepreneurship, Islamic Convention of Entrepreneurship, Psychology of Entrepreneurship, Business Plans for New Ventures, Corporate Venturing, Financing Entrepreneurial Ventures, Managing Entrepreneurial Ventures and New Venture Creation. It was interesting to see specialisations in entrepreneurship aligned with cultural and cross-disciplinary topics, proving positive inference of the delineation of entrepreneurship education.

30 HEIs (35 percent of all HEIs in Table 1) offered subjects related to entrepreneurship, lower than those HEIs offering subjects about entrepreneurship (36 HEIs or 42 percent of all HEIs in Table 1). Subjects related to entrepreneurship included titles such as Critical and Creative Thinking, Creative Thinking, Creativity and Innovation, Business Innovation, Innovation Management, Management of Innovation, Product Design and Innovation, Technology Management and Innovation, Design Thinking, Small Business Management, Small Business Planning, Small Business Growth, Enterprise and Small Business Management, Managing Business Growth and Family Business. Subjects about and related to entrepreneurship offered outside of full programme, major or minor specialisation in entrepreneurship, including university- compulsory or faculty-compulsory entrepreneurship subject in public HEIs and general

study subject of Fundamentals of Entrepreneurship in private HEIs, are offered in 80 percent of HEIs in Table 1. These subjects are classified under Others in Table 1.

Our final classification was that of entrepreneurship centres, consisting of formal and informal groupings of collaborative members and initiatives such as teaching teams, research and engagement and community initiatives in entrepreneurship. Entrepreneurship centres were dominant in those HEIs prominent in EEPs, however, to a lesser extent, in a few private HEIs without EEPs. It was observed that there are more entrepreneurship centres in public HEIs (19) than in private HEIs (15), although private HEIs constituted 78% of HEIs in Table 1.

When looking at EEP offerings by Malaysian HEIs, a few interesting observations were noted. The top 10 HEIs consists of equal number of public and private HEIs, albeit public HEIs have more EEPs (57%) because they are primarily publicly funded to promote Malaysian Government's entrepreneurship agenda. The leader of this quantitative tally – Universiti Malaysia Kelantan – is an entrepreneurial university with a motto of “Entrepreneurship is our thrust”. Interestingly enough, as is the case with other similar country study (Maritz et al., 2019), the top 10 HEIs (representing 12 percent of all HEIs in Table 1) accounted for 35 percent of total EEPs offered. It may thus be said that EEPs is significantly dominated by the top 10 HEIs in Malaysia, indicative of dominance in a quest to become entrepreneurial universities. Overall, EEPs are offered in 86 out of 111 HEIs (77% of all HEIs in Malaysia), despite sparsely distributed across HEIs in the bottom half of Table 1. Nevertheless, many HEIs in the bottom half of Table 1 have the opportunity to increase their EEP offerings, thus, increase their impact. Furthermore, 40% of all HEIs in Table 1 have entrepreneurship centres, with 56% of entrepreneurship centres found in public HEIs, further aligning with Malaysian Government's entrepreneurship agenda.

Presently, 9 (out of 20 or 45%) public HEIs and 27 (out of 91 or 30%) private HEIs offered full, major and minor specialisation in entrepreneurship. In other words, only 36 (out of 111 or 32%) public and private HEIs in Malaysia offered full, major and minor specialisation in entrepreneurship. For greater impetus to support the national entrepreneurship agenda, this study suggests wider offering of EEPs across more public and private HEIs.

Although this study found specialisations in entrepreneurship aligned with cultural, cross-disciplinary and technological topics, this study strongly suggest focussed EEP offerings in emerging fields to produce entrepreneurs of the future (in contrast to future entrepreneurs), associated with Internet of Things (IoT), drones, artificial intelligence (AI), industrial revolution (IR) 4.0, 5G, et cetera.

Conclusion

Embedding entrepreneurship in education makes multiple contributions to the scholarship and study of EE and advancement of EEPs. This is the first study using emergent enquiry into the status of EE and EEP offerings by Malaysian public and private HEIs. First, this study identified a growing Malaysian body of knowledge regarding the scholarship of entrepreneurship. Second, building on the above contributions, this study examined EEP offerings at Malaysian public and private HEIs. Overall, this study found a moderate offering of EEPs across 86 HEIs in Malaysia, despite sparse offering of EEPs amongst HEIs in the bottom half of Table 1.

This study provides inferences for HEIs to identify their relative position in EEPs and to enhance their EEPs. One may assume that the top 10 HEIs are dominant in the quest to become entrepreneurial universities. This study suggests further research within the Malaysian context, first on quality and impact of EE and EEPs, followed by alignment of HEIs to the quest of Malaysian Government's entrepreneurship agenda.

The limitations and implications of this study are associated with the nascent archetype regarding iterative open-ended inquiry to provide inference on the status of EE in Malaysia. To inquire into the current status of EEP offerings in Malaysian public and private HEIs, data were collected by browsing official websites of HEIs. As this study presents findings from official websites of HEIs, data was subject to availability and accuracy of online information and documents. However, limitations have been mitigated with telephone and email inquiries and other sources of information.

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MENEROKA TAHAP PEMBELAJARAN KEUSAHAWANAN DIGITAL DALAM KALANGAN PELAJAR INSTITUSI TVET

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ABSTRAK : Keusahawanan merupakan agenda penting yang menjadi nadi utama dalam membantu meningkatkan ekonomi negara. Negara telah mengorak langkah ke hadapan dengan melaksanakan pelbagai program pembangunan keusahawanan bagi menghadapi cabaran besar dalam melahirkan usahawan tradisional kepada usahawan baru yang dilengkapi dengan kemahiran abad ke 21 melalui pendigitalan operasi perniagaan. Kajian ini dijalankan bagi mengetahui tahap pembelajaran keusahawanan digital iaitu melalui kursus Digital Entrepreneurship Development terhadap 88 orang pelajar yang telah dipilih sebagai sampel dari aspek kesedaran dan kemahiran dalam keusahawanan. Objektif utama kajian ini adalah mengenalpasti pembelajaran keusahawanan digital dapat meningkat tahap kesedaran dan kemahiran keusahawanan pelajar dan melihat samada terhadap perbezaan yang signifikan terhadap pelajar dalam pembelajaran keusahawanan digital berdasarkan jantina dan pengalaman keusahawanan. Data yang dikumpulkan telah dianalisa menggunakan perisian Statistical Package for Social Science (SPSS) for Window Version 23.0 dan dapatan kajian dibentangkan dalam pengukuran skor min, Ujian-t dan ANOVA sehalu. Selain itu kebolehpercayaan soal selidik dianalisis dan memperolehi nilai Alpha Cronbach bagi keseluruhan objektif adalah 0.889. Ini menunjukkan soal selidik dalam kajian ini mempunyai kebolehpercayaan yang tinggi. Analisis data menunjukkan tahap kesedaran dan kemahiran pelajar dapat ditingkatkan melalui kursus Digital Entrepreneurship Development berdasarkan tafsiran skor min yang diadaptasi daripada Abdul Sukor et al (2007) secara keseluruhannya kedua-duanya berada pada tahap yang tinggi dan nilai skor min yang diperolehi adalah 3.28 dan 3.16. Manakala bagi analisis Ujian-t dan ANOVA sehalu dapatannya adalah sama. Dapatan analisis Ujian-t dan ANOVA sehalu, hipotesis nul diterima iaitu tidak terdapat perbezaan yang signifikan berdasarkan kepada jantina dan pengalaman keusahawanan dengan nilai signifikan lebih daripada 0.05 (0.610 & 0.795). Oleh yang demikian daripada dapatan kajian ini menunjukkan pembelajaran keusahawanan digital dalam kalangan pelajar dilihat telah memberikan impak yang sangat baik dari aspek kesedaran dan kemahiran mereka. Usaha berterusan perlu dilakukan bagi memastikan ilmu yang mereka terima dapat dimanfaatkan untuk diri mereka dan juga negara.

Kata Kunci: Keusahawanan Digital, Kesedaran, Kemahiran

1. Pengenalan

Keusahawanan merupakan agenda penting yang menjadi nadi utama dalam membantu meningkatkan ekonomi negara. Persekitaran keusahawanan di Malaysia sentiasa disokong bagi melahirkan usahawan yang berpotensi tinggi. Pelbagai inisiatif kerajaan dibangunkan dalam usaha untuk melengkapkan usahawan-usahawan di Malaysia dengan kemahiran yang diperlukan supaya ianya selari dengan perubahan persekitaran perniagaan dan teknologi yang muncul secara pantas. Negara telah mengorak langkah ke hadapan dengan melaksanakan pelbagai program pembangunan keusahawanan bagi menghadapi cabaran besar dalam melahirkan usahawan tradisional kepada usahawan baru yang dilengkapi dengan kemahiran abad ke 21 melalui pendigitalan operasi perniagaan. Seiring dengan usaha tersebut, Malaysia juga telah mengorak langkah berubah kepada ekonomi

baharu. Penjanaan ekonomi di Malaysia secara amnya disumbangkan oleh aktiviti keusahawan yang meliputi pelbagai jenis aktiviti perusahaan termasuk juga perniagaan atas talian (online) (MEDAC, 2019).

Kementerian Pembanguana Usahawan Malaysia telah memperkenalkan Dasar Keusahawanan Negara (KDN) menjelang tahun 2030 bertujuan memberi panduan dalam menyediakan kerangka atau ekosistem yang menyeluruh untuk pembangunan keusahawanan di Malaysia. Bagi merealisasikan hasrat ini, galakan keusahawanan turut di sebar luaskan kepada masyarakat melalui Dasar dan Pelan Strategik Keusahawanan IPT oleh Kementerian Pendidikan Malaysia. Melalui dasar ini, sistem pendidikan tinggi negara perlu menerapkan dan memberi pendedahan kepada budaya dan nilai-nilai keusahawanan serta menganjakkkan minda pelajar IPT daripada pencari kerja (*job seeker*) kepada penjana pekerjaan (*job creator*) (MEDAC, 2019).

Perkembangan ini disambut baik oleh IPT di mana hasil kajian yang dijalankan oleh Perbadanan Produktiviti Malaysia (MPC, 2015) menunjukkan bahawa pengurusan tertinggi IPT memberikan komitmen dengan kebanyakan daripada IPT yang ada menjadikan pembangunan dan pendidikan keusahawanan sebagai salah satu agenda yang menjadi keutamaan pencapaian di institusi mereka. Politeknik dan Kolej komuniti yang bernaung di bawah IPT awam di Malaysia turut bergerak ke hadapan untuk bersama-sama memastikan setiap agenda yang dirancang oleh kerajaan dapat di capai. Dengan melihat setiap halatuju itu mampu memberi nilai tambah yang baik kepada semua pelajar dalam berhadapan dengan dunia pekerjaan yang mencabar. Bagi memastikan kejayaan ini tercapai Jabatan Pengajian Politeknik dan Kolej Komuniti (JPPKK) bersama-sama dengan Perbadanan Pembangunan Multimedia (MDEC) telah mewujudkan program keusahawanan digital yang ditawarkan ke seluruh Institusi Pendidikan Teknik dan Vokasional di Malaysia.

1.1 Pernyataan Masalah

Penggubalan semula kurikulum keusahawanan telah membentuk kerjasama di antara MDEC dengan JPPKK untuk memperkenalkan kursus baru yang dikenali sebagai *Digital Entrepreneurship Development*. Kerjasama ini bakal merubah kurikulum TVET dari model keusahawan dan teori konvensional kepada pengkhususan dalam penjanaan pendapatan melalui platform digital. Selaras dengan kehendak kerajaan untuk menjadikan keusahawanan sebagai kerjaya pilihan, Pelan Tindakan Keusahawanan IPT telah menggariskan beberapa inisiatif yang perlu dicapai iaitu menasaskan 5% daripada jumlah pelajar IPT yang bergraduasi bekerja sendiri.

Hasil penelitian yang dilakukan mendapati usaha dan inisiatif penerapan budaya, nilai dan kemahiran keusahawanan dalam kalangan pelajar IPT di Malaysia menunjukkan hasil yang positif. Penerimaan pelajar terhadap agenda keusahawanan ini dapat dilihat melalui aktiviti yang mereka sertai (KPT, 2013). Statistik daripada Jabatan Perangkaan Malaysia bagi bulan Julai 2019 menunjukkan kadar pengangguran kekal sebanyak 3.3% manakala data bagi bulan Disember menunjukkan penurunan kepada 3.2%. Namun begitu statistik ini meningkat bagi tahun 2020 di mana sebanyak 3.9% kadar pengangguran dicatatkan bagi bulan Mac 2020 (DOSM, 2020). Keadaan ini turut dipengaruhi oleh faktor pelaksanaan Perintah Kawalan Pergerakan di seluruh negara. Situasi ini dilihat satu isyarat yang perlu diberikan penekanan khususnya oleh politeknik-politeknik yang menawarkan Kursus *Digital Entrepreneurship Development* kepada pelajar-pelajar mereka. Dengan inisiatif dan

pendedahan yang meluas kepada pelajar-pelajar dalam kursus ini secara tidak langsung dapat membantu mereka daripada terus bergantung kerja dengan majikan.

Politeknik Merlimau antara politeknik yang turut menawarkan Kursus *Digital Entrepreneurship Development* kepada pelajar yang mengambil Program Diploma Pengajian Perniagaan (DPM). Laporan Kajian Pengesanan Graduan TVET tahun 2019 Politeknik Merlimau memberikan dapatan tiada pelajar dari program DPM yang terlibat sepenuhnya dalam bidang keusahawanan (KPT, 2020) walaupun mereka ini telah didedahkan dengan kursus keusahawanan digital. Keadaan ini sangat membimbangkan memandangkan sasaran KPT sebanyak 5% graduan bekerja sendiri perlu dipenuhi. Atas alasan ini, satu kajian telah dijalankan untuk melihat adakah pembelajaran keusahawanan digital iaitu melalui kursus *Digital Entrepreneurship Development* dapat membantu pelajar-pelajar dari aspek kesedaran dan kemahiran dalam keusahawanan.

1.2 Objektif Kajian

- 1.2.1 Menenalpasti pembelajaran keusahawanan digital dapat meningkatkan tahap kesedaran dan kemahiran keusahawanan pelajar.
- 1.2.2 Menenalpasti terdapat perbezaan yang signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan jantina.
- 1.2.3 Menenalpasti terdapat perbezaan yang signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan pengalaman keusahawanan.

1.3 Persoalan Kajian

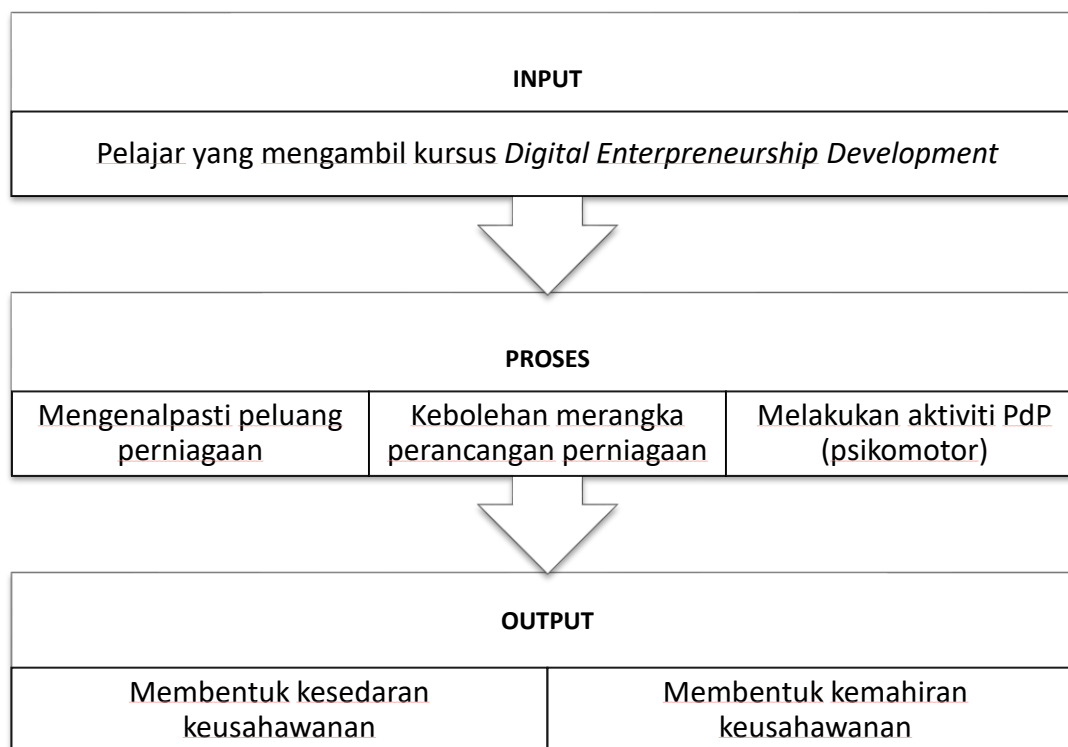
- 1.3.1 Apakah tahap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital?
- 1.3.2 Adakah terdapat perbezaan yang signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan jantina?
- 1.3.3 Adakah terdapat perbezaan yang signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan pengalaman keusahawanan?

1.4 Hipotesis

- 1.4.1 H₀ - Tidak terdapat perbezaan signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan jantina.
H₁ - Terdapat perbezaan signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan jantina.
- 1.4.2 H₀ - Tidak terdapat perbezaan signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan pengalaman keusahawanan.

H1 - Terdapat perbezaan signifikan terhadap kesedaran dan kemahiran keusahawanan pelajar dalam pembelajaran keusahawanan digital berdasarkan pengalaman keusahawanan.

1.5 Kerangka Kajian



Kerangka konsep adaptasi daripada Mohd Hafeez Al –Amin (2013)

2. Sorotan Kajian

Aktiviti keusahawanan menjadi nadi utama terhadap pembangunan ekonomi negara. Pendidikan dalam bidang keusahawanan merupakan satu perkara yang penting kerana bukan sahaja ia membantu menyediakan kemahiran yang diperlukan malah dapat membantu seseorang usahawan itu menguruskan perniagaan dan membantu perniagaan baru. Kementerian Pengajian Tinggi telah melancarkan dasar pembangunan keusahawanan Institut Pengajian Tinggi yang bertujuan menggalakkan pendidikan dan pembangunan keusahawanan yang lebih terancang dan holistik dalam kalangan Institut Pengajian Tinggi. Kenyataan ini juga disokong dengan dapatan oleh NorFadhilah (2010), bahawa secara keseluruhannya pelajar bersikap positif terhadap kerjaya keusahawanan namun mereka tidak mempunyai minat untuk menjadi seorang usahawan.

Kajian yang telah dijalankan oleh Che Rugayah dan Noor Hanisa (2013) yang bertajuk Penggunaan Model Kecerdasan Emosi Goleman: Kesesuaiannya Dalam Konteks Pendidikan Keusahawanan memberikan dapatan bahawa keusahawanan boleh diajar dan memberi kesan yang positif kerana dalam pendidikan keusahawanan peranan utama adalah untuk memberi kesedaran dan penerimaan kepada seseorang. Manakala dapatan kajian oleh Mahani dan Suraiya (2020) dalam kajian mengenai Pengetahuan, Sikap dan Kesedaran

Pendorong Tingkah Laku Inovasi Pembungkusan Usahawan Mikro mendapati kesedaran, pengetahuan dan sikap seseorang usahawan itu dapat dilihat setelah mereka menerima bimbingan. Selain itu, kajian oleh Siti Syuhada, Muhammad Firdaus & Suhaila Nadzri (2015) melihat para siswazah perlu diberi bantuan mengenai kesedaran keusahawanan untuk mereka mengenalpasti kompetensi yang relevan dan utama di mana secara tidak langsung akan mengajar mereka untuk merangka dan merancang strategi jangka panjang untuk lebih berjaya walau dalam budaya atau masyarakat yang berbeza.

Kajian yang telah dijalankan oleh Zaidatul Akmaliah, Abd, Rahim dan Mohd Majid (2002) terhadap pelajar tingkatan 4 di sekolah menengah di Malaysia iaitu terdiri daripada 1336 orang pelajar dari negeri Perak, Kelantan, Johor dan Sarawak mendapati pelajar sekolah menengah yang dilihat mempunyai potensi, sikap dan ciri-ciri yang tinggi dalam keusahawanan akan membantu mewujudkan kesedaran serta menjadikan bidang keusahawanan sebagai satu alternative untuk mereka memilih sebagai kerjaya.

Kemahiran Keusahawanan merupakan minat dan keupayaan untuk meneroka peluang dan membangunkan kesedaran terhadap risiko, kreativiti dan inovasi dalam aktiviti berkaitan perniagaan dan pekerjaan. Kegiatan keusahawanan merupakan satu proses memupuk dan melahirkan pelajar dengan budaya berniaga (KPT, 2006). Kajian yang telah dilaksanakan oleh Ramayah dan Harun (2005), mendapati responden yang menghadiri kursus dan latihan dalam bidang keusahawanan mempunyai tahap efikasi sendiri dan kecenderungan keusahawanan yang tinggi berbanding mereka yang tidak mengambil kursus keusahawanan. Perkara ini disokong oleh kajian Fauzi (2014) yang menyatakan bahawa untuk menjadi seorang usahawan yang berjaya perlulah mempunyai minda yang kreatif supaya dapat mencipta sesuatu yang baharu. Seterusnya elemen membina jaringan sosial, di mana usahawan perlu mempunyai kemahiran mengenai jaringan sosial untuk meluaskan perniagaan yang dijalankan. Dengan adanya bantuan jaringan sosial perniagaan ianya dapat memastikan perniagaan yang dimiliki dikenali ramai dan mendapat sambutan dari perniagaan-perniagaan lain untuk menjalinkan usahasama untuk mencapai kejayaan dalam perniagaan (KPM, 2010).

Kajian yang dijalankan di Sekolah Menengah Kebangsaan Agama yang menjalankan program Tunas Niada mendapati pemikiran pelajar dapat diubah kepada ingin menjalankan perniagaan sendiri sekiranya pelajar tersebut memiliki kemahiran keusahawanan. Kemahiran keusahawanan dapat menentukan sama ada mereka memahami bidang yang bakal diceburi atau sebaliknya. (Wan Mohd Zaifurin, 2016). Selaras dengan kajian Abdul Aziz (2000), kemahiran merupakan pendidikan formal yang telah diperkembangkan melalui latihan yang sesuai dan pengalaman yang diperolehi daripada kerja yang pernah dilakukan ketika belajar ataupun praktikal. Hasil kajian ini menyamai penemuan Oguntimehin & Olaniran (2017) mendapati mahasiswa universiti Nigeriayang mempunyai kemahiran keusahawanan cenderung menceburkan diri ke dalam kerjaya keusahawanan. Kajian terdahulu yang dijalankan oleh Mazlina & Maitilee (2015) juga mendapati mahasiswa perakaunan yang mengambil kursus keusahawanan di tiga buah universiti awam di Lembah Klang Malaysia cenderung bekerja sebagai usahawan kerana mereka mempunyai kemahiran keusahawanan.

Penerapan ciri-ciri penting yang perlu ada pada seseorang usahawan itu iaitu sifat berdikari, yakin diri, mencari maklum balas, desakan supaya berjaya dan kerja secara berpasukan (Nor Ain, 2016). Ciri-ciri ini bukanlah sesuatu yang diwarisi semenjak seseorang itu dilahirkan tetapi ia dapat dipelajari dan dibangunkan. Hal ini disokong oleh Kamsah & Zakaria (2008) yang menyatakan bahawa seseorang usahawan tidak

dilahirkan secara semula jadi ianya boleh dibentuk, di beri motivasi dan ditanam minat untuk bagi memulakan sesuatu perniagaan. Setiap individu mempunyai potensi tertentu yang boleh dikenalpasti, dicungkil dan dikembangkan melalui program latihan hingga menjadi seorang usahawan. Hasil dapatan analisis Ujian-t mendapati, bahawa terdapat perbezaan tahap kecenderungan menjadi usahawan berdasarkan faktor jantina. Pelajar perempuan mempunyai skor min yang lebih tinggi iaitu 4.139, berbanding pelajar lelaki iaitu 3.913. Oleh itu, dapat disimpulkan bahawa pelajar perempuan mempunyai tahap kecenderungan yang lebih tinggi untuk menjadi usahawan berbanding pelajar lelaki. Hasil kajian ini disokong oleh Azira dan Nazrun (2012), dengan menyatakan bahawa ramai pelajar perempuan berminat untuk menceburi bidang keusahawanan berbanding dengan pelajar lelaki.

Kajian Suaibah, Azlah, Rozeyta, Hishamuddin dan Syaharizatul Noorizwan (2007) menyatakan, wanita pada hari ini telah mempamerkan kebolehan, keupayaan dan kemampuan dalam bidng masing - masing bagi menunjukkan bahawa kedudukan dan kemampuan wanita telah setanding dengan kaum lelaki. Selain itu, penglibatan wanita dalam perniagaan juga menunjukkan peningkatan yang memberangsangkan. Hasil daripada penemuan Suruhanjaya Syarikat (2001) menunjukkan bilangan wanita yang terlibat dalam bidang perniagaan menunjukkan angka yang amat menggalakkan. Manakal Zulkifli (1996) yang telah melaksanakan satu kajian terhadap pelatih IKM untuk melihat kecenderungan pelajar dalam bidang keusahawanan mendapati bahawa pelajar lelaki melihatkan kecenderungan meminati bidang keusahawanan berbanding pelajar perempuan.. Hasil dapatan kajian ini disokong dengan dapatan Syaripah Kamaliah (1996), yang mendapati ciri-ciri keusahawanan pelajar perempuan secara keseluruhannya lebih tinggi daripada pelajar lelaki.

Kajian yang dilakukan oleh Norfadhilah dan Nasharudin (2010) menemukan dapatan bahawa minat terhadap kerjaya keusahawanan dipengaruni oleh bangsa dan kalangan ahli keluarga pelajar yang menceburi bidang keusahawanan akan turut mempengaruhi minat pelajar itu sendiri untuk menjadikan keusahawanan sebagai kerjaya mereka. Dorongan ibu bapa merupakan salah satu cara memberikan sokongan kepada pelajar supaya memilih dan melibatkan diri dalam aktiviti keusahawanan. Ibu bapa memikul tanggungjawab memainkan peranan memberi dorongan dan rangsangan untuk menyokong penyertaan pelajar menuju ke arah bidang keusahawanan. Kecenderungan boleh timbul apabila pelajar tertarik kepada sejauh mana ibu bapa komited terhadap peranan membina perkembangan kerjaya mereka secara optimum. Ibu bapa memberi tumpuan kepada perkara yang menarik mengenai kerjaya usahawan boleh menimbulkan keinginan pelajar untuk mengetahui lebih lanjut bidang keusahawanan. Secara tidak langsung pelajar akan bergiat aktif dalam bidang keusahawanan kerana sesuai dengan kehendak atau merasa sesuatu yang akan dipelajari amat bermakna bagi dirinya (Wan Mohd Zaifurin, Nor Hayati, Sabri dan Ibrahim, 2016). Dapatan ini selari dengan kajian yang dijalankan oleh Shujahat, Wei dan Wenjun (2012) terhadap pelajar kolej di dua buah nega iaitu Pakistan China, di mana pengalaman kerja tidak memainkan pengalaman penting dalam mempengaruhi seseorang itu menjadi seorang usahawan yang dijalankan tetapi latarbelakang perniagaan keluarga memberikan impak positif hanya kepada para pelajar dari negara Pakistan.

Hasil kajian Sabree (2002) mendapati anak kepada usahawan mempunyai kecenderungan lebih untuk menjadi usahawan. Ini mungkin terjadi kerana faktor pendedahan semenjak dari kecil lagi. Persepsi anak tersebut tentang keusahawanan sudah tentu dipengaruhi oleh pemikiran bapanya. Pendedahan harian kepada aktiviti berniaga

tentunya boleh menimbulkan minat seseorang terhadap bidang perniagaan. Pendedahan sedemikian membolehkan seseorang dapat melihat, memahami dan menghayati segalanya tentang kegiatan keusahawanan dan jatuh hati kepada bidang keusahawanan bersesuaian dengan anggapan tak kenal maka tak cinta. Selain itu, kajian yang dijalankan oleh Wan Mohd Zaifurin dan Ibrahim (2019) model peranan menjadi sumber inspirasi kepada pelajar yang terlibat dalam kelab keusahawanan sekolah terhadap kerjaya keusahawanan. Kajian ini mendapati model ibu bapa pelajar berkenaan menjadi model yang berperanan penting dalam mempengaruhi kecenderungan anak-anak mereka supaya menceburi kerjaya keusahawanan. Oleh yang demikian, kejayaan pelajar kelab keusahawanan ini yang cenderung memilih kerjaya keusahawanan dipengaruhi oleh ibubapa yang dilihat sebagai model penggerak perubahan minda pelajar tersebut. Kajian ini menyamai penemuan Simone, Holger, Sabine dan Christian (2012) yang mendapati ibu bapa bertindak sebagai model peranan menggalakkan anak-anak mereka menjalankan perniagaan keluarga.

3. Metodologi

Reka bentuk kajian yang akan dilaksanakan adalah berbentuk tinjauan, iaitu dengan menggunakan kaedah borang soal selidik yang akan diedarkan kepada pelajar-pelajar Politeknik Merlimau Melaka. Kajian ini juga berbentuk kajian deskriptif dan infrensi yang bertujuan untuk mengkaji pembelajaran keusahawanan digital dapat membantu pelajar-pelajar dari aspek kesedaran dan kemahiran dalam keusahawanan. Pengumpulan data dilakukan melalui dua kaedah iaitu menggunakan data sekunder dan data primer. Dalam kajian ini, data primer diperolehi dengan menggunakan borang soal selidik yang dibina terdiri daripada beberapa bahagian yang dikemukakan kepada responden berdasarkan kepada objektif kajian. Manakala data sekunder pula diperolehi melalui sumber internet, buku rujukan dan akhbar on line untuk mencari sumber rujukan dan artikel.

Populasi kajian ini adalah bilangan pelajar yang mengambil kursus *Digital Entrepreneurship Development* bagi sesi Jun 2019 dan Disember 2019 di Politeknik Merlimau Melaka iaitu seramai 110 orang. Daripada populasi tersebut sebanyak 88 orang pelajar telah dipilih sebagai sampel dan responden mengikut bilangan dalam jadual Krejcie and Morgan (1970). Kaedah yang digunakan bagi menentukan bilangan sampel dan responden adalah melalui cara persampelan rawak mudah. Responden akan menjawab berdasarkan Skala Likert (Rujuk Jadual 1). Manakala untuk mendapatkan kesahihan soal selidik, kami telah mengedarkan 30 borang soal selidik kepada bukan responden sebenar kajian sebagai *pilot test*. Ia bertujuan untuk mendapatkan maklum balas tentang soalan kajian. Di dalam kajian ini, kebolehpercayaan soal selidik dianalisis mengikut objektif dan berikut adalah nilai *Alpha Cronbach* yang diperolehi bagi keseluruhan objektif (0.889). Ini menunjukkan soal selidik dalam kajian ini mempunyai kebolehpercayaan yang tinggi.

Jadual 1 Menunjukkan Markat, Skala Likert, dan Penyataan.

Markat	1	2	3	4
Skala Penyataan	Sangat Tidak Setuju	Tidak Setuju	Setuju	Sangat Setuju

Namun begitu, tafsiran nilai min yang diperolehi adalah mengikut jadual 2 dan tafsiran min menggunakan min tertinggi, terendah dan sederhana untuk setiap pembolehubah yang dipilih. Tambahan lagi, kami membuat Ujian-t untuk melihat

perbezaan dari segi min bagi objektif perbezaan pelajar jantina lelaki dengan pelajar perempuan.

Jadual 2 Skor Min dan Tahap Tafsiran Min

SKOR MIN	TAFSIRAN
1.00 – 2.00	Rendah
2.01 – 3.00	Sederhana
3.01 – 4.00	Tinggi

Zainudin, Meor Ibrahim, Megat Aman Zahir dan Mohd Ali Ibrahim dalam Abdull Sukor, Ab Aziz dan Mohd Khan Jamal (2007)

4. DAPATAN PERSOALAN KAJIAN

4.1 Analisis Dapatan Kajian Bahagian I (Latar Belakang)

Bahagian ini melaporkan analisis latar belakang responden yang terdiri daripada jantina, semester, bidang perniagaan, pengalaman keusahawanan dan hasil pendapatan sepanjang terlibat dalam keusahawanan digital. Kategori jantina responden iaitu 23.9% adalah daripada responden lelaki dan sebanyak 76.1% adalah daripada responden perempuan. Manakala bidang perniagaan pula bidang perniagaan makanan lebih tinggi berbanding dengan bidang perniagaan yang lain iaitu nilai kekerapan bagi bidang perniagaan makanan mencatatkan sebanyak 35, fesyen mewakili 12 responden, kecantikan dan kesihatan sebanyak 6 responden, aksesori mewakili 9 responden, pakaian mewakili 7 manakala bidang perniagaan lain-lain pula nilai kekerapannya adalah 19. Taburan responden mengikut semester iaitu sebanyak 48 responden daripada semester 5, 40 responden pula daripada semester 6. Bagi data tentang pengalaman memperolehi pengalaman keusahawanan pula, peratusan yang paling tinggi adalah daripada pengalaman sendiri iaitu 52.3% pelajar mendapat pengalaman keusahawanan berbanding dengan pengalaman daripada keluarga dan kawan-kawan iaitu 29.5% dan 18.2%. Maklumat yang terakhir bagi analisis latar belakang adalah hasil pendapatan sepanjang terlibat dalam keusahawanan digital. Nilai peratusan yang paling tinggi adalah bagi hasil pendapatan di antara RM 101 hingga RM 500 iaitu seramai 49 orang pelajar mewakili 55.7%. Hasil yang paling rendah bilangannya adalah pada tahap pendapatan RM 100 ke bawah iaitu seramai 9 orang pelajar. Terdapat juga pelajar yang memperolehi hasil pendapatan antara RM 501 hingga RM 1001 ke atas iaitu seramai 30 orang pelajar. Ini menunjukkan pembelajaran digital keusahawanan dapat membantu pelajar memperolehi pendapatan tambahan.

4.2 ANALISIS DAPATAN KAJIAN BAHAGIAN II (OBJEKTIF KAJIAN)

4.2.1 Analisis Objektif 1a: Kesedaran Keusahawanan

Pada keseluruhannya, skor min bagi kesedaran keusahawanan berada pada tahap yang tinggi dalam tafsiran iaitu 3.17 hingga 3.48. Kebanyakan item mendapat nilai skor min

lebih dari 3.00. Manakala nilai min keseluruhan item untuk objektif 1 adalah 3.28. Ini menunjukkan bahawa pada keseluruhannya tahap kesedaran keusahawanan terhadap pembelajaran keusahawanan digital dalam kalangan pelajar mempunyai tahap yang tinggi.

Jadual 3 Analisis Min bagi Kesedaran Keusahawanan

NO	ITEM SOALAN	SKOR MIN	TAFSIRAN
1.	Saya mula sedar kelebihan menjadi usahawan selepas mengikuti kursus ini.	3.33	Tinggi
2.	Saya sedar bahawa kepentingan bidang keusahawanan yang tinggi dapat menjayakan sesuatu perniagaan.	3.48	Tinggi
3.	Kursus ini telah dapat membantu saya dalam memperkembangkan tahap pengetahuan dan pendedahan terhadap bidang keusahawanan.	3.42	Tinggi
4.	Saya berasa lebih cenderung untuk berhadapan dengan sebarang cabaran.	3.17	Tinggi
5.	Saya akan merebut peluang perniagaan apabila wujudnya permintaan terhadap sesuatu barang atau perkhidmatan	3.32	Tinggi
6.	Saya mampu memadankan peluang-peluang perniagaan dengan kebolehan dan kemampuan diri menggunakan sumber-sumber yang ada.	3.23	Tinggi
7.	Selepas mengikuti kursus ini, saya mempunyai nilai-nilai keusahawanan dalam diri saya.	3.23	Tinggi
8.	Saya menjalankan perniagaan berorientasikan keuntungan dalam mencapai kecemerlangan kehidupan dan bukan kerana tarikan oleh pensyarah.	3.17	Tinggi
9.	Saya menjalankan perniagaan berorientasikan keinginan sendiri dan bukan atas paksaan.	3.31	Tinggi
10.	Selepas mengikuti kursus ini, saya lebih komited kepada kerja saya.	3.20	Tinggi
11	Saya mampu mencapai kebebasan dan kepuasan jika menjalankan perniagaan sendiri.	3.25	Tinggi
12	Saya sanggup bekerja lebih kuat untuk menjadi usahawan yang berjaya.	3.33	Tinggi
13	Walaupun banyak halangan semasa menjalankan perniagaan, saya tidak mudah putus asa.	3.22	Tinggi
14	Dengan ketahanan mental yang tinggi, saya mampu menghadapi segala cabaran.	3.24	Tinggi

NO	ITEM SOALAN	SKOR MIN	TAFSIRAN
15	Saya yakin untuk menjadi usahawan selepas tamat pengajian.	3.22	Tinggi
Skor min dan tafsiran keseluruhan		3.28	Tinggi

SKALA LIKERT

STS = Sangat Tidak Setuju, TS = Tidak Setuju, S = Setuju, SS = Sangat Setuju

4.2.2 Analisis Objektif 1b: Kemahiran Keusahawanan

Skor min bagi kemahiran keusahawanan adalah dari 3.00 hingga 3.25. Ksemua item solaselidik memperoleh skor min 3.00 ke atas. Bagi item soalan saya boleh menjadikan diri saya berani untuk mengorak langkah dalam bidang perniagaan mempunyai nilai min yang paling tinggi iaitu 3.25. Secara keseluruhannya, objektif bagi kemahiran keusahawanan mendapat nilai min 3.16. Ini menunjukkan bahawa pada keseluruhannya kemahiran keusahawanan mempunyai tahap yang tinggi.

Jadual 4 Analisis Min bagi Kemahiran Keusahawanan

NO	ITEM SOALAN	SKOR MIN	TAFSIRAN
1.	Selepas mengikuti kursus ini, saya dapat menyelesaikan sesuatu masalah dengan cara yang berbeza.	3.19	Tinggi
2.	Saya mampu menyelesaikan masalah pelanggan saya tanpa bantuan orang lain.	3.00	Sederhana
3.	Selepas mengikuti kursus ini, saya dapat membuat keputusan dengan lebih kreatif.	3.20	Tinggi
4.	Selepas mengikuti kursus ini, saya dapat menjana idea produk yang kreatif dan inovatif.	3.20	Tinggi
5.	Saya dapat meningkatkan produktiviti dalam pengurusan perniagaan saya sendiri.	3.18	Tinggi
6.	Saya dapat berfikiran secara kreatif untuk meneroka bidang-bidang baru yang belum dilakukan oleh orang lain.	3.16	Tinggi
7.	Saya dapat berusaha dengan lebih keras bagi menjadikan perniagaan saya lain dari yang lain.	3.14	Tinggi
8.	Selepas mengikuti kursus ini, saya dapat menghasilkan produk yang mampu memenuhi permintaan pengguna.	3.10	Tinggi
9.	Saya dapat memperkenalkan perniagaan kepada para pengguna dengan kreativiti tersendiri.	3.18	Tinggi

NO	ITEM SOALAN	SKOR MIN	TAFSIRAN
10.	Saya mampu mempelbagaikan produk jualan saya agar ianya berbeza dari orang lain.	3.20	Tinggi
11.	Selepas mengikuti kursus ini, saya yakin dengan kebolehan dan kemampuan diri sendiri.	3.23	Tinggi
12.	Saya juga boleh berurusan dengan pelbagai pihak seperti kakitangan, pelanggan dan institusi kewangan.	3.13	Tinggi
13.	Saya juga tidak takut untuk mencuba sesuatu dan tidak takut untuk gagal.	3.15	Tinggi
14.	Selepas mengikuti kursus ini, saya dapat memupuk minat yang berterusan untuk meneruskan perniagaan yang telah dijalankan.	3.15	Tinggi
15.	Saya boleh menjadikan diri saya berani untuk mengorak langkah dalam bidang perniagaan.	3.25	Tinggi
Skor min dan tafsiran keseluruhan		3.16	Tinggi

SKALA LIKERT

STS = Sangat Tidak Setuju, TS = Tidak Setuju, S = Setuju, SS = Sangat Setuju

4.2.3 Analisis Objektif 2: Perbezaan Pelajar Lelaki Dengan Pelajar Perempuan

Keputusan Ujian-t dalam jadual di bawah menunjukkan tidak wujud perbezaan yang signifikan terhadap kemahiran keusahawanan digital dalam kalangan pelajar berdasarkan jantina. Manakala berdasarkan hasil Ujian-t, nilai aras signifikan yang diperolehi bagi pembolehubah adalah $p(0.610) > 0.05$. Maka H_0 diterima. Ini bermakna tidak wujudnya perbezaan yang signifikan bagi kesedaran dan kemahiran keusahawanan digital dalam kalangan pelajar lelaki dan pelajar perempuan. Kesimpulan dibuat pada tahap keyakinan 95% iaitu pada aras signifikan $\alpha = 0.05$. Hal ini juga boleh dilihat melalui perbezaan skor min di antara pelajar lelaki dan pelajar perempuan dalam jadual 5 yang begitu ketara iaitu 97.29 dan 96.34.

Jadual 5 Keputusan Ujian-t

BIL	JABATAN	N	MIN	SD	NILAI - t	TAHAP SIGNIFIKAN
1.	Lelaki	21	97.29	6.83	0.511	0.610
2.	Perempuan	67	96.34	7.52		

4.2.4 Analisis Objektif 3: Perbezaan Pengalaman Keusahawanan

Berdasarkan jadual 6, didapati tidak terdapat perbezaan yang signifikan skor min terhadap tahap kesedaran dan tahap kemahiran keusahawanan dengan pengalaman keusahawanan ($F(2,85) = 0.795$; $p > 0.05$). Tahap kesedaran dan tahap kemahiran keusahawanan bagi keluarga sebagai pengalaman keusahawanan ($M=95.12$, $S.P = 7.04$) lebih rendah berbanding dengan diri sendiri sebagai pengalaman keusahawanan ($M = 97.39$, $S.P = 8.23$) dan kawan-kawan sebagai pengalaman keusahawanan ($M = 96.56$, $S.P = 4.55$). Walaubagaimanapun, skor min yang diperolehi bagi ketiga-tiga pengalaman keusahawanan adalah tidak berbeza secara signifikan. Walaupun keputusan ujian ANOVA Sehalu tersebut adalah signifikan secara statistik, perbezaan sebenar dalam skor min antara kumpulan agak kecil.

Jadual 6 : Taburan Tahap Kesedaran dan Kemahiran Keusahawanan Terhadap Pengalaman Keusahawanan dalam Keusahawanan Digital

Bil	Pengalaman Keusahawanan	N	Skor min	Sisihan Piawai
1.	Keluarga	26	95.12	7.04
2.	Sendiri	46	97.39	8.23
3.	Kawan-kawan	16	96.56	4.55
	Jumlah	88	96.57	7.34

Jadual 7 :Ujian ANOVA Tahap Kesedaran dan Kemahiran Keusahawanan Terhadap Pengalaman Keusahawanan dalam Keusahawanan Digital

Tahap Kesedaran dan Kemahiran Terhadap Pengalaman Keusahawanan	Jumlah Kuasa Dua	Darjah kebebasan	Min Kuasa Dua	Nilai F	Signifikan
Antara Kumpulan	86.04	2	43.02	0.795	0.455
Dalam Kumpulan	4597.55	85	54.09		
Jumlah	4683.59	87			

Jadual 8 : Keputusan Ujian Post Hoc Scheffe Tahap Kesedaran dan Kemahiran Keusahawanan Terhadap Pengalaman Keusahawanan Dalam Keusahawanan Digital

Tahap Kesedaran dan Kemahiran Terhadap Pengalaman Keusahawanan		Perbezaan Min	Ralat Piawai	Signifikan
Keluarga	Sendiri	-2.276	1.80	0.455
	Kawan-kawan	-1.447	2.34	0.826
Sendiri	Keluarga	2.276	1.80	0.455
	Kawan-kawan	0.829	2.13	0.927

Kawan-kawan	Keluarga	1.447	2.34	0.826
	Sendiri	-0.829	2.13	0.927

5. Perbincangan Dan Kesimpulan

5.1 Perbincangan

Merujuk kepada jadual 1 didapati skor min keseluruhan bagi persoalan kajian yang pertama berada pada tahap yang tinggi dalam tafsiran iaitu 3.17 hingga 3.48. Skor min yang diperolehi ini dapat memberikan tafsiran bahawa responden kajian bersetuju dengan pembelajaran keusahawanan digital dapat memberikan mereka kesedaran dalam bidang keusahawanan. Dapatan ini selari dengan kajian oleh Mahani dan Suraiya (2020) mendapati bahawa kesedaran, pengetahuan dan sikap seseorang usahawan itu dapat dilihat setelah mereka menerima bimbingan. Adalah menjadi satu keperluan untuk memastikan kesedaran keusahawanan itu wujud dalam kalangan golongan muda khususnya, pendedahan awal seperti penganjuran program-program keusahawanan atau pendidikan keusahawanan perlu di perkenalkan seawal mungkin dalam usaha untuk mengurangkan penggangguran dan meningkatkan usaha untuk menceburi bidang keusahawanan . Bertepatan dengan kajian Siti Syuhada, Muhammad Firdaus & Suhaila Nadzri (2015) melihat para siswazah perlu diberi bantuan mengenai kesedaran keusahawanan untuk mereka mengenalpasti kompetensi yang relevan dan utama di mana secara tidak langsung akan mengajar mereka untuk merangka dan merancang strategi jangka panjang untuk lebih berjaya.

Respon kajian juga bersetuju sekiranya mereka menceburi bidang keusahawanan selepas tamat pengajian, mereka akan rasa kepuasan dan kebebasan. Ini mungkin kerana tanpa menjadikan satu-satu bidang itu sebagai pembelajaran wajib dalam kurikulum, ia dilihat tidak akan dapat membantu seseorang pelajar untuk memahami dan menghayati bidang tersebut. Sangat bertepatan apabila keusahawanan digital ini diperkenalkan kepada pelajar kerana dengan mempelajari secara formal iaitu melibatkan penilaian-penilaian tertentu bagi membolehkan pelajar-pelajar ini lulus dengan cemerlang, ia secara tidak langsung memberikan ilmu yang baru kepada mereka. Pelajar akan sedaya upaya untuk menguasai dengan sepenuhnya dan sebaik mungkin ilmu keusahawanan ini bagi membolehkan mereka mendapat gred yang terbaik. Situasi ini secara tidak langsung akan memberikan satu kesedaran keusahawanan kepada pelajar berkenaan. Selari dengan dapatan kajian oleh Che Rugayah dan Noor Hanisa (2013) yang melihat bahawa keusahawanan boleh diajar dan memberi kesan yang positif kerana dalam pendidikan keusahawanan peranan utama adalah untuk memberi kesedaran dan penerimaan kepada seseorang.

Hasil dapatan bagi kemahiran keusahawanan menunjukkan skor min yang tinggi bagi kemahiran keusahawanan iaitu dari 3.00 hingga 3.25. Ia jelas memberi maksud bahawa dengan pembelajaran keusahawanan digital dapat memberikan mereka kemahiran keusahawanan. Ramayah dan Harun (2005), mendapati responden yang menghadiri kursus dan latihan dalam bidang keusahawanan mempunyai tahap efikasi sendiri dan kecenderungan keusahawanan yang tinggi berbanding mereka yang tidak mengambil kursus keusahawanan. Dengan memberikan sesuatu ilmu itu, ianya dapat membantu seseorang menambah kemahiran dalam satu-satu bidang. Selaras dengan kajian Abdul Aziz (2000), kemahiran merupakan pendidikan formal yang telah diperkembangkan melalui latihan yang sesuai dan pengalaman yang diperolehi daripada kerja yang pernah dilakukan ketika belajar

ataupun praktikal. Responden juga bersetuju bahawa setelah mempelajari kursus keusahawanan ini ianya dapat membantu meningkatkan produktiviti dalam pengurusan perniagaannya kelak. Di samping itu, ianya juga dapat membantu menjana idea produk yang kreatif dan inovatif. Responden juga dapat menambahkan kemahiran dalam menghasilkan produk yang mampu memenuhi permintaan pengguna apabila terlibat dalam kursus ini.

Dalam kursus keusahawanan digital ini, memerlukan pelajar sepenuhnya membuat jualan secara individu. Keadaan ini mungkin dilihat sebagai penyebab utama kepada pelajar memberikan respon positif bahawa pembelajaran keusahawanan digital dapat memberikan mereka kemahiran. Setiap penggunaan media sosial dalam membantuan penjualan diajar dengan sepenuhnya di samping pelaporan pendapatan jualan menjadi aspek utama dibuat pemantauan berkala oleh pensyarah. Kemahiran-kemahiran ini sangat membantu pelajar dalam berdepan dengan pengalaman memilih kerjaya keusahawanan setelah tamat pengajian. Bersesuaian dengan dapata oleh Ramayah dan Harun (2005), mendapati responden yang menghadiri kursus dan latihan dalam bidang keusahawanan mempunyai tahap efikasi sendiri dan kecenderungan keusahawanan yang tinggi berbanding mereka yang tidak mengambil kursus keusahawanan. Bagi persoalan kajian yang kedua pula, keputusan *t-test* dalam jadual di bawah menunjukkan tidak wujud perbezaan yang signifikan terhadap kesedaran dan kemahiran keusahawanan dalam keusahawanan digital bagi pelajar berdasarkan jantina iaitu pelajar lelaki dan perempuan. Oleh itu jelas menunjukkan sememangnya pelajar lelaki dan perempuan memberikan satu persepsi yang sama. Dapatan ini mungkin disebabkan pelajar lelaki dan perempuan menerima cara pembelajaran yang sama, kaedah penilaian pembelajaran yang sama serta mereka berkongsi idea dan pengalaman melaksanakan jualan secara bersama.

Faktor lain mungkin membantu dapatan bagi persoalan dalam kajian ini, di mana setaip pelajar perlu membuat jualan bagi produk yang berbeza. Oleh yang demikian, tidak timbul persoalan di mana mereka perlu bersaing sesama sendiri. Kesedaran dan kemahiran yang mereka miliki dikongsi bersama bagi mencapai matlamat untuk membuat jualan yang tinggi. Dengan jualan yang tinggi inilah akan melayakkan mereka memperolehi markah yang cemerlang. Hasil dapatan ini bercanggah dengan dapatan kajian oleh Azira dan Nazrun (2012), dengan menyatakan bahawa ramai pelajar perempuan berminat untuk menceburi bidang keusahawanan berbanding dengan pelajar lelaki. Namun begitu dapatan kajian disokong oleh kajian Nor Ain (2016) penerapan ciri-ciri penting yang perlu ada pada seseorang usahawan itu iaitu sifat berdikari, yakin diri, mencari maklum balas, desakan supaya berjaya dan kerja secara berpasukan.

Persoalan kajian yang ketiga merumuskan bahawa tidak terdapat perbezaan yang signifikan terhadap tahap kesedaran dan kemahiran keusahawanan dengan pengalaman keusahawanan. Dari aspek keluarga, sendiri dan kawan-kawan, aspek diri sendiri yang lebih memberikan dapatan yang positif iaitu pengalaman keusahawanan adalah datang dari dalam diri mereka sendiri. Ini mungkin adalah kerana responden kajian bukan dari latarbelakang keluarga yang terlibat dalam perniagaan. Ia menyamai dengan hasil kajian Sabree (2002) mendapati anak kepada usahawan mempunyai kecenderungan lebih untuk menjadi usahawan. Ini mungkin terjadi kerana faktor pendedahan semenjak dari kecil lagi. Oleh itu, mereka merasakan kesedaran dan kemahiran yang mereka terima dalam bidang keusahawanan terhasil daripada pembelajaran mereka dalam kursus keusahawanan digital ini.

Keadaan ini juga memungkinkan mereka lebih memahami konsep dan pelaksanaan keusahawanan itu sendiri, pembelajaran keusahawanan digital kerana memerlukan mereka terlibat secara langsung dalam penjualan produk secara maya. Dapatan ini tidak selari dengan kajian oleh Wan Mohd Zaifurin dan Ibrahim (2019) di mana model ibu bapa pelajar dilihat berperanan penting dalam mempengaruhi kecenderungan anak-anak mereka dalam menceburi kerjaya keusahawana. Dapatan yang sama oleh Simone, Holger, Sabine dan Christian (2012) yang mendapati ibu bapa bertindak sebagai model peranan menggalakkan anak-anak mereka menjalankan perniagaan keluarga. Di samping itu, memilih kerjaya sebagai seorang usahawan setelah tamat pengajian memerlukan seseorang itu pernah terlibat secara langsung dalam dunia perniagaan. Dari situ ia akan memberikan pengalaman yang sangat bermakna untuk mereka memilih menjadi usahawan sebagai kerjaya pilihan utama setelah tamat pengajian. Tanpa penglibatan diri sendiri sepenuhnya agak sukar dan nipis keyakinan diri untuk terlibat secara langsung dalam bidang keusahawanan kerana bidang ini sanagat menuntut kepada kesabaran dan kerja yang bersungguh.

5.2 Kesimpulan

Pembelajaran keusahawanan digital dalam kalangan pelajar dilihat memberikan impak yang sangat baik dari aspek kesedaran dan kemahiran mereka. Usaha berterusan perlu dilakukan bagi memastikan ilmu yang mereka terima dapat dimanfaatkan untuk diri mereka dan juga negara. Usaha murni daripada pihak-pihak yang berkepentingan seharusnya diteruskan memandangkan faedah yang besar dilihat hasil daripada dapatan yang diperolehi. Walaupun dapatan ini tidak menunjukkan realiti ramai pelajar khususnya yang mengambil kursus Digital Entrepreneurship Development menceburkan diri sepenuhnya dalam dunia perniagaan, tetapi secara tidak langsung ilmu yang mereka miliki serta pengalaman yang mereka pelajari dapat membantu mereka menambah pendapatan dengan membuat jualan dalam talian secara kecil-kecilan. Perniagaan dalam talian kini dilihat semakin berkembang pesat. Mereka yang terlibat dengan perniagaan dalam talian ini lebih gemar untuk menjadikan ianya sebagai kerjaya sampingan disebabkan suasana ekonomi kini yang berdepan dengan kemungkinan-kemungkinan yang tidak menentu.

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Higher Institution Students Readiness On Mobile Learning : A Case Study At Politeknik Ungku Omar (PUO)

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Abstract - Ways of learning nowadays are very wide and varied. The teaching and learning process is not only done face to face, but also through online. Following the Covid-19 pandemic situation that hit the whole world, online learning has become a major medium in teaching and learning process. Besides that, there are increasing numbers in Malaysia's population that use the Internet. So, educators should look into the opportunity to integrate mobile learning into the academic programmes at higher institutions. This paper is focuses on basic readiness, technology readiness, psychological readiness and opportunities in mobile learning of students in Politeknik Ungku Omar in relation to mobile learning. The study was carried out to develop a research framework to show the relationship between the independent variable (technology readiness, psychology readiness and opportunity in mobile learning) and dependent variable (mobile learning readiness) under study. Data were collected from a total of 370 students in Politeknik Ungku Omar. Instruments measuring variables used in the study were adapted from the existing instruments. The reliability value of the instruments in the range of 0.750 to 0.812. The findings of the correlation analysis showed that there exists positive relationship between technology readiness, psychology readiness and opportunities on mobile learning readiness. The findings revealed that the students are ready and aware about technological development. In psychology sides, the students are ready to use mobile learning as a way of teaching method. Besides that, students agree that there are a lot of new opportunities that they can get from mobile learning.

Keywords: higher institutions, mobile learning, readiness, technology

1. Introduction

The use of mobile device such as smartphones, tablets, smartwatches, laptop computers, e-readers and handheld gaming consoles are widely used not only for connecting with others, entertainment, play games, social media and many more, but it also has a great prospective to be the effective tool for learning purpose. Several researchers and

practitioners have integrated the technology into their teaching and learning environments due to increasingly used in mobile devices (Park, 2011). According to annual survey done by Malaysian Communications and Multimedia Commission (MCMC) in 2018, smartphone remains the topmost device for accessing the Internet, coming in at 93.1%. The increasing computing power of this device which continues to enable the evolution of new applications and functionalities, has led to the weakening in accessing the Internet via desktop and feature phones. Mobile learning is where the connection of mobile computing and e-learning, with accessible resources wherever you are, strong search capabilities, rich interaction, powerful support for effective learning, and performance-based assessment (Quinn, 2000). This indicates that Malaysian prefer to use smartphone to access the internet to get information and this will be great opportunities for educators to integrate mobile learning in their methods of teaching. In line with this potential of mobile devices in education, much research has been carried out to assess the effectiveness of mobile technology integration with pedagogy (Issam et al., 2016). Supyan et al. (2012) reported that the majority of the respondents have already had the basic necessities to engage in mobile learning and they are highly aware with computing skills. It makes them feel welcome the integration of mobile learning in education. The researcher focuses on basic readiness, budget readiness, psychological readiness and skills readiness of students at two different universities in relation to mobile learning. The findings also show some positive move for both the universities to offer the mobile learning to their students. This is support by study done by Afendi et al. (2012), in which the high score has been given by the respondents to the idea of combination between the existing e-learning platform and mobile learning. This is in line with the view that m-learning should be an addition of e-learning technology employed by the universities. So, it is important to know whether students are ready or not to use mobile learning as their method of learning. This study will focus on the readiness of Politeknik Ungku Omar students in terms of technology readiness, psychology readiness and opportunity in mobile learning.

2. Mobile Learning

Mobile learning (m-learning) is education through the network or internet connection by using personal mobile devices, such as tablets and smartphones to get learning materials through mobile applications, social networking and online educational platform. It is very flexible and convenient that allow students to access to education anywhere and anytime. It is supported by Alexander (2004) that viewed mobile learning as any form of learning that happens when intervened through mobile devices, and a form of learning that established the validity of 'nomadic' learners mobile learning. Therefore, this feature enables students to take advantage of their free time while they are outside the classroom to complete their study and homework (Yusup, Y., 2014). According to Jacob and Isaac (2008), they do a research on the perception towards mobile learning and the results shows that the usage of mobile device among university students as a means to make an effective learning supplement and the subject become more interesting. The introduction of the technology has created new signs, new ways of writing and receiving information, and new ways of transmitting video clips. These activities are rendered new and unique by a similar function which is mobility. Mobile technologies authorized users to benefit from the changes in language and signs that have entered our language and experience in the wake of these new technologies (M. Osman M.E & Johannes, 2010). With those advantages, it is very suitable and useful methods to be taken by educators to teach their students due to outbreak of Covid-19. Due to this pandemic, everyone need to comply with the standard operating procedures (SOP) that have been set by the National Security Council (MKN) to curb the spread of

Covid-19. One of the SOP is to practising physical distancing. This SOP will limit the educators to meet their students through face to face due to limited space in the classroom in which it is impossible to practice physical distancing.

3. Methodology

This study involves 370 respondents, consisting of students of Politeknik Ungku Omar. After the students' survey was collected, the researchers manually go through the questionnaire as to detect any questionnaires that are not complete. The data was then coded and key in into the computer, using the program Statistical Package for Social Science (SPSS) version 18. This study uses the convenience sampling method in obtaining the sample study. The survey consisted of 28 items in three sections composed of Part A, B, C, D, & E. Part A are asking on respondent's profile consisted of four items, regarding their gender, race, semester, department and general information. Part B-E measuring the variables of dependent and independent variables.

The choice of response for each of the item used in the instrument is using the four point Likert Scale; 1= Strongly Disagree, 2= Disagree, 3= Agree and 4= Strongly Agree. Statistical analyses used for the data analysis were descriptive statistics, frequency distribution and correlation analysis. The determination of internal consistency on the index of instrument on the index of instrument is using reliability analysis by obtaining the Cronbach's Alpha coefficient (Cohen and Swerdlik 2002). Bryman and Bell (2003) states that Cronbach's Alpha values were in the range of 0 (indicating no internal reliability) and 1 (indicating internal reliability was perfect). This study used the value of 0.6 and above proposed by Hair et al. (2006).

Pearson correlation coefficient (r) has been used in the study to measure the strength and direction of the relationship between two variables. The value lies between -1 to +1. If $r = 1.0$ or positive value; there is a perfect positive linear relationship. If $r = -1.0$ or negative value; There is a perfect negative linear relationship. No correlation is indicate if $r = 0$. In determining the strength of the relationship, this study used the guideline proposed by Hatcher (2003) as stated below:

No correlation	0.00
Weak correlation	0.01 to 0.49
Medium correlation	0.50 to 0.79
Strong correlation	0.80 to 0.99
Perfect correlation	1

4. Data Analysis and Findings

Demographic Information

Respondents' profile was summarized in Table 1. Majority of respondents are female (60%), while male is 40%. In terms of race, 54.1% were Malay, followed by 31.4% Indian, 12.7% were Chinese and 1.9% from other races. For department background, 47.6% respondents were from Jabatan Perdagangan, JP (Commerce Department), 15.4 % from Jabatan Kejuruteraan Elektrik, JKE (Electrical Engineering Department), both department from Jabatan Kejuruteraan Awam, JKA (Civil Engineering Department) and Jabatan Teknologi Maklumat & Komunikasi, JTMK (Information Technology & Communication

Department) share the same percentage which is 12.7% and 11.6% from Jabatan Kejuruteraan Mekanikal, JKM (Mechanical Engineering Department). Most of the respondents are semester 5 students (35.9%), followed by semester 4 students (33.2%), 18.1% are semester 3 students, 9.5% are semester 2 students and only 3.2% are semester 1 students.

Table 1 : Respondent's Profile

	Item	Number	%
Gender	Male	148	40.0
	Female	222	60.0
Race	Malay	200	54.1
	Chinese	47	12.7
	Indian	116	31.4
	Others	7	1.9
Department	JKM	43	11.6
	JTMK	47	12.7
	JKE	57	15.4
	JKA	47	12.7
	JP	176	47.6
Semester	Sem 1	12	3.2
	Sem 2	35	9.5
	Sem 3	67	18.1
	Sem 4	123	33.2
	Sem 5	133	35.9

According to the analysis on the first category on general information, was asking the respondents whether they have mobile devices or not. The result clearly showed that all 370 (100%) of the respondents have mobile devices. Next, the second category was asking the respondents whether they access the internet through mobile devices or not. The result showed that majority of the respondents do access the internet through mobile devices with the percentage of 98.6% (365 respondents). However, there were only 1.4% (5 respondents) who were not access the internet through mobile devices. The third category was asking the respondents whether they prefer to study online or not. The result revealed that most of the respondents prefer to study online with the percentage of 68.9% (255 respondents). However, there were only 31.1% (115 respondents) who were not prefer to study online. The fourth category was asking the respondents about how long they spend in mobile learning. The result showed that 111 (30.0%) of the respondents spend less than 1 hour, followed by 142 (38.4%) of the respondents spend 1-3 hours and 117 (31.6%) of the respondents spend more than 3 hours. The last category was asking the respondents about the types of network they prefer to use during mobile learning. The result revealed that most of the respondents prefer to use 4G (Fourth Generation) during mobile learning with the percentage of 49.5% (183 respondents), followed by Wi-Fi with the percentage of 43.5% (161 respondents), followed by 3G (Third generation) with the percentage of 5.4% (20 respondents) and there were only 1.6% (6) of respondents prefer to use Ethernet (wired connection) during mobile learning

Table 2 : General Information

Category	Item	Frequency	%
Mobile devices usage	Yes	370	100
	No	0	0
Access the internet through mobile devices	Yes	365	98.6
	No	5	1.4
Online study	Yes	255	68.9
	No	115	31.1
Hours spend in mobile learning	Less than 1 hour	111	30.0
	1-3 hours	142	38.4
	More than 3 hours	117	31.6
Types of network	3G	20	5.4
	4G	183	49.5
	Wi-Fi	161	43.5
	Ethernet	6	1.6

Reliability Analysis

Table 3 shows the results of reliability analysis for 4 variables which are mobile learning readiness, technology readiness, psychology readiness and opportunities in mobile learning. The result from Table 3 indicated that the Cronbach Alpha for the variables were reliable which are above 0.6. The value of each Cronbach Alpha are ranged from 0.750 to 0.812. The result concluded that the measurement scales of the variables were stable to measure the variables under study.

Mobile learning readiness constituted of 6 items with the Cronbach Alpha 0.785; Technology readiness have 6 items with alpha value of 0.750; Psychology readiness have 6 items with alpha value of 0.801 and opportunities in mobile learning constituted of 6 items with the Cronbach Alpha 0.812.

Table 3 : Cronbach's Alpha Coefficients

Variable	Cronbach Alpha
Mobile learning readiness	0.785
Technology readiness	0.750
Psychology readiness	0.801
Opportunities in mobile learning	0.812

Student's mobile learning readiness

Descriptive analysis was prepared to study respondents' readiness for the use of mobile learning in their learning institutions. Table 4 showed the descriptive statistics for respondents mobile learning readiness under the study.

As shown in the results, respondents mostly agreed that mobile learning will make their life easier (mean=3.15). Respondents also agreed that they are ready for mobile learning if the polytechnic implement it now (mean=3.15). This finding shows that respondents want to know more about mobile learning (mean=3.07). In addition, they also consider that mobile learning will bring benefit for them (mean=3.05). Furthermore, not many of the respondents agree that they know what mobile learning is all about (mean=2.91). The

respondents also disagree that they prefer mobile learning than conventional learning (mean=2.90).

In overall, respondents seem agree that they are ready to use mobile learning as their method of learning in which the overall mean is 3.0369. Therefore, respondents can be assumed to be prepared to use of mobile learning as a learning tool in their learning institution which is polytechnic.

Table 4 : Descriptive Statistics of Respondents' Mobile Learning Readiness

Items (Overall mean = 3.0369)	Mean
1 I know what mobile learning is all about	2.91
2 I want to know more about mobile learning	3.07
3 I prefer mobile learning than conventional learning	2.90
4 I think mobile learning is good for me.	3.05
5 Mobile learning will make my life easier	3.15
6 I am ready for mobile learning if the university/polytechnic implements it now.	3.15

Technology Readiness

This descriptive analysis was prepared to study respondents' readiness for technology. Results of the analysis were summarized in Table 5.

As shown in the results, most of the respondents agree that they will keep up with the latest technological developments in their area of interest (mean=3.22). In addition, respondents agree that technologies that have been use in the products and services are far more convenient to use (mean= 3.16). Furthermore, respondents also prefer to use the most advanced learning technology that available in the market (mean=3.12). Respondents agree that they can find out new high-tech products and services without the helps from others (mean=3.12). Some of the respondents also like the idea of using mobile phone for the purpose of learning because they are not limited to regular working hours (mean=3.09). Besides that, respondents can be considered agree due to the mean value of 2.96 in which they agree that technology will give more control over their day-to-day lives.

Overall, respondents are agreeing that they are ready in terms of psychology to use mobile learning as a medium of learning in their institutions (mean=3.1117). This is due to they are able to deal with the new technology and it will bring benefits & convenience to them.

Table 5 : Descriptive Statistics of Technology Readiness

Items (Overall mean = 3.1117)	Mean
1 In my opinion, technology gives people more control over their daily lives	2.96
2 In my point of view, products and services that use the technologies are much more convenient to use.	3.16
3 I like the idea of using mobile phone for the purpose of learning because I am not limited to regular working hours	3.09

4	Students prefer to use the most advanced learning technology available.	3.12
5	Students can usually figure out new high-tech products and services without help from others	3.12
6	In my opinion, students keep up with the latest technological developments in my area of interest.	3.22

Psychology Readiness

Descriptive analysis was also prepared to study respondents' psychology readiness towards mobile learning in their learning institutions. Results of the analysis were brief in Table 6.

As can be notice, respondents mostly agree that some of their lecturer are ready to integrate mobile learning in their teaching method (mean=3.15). They are also agreeing that mobile learning can be an alternative medium rather than web based learning (mean=3.11). Furthermore, respondents agree that polytechnic is ready for mobile learning by using hand phone facilities (3.08). In addition, respondents agree that their learning time will be save if they use mobile learning (mean=3.03). Respondents wants their lecturer to integrate mobile learning in their class in addition to face-to-face meetings in the class (mean=2.99). However, respondents seem like disagree that they don't mind to pay extra money for mobile learning (mean=2.52).

Nonetheless, with an overall mean of 2.9802 which is consider very close to agree statement, it shows that respondents are psychologically ready to integrate mobile learning as their methods of learning in their learning institutions.

Table 6 : Descriptive Statistics of Psychology Readiness

Items	Mean
(Overall mean = 2.9802)	
1 I don't mind paying extra money for mobile learning	2.52
2 I would like my lecturer to integrate mobile learning in my class in addition to face-to-face meetings in the class.	2.99
3 Mobile learning will save my learning time.	3.03
4 In my perception, mobile learning is an alternative to web based learning.	3.11
5 I think my polytechnic is ready for mobile learning using hand phone facility.	3.08
6 Some of my lecturers are already integrating mobile learning in their teaching.	3.15

Opportunities in mobile learning

Descriptive analysis was also done to study respondents' readiness to take opportunities for the use of mobile learning in their learning institutions. Results of the analysis were summarized in Table 7.

Most of the respondents agree that mobile learning is possible to achieve personal educational aims (mean=3.22). This finding also indicate that respondents can get feedback from lecturers more quickly than before (3.16). Respondents also agree that mobile learning is easy as it possible to learn what they want (3.16). Besides that, respondents agree that their needs and interest can be met by using mobile learning (mean=3.14). In addition,

respondents agree that mobile learning can save their time (mean=3.12). Furthermore, respondents agree that mobile learning will bring new opportunities for learning (3.06).

In overall, most of the respondents agree that mobile learning will provide new and more opportunities for learning (mean=3.1441). Students in higher learning institutions should take the opportunities to get more experience and knowledge in integrating mobile learning in their education environment.

Table 7 : Descriptive Statistics of Opportunities in Mobile Learning

	Items	Mean
	(Overall mean = 3.1441)	
1	In my opinion, mobile learning will bring new opportunities for learning	3.06
2	Mobile Learning can save my time.	3.12
3	I find mobile learning easy, as it is possible to learn what I want.	3.16
4	Mobile learning meets my needs and interests.	3.14
5	Mobile learning enables me to get feedback from lecturers more quickly than before.	3.16
6	In my perception, mobile learning is possible to achieve personal educational aims.	3.22

Factors Influencing Students' Readiness Towards Mobile Learning

The correlation analysis between variables under study was shown on Table 8. Pearson correlation analyses were used to study whether there is a relationship between respondents' mobile learning readiness with technology readiness, psychology readiness and opportunity in mobile learning.

It was revealed that there was a medium positive significant correlation between technology readiness and mobile learning readiness; $r= 0.566$, $n= 370$ $p= 0.000 < 0.01$. It is in a positive value. So, it indicates that respondents mobile learning readiness have a positive relationship with technology readiness.

The result showed that there was a weak positive significant correlation between psychology readiness and mobile learning readiness; $r= 0.366$, $n=370$ $p= 0.000 < 0.01$. It is still in a positive value. So, it indicates that respondents mobile learning readiness have a positive relationship with psychology readiness.

The output also shows that opportunity in mobile learning is weak positively significant correlation to the mobile learning readiness; $r= 0.479$, $n=370$ $p= 0.000 < 0.01$. Therefore, this means that respondents mobile learning readiness have a positive relationship with opportunities in mobile learning.

In overall, the result showed that independent variables (technology readiness, psychology readiness and opportunity in mobile learning) were correlated significantly with the dependent variable (mobile learning readiness).

Table 8 : Correlation Between Mobile Learning Readiness With Technology Readiness, Psychology Readiness and Opportunities in Mobile Learning

		Mobile Learning Readiness	Technology Readiness	Psychology Readiness	Opportunity in Mobile Learning
Mobile Learning Readiness	Pearson Correlation	1			
	1 Sig. (2-tailed)				
	N	370			
Technology Readiness	Pearson Correlation	.566**	1		
	1 Sig. (2-tailed)	.000			
	N	370	370		
Psychology Readiness	Pearson Correlation	.366**	.576**	1	
	1 Sig. (2-tailed)	.000	.000		
	N	370	370	370	
Opportunity in Mobile Learning	Pearson Correlation	.479**	.576**	.627**	1
	1 Sig. (2-tailed)	.000	.000	.000	
	N	370	370	370	370

** . Correlation is significant and the 0.01 level (2-tailed)

5. Discussions and Conclusions

All the findings from this study is to know the readiness of the students in order to use mobile learning as a new methods of learning. Most of the students are ready to implement mobile learning in their higher learning institutions which is polytechnic. By using mobile learning as new methods of teaching and learning, mobile learning will make their life easier. This is due to the learning process can be done without need to go to the class and they can join the class only through their mobile device. Even though they don't have a lot of knowledge about mobile learning, they still have a desire to know more about mobile learning. The management of higher institutions should take an action and initiative to increase student's and lecturer's knowledge regarding mobile learning. A friendly user platform of mobile learning can be a good initiative in order to make students and lecturer attracted to explore and use mobile learning. Some of the students prefer to use conventional learning rather than mobile learning. This may be due to they haven't use mobile learning yet or they prefer to have face-to-face learning methods. Educators can mix their methods of teaching in which to mix traditional or conventional learning and mobile learning.

The technology readiness plays an important role in order to make sure students are ready to use mobile learning in their learning process. This is due to the changes in technology is too fast. If students and lecturer cannot cope with the changes, they will be left behind. The students seem to always keep up with the latest technology development in which it gives a good sign to the lecturers. Lecturers will not have a big problem in order to implement mobile learning since the students prefer to use learning technology that available in their daily live. The technology brings convenient to the students in order to learn or attending the class by using their mobile devices. This suggest that both students and lecturers need to be ready in terms of technology in order to integrate mobile learning in a new method of teaching and learning.

In terms of psychology readiness, students are ready psychologically to use mobile learning since some of their lecturer have already integrate mobile learning in their teaching. Students must set in their minds that mobile learning is easy to use and it will bring more benefits to the students. When they have a positive thinking, they will act and behave accordingly to what their lecturers expect. Most of the students' todays are from Z

Generation. Gen Z is the most technologically saturated generation in our world. According to Julian (2019), Generation Z are more hooked into electronic devices and virtual spaces more than any other group thus far. It suggested that the students should have no or only a minor issue in order to use technology in their daily lives in which they can use mobile learning in their learning process.

There are a lot of opportunities that can be gain by integrating mobile learning in teaching and learning process. The opportunities are such as mobile learning can save more time and it also can meet students' needs and interest. Besides, students can get quick feedback from lecturer. Lecturer can also share a lot of information from varieties of sources by using mobile devices. Furthermore, students can have an opportunity to achieve their personal education aims. This shows that students and lecturer have a lot of opportunities if they implement and integrate mobile learning at their institutions. It will also bring much benefits for both students and lecturers.

In terms of factors that influencing students' readiness towards mobile learning, our study found that students' readiness for technology, psychology and opportunities in mobile learning could be the factors. Technology readiness, psychology readiness and opportunities in mobile learning has a significant positive relationship with mobile learning readiness. Therefore, students need be more aware with the technology changes especially in academic field. If they are technologically ready, they are able to implement mobile learning in their learning process. Students also need to be a positive thinker in order to make them ready psychologically. By having a positive thinking, they will act in a good way in order to accept a new environment in which they have to learn by using mobile learning.

In conclusion, most of the students in Politeknik Ungku Omar ready to use mobile learning as a new method of teaching and learning. However, there are some area that need to be considered by the management of polytechnic before implementing mobile learning in the institution such as a strong and good internet or WiFi connection, intensive course for lecturer in order to get them well prepared to use mobile learning, an effective campaign to get awareness from students about mobile learning and many more. Looking at the trend, mobile learning could be a boom in Malaysian higher education. Furthermore, by the spreading of pandemic Covid-19, this teaching method is very suitable to be implement at this current situation.

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SUB-SESSION 6

ECONOMICS AND DEVELOPMENT

The Impact of Digital Transformation on Economic Growth in ASEAN Countries

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Abstract - Last few years have seen a wave of new disruptive technologies with digitalisation being a common attribute. Online technology such as broadband connectivity, e-commerce and social media are transforming the world. Digital technology has significantly changed the speed of operation in the economy. The Internet and digital devices are a driver of economic growth. These activities comprise the digitization process to stay connected to another. From this perspective, the objective of this research is the impacts that the phenomenon of digital transformation processes in which the digital technology and the related changes lead to the economic growth of Malaysia considering the development of the digital society. Based on secondary data from the World Bank, this study undertakes to scrutinise components contributing to digital transformation of an economy. It includes broadband infrastructure, Global Innovation Index (GII), population and trade openness. Several transmission mechanisms from broadband access, usage and digital empowerment to key macroeconomic variable, namely GDP per capita is identified. The econometric evidence supports our hypotheses showing that the usage of broadband, i.e. digital empowerment, openness of external sector on top of population bonus exert the major economic effects. The overall conclusion is that the research framework for economic impact seems to be up to the opportunities brought by digitalisation. Many practical challenges remain where digitalisation meets internationalization. Eventually, this will improve the business climate in Malaysia.

Keywords: Broadband Networks, Digital Economy, Digital Technologies, Economic Impact, Electronic Commerce, Fourth Industrial Revolution, Innovations

1. Introduction

A fourth industrial revolution is building on the third that driven by the digital transformation which is a megatrend that government wish to tap into it to ensure their countries are not left behind by the digital revolution. Digital transformation generally triggered by massive adoption of the digital technologies that generate, process and transfer information. It was not a single event, its build on the evolution of multiple technologies. Each evolution of technologies drives each wave of transformation. The first wave of transformation was driven by the introduction of innovate hardware technologies such as adoption of computer in the 1960s and this enable for the introduce of management information system that can automated the data processing and improve the work of

monitoring and reporting the company performance. The second wave of digital transformation was about the connectivity which driven by the introduce of Internet in year 1995. The diffusion of Internet enables the enterprises to build their strong business network with suppliers and customers for purchasing of supplies and distribution of output. The digital connectivity had led to the introduction of some new business services or business model today that had disrupted the business rule. Combining the mature technologies characteristic bring by first and second wave of transformation, the third wave of transformation focused on enhancing the information processing and the quality of decision, while further automating routine tasks within business enterprises and governments. For example, the big data analytics, Internet of Things, Robotics, 3D printing and AI (artificial intelligence).

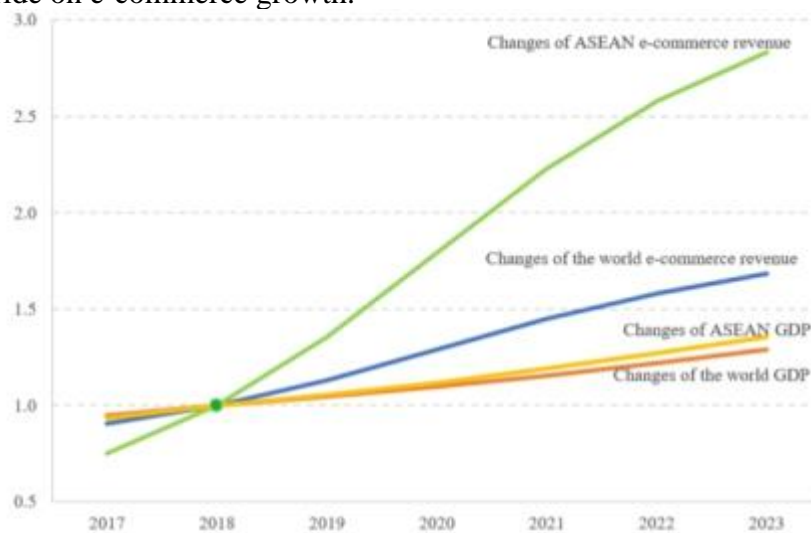
Digital transformation has significantly changed the daily lifestyle of people and ways of doing business. Even for the public sector, the introduced of internet has triggered the implementation of E-government that transform the government relation with citizens, business, and other government department. The E-government basically means the use of information technologies by government to deliver better service to citizens, improved interactions with business and industry and more efficient management. As public sector was one of the largest producers of information, therefore making the information digitalized can bring a positive impact on the level of information quality and supply in the public sector. It can decrease the amount of errors and consequently help the government to build up a quality management information system. In addition, the adoption of web-technologies in public sector activities can act as a tool to minimize the process time of public to reach the government service and reach the goal of encouragement public to use online service. Other than improvement in the quality of service, the most significant impact was the improvement in the transparency of government. The free access and openness of government data provide the important data for citizens and business which in turn of increasing their trust in public administration and eliminate the barriers in interactions with governmental organizations that may also result of reduction in corruption.

Besides that, the digital transformation that triggered by internet also shaping a new kind of consumer behaviour in the market. Throughout the years, the information technologies have become more mature, the web user rapidly increase, speed of internet highly increased, and web developing skill improved, these improvements lead the firms to promote and enhance image of product and services through website. Thus, with more detailed and better service, more and more people are changed their consumer behaviour from traditional mode to online shopping. The most difference of internet shopping compare to traditional shopping is the convenience and interactive service. The internet provides a big convenience for shopper, it allowed the shopper to browse and shopping online anytime and anywhere which making the consumption process much easier. In addition, the intention of customer to consume won't be affected by the external factor such as transportation cost and time consume for searching products in physical store. For instance, new business model like food delivery service such as Grab Food or Food Panda are making people consumption on their daily need more convenience and eliminate people intention for not making the purchase due to the laziness of driving or frustration toward the traffic jam. This can be seen when the food delivery demand rises dramatically during COVIC-19 Pandemic Outbreak and MCO Move Control Order Period in Malaysia.

On another hand, the increasing of usage of social media such as Facebook, Instagram, Twitter or other platforms, consumers now are able to search, share, access and compare

the product information and reviews. As the increasing time spending on social media, organizations also changing their marketing strategies more on social media to attract and building the relationship with customers. Social media is now the centre of information distribution. More and more content created by business or individual on social media and combining with the convenience of internet shopping eventually increase the buying intention of customer.

ASEAN, which one of those world fastest growing Internet market with the 125,000 new users coming into the Internet every day, rapid growth of the social media and mobile activities had become the next target market of investors. According to a jointly report by Google and Temasek Holdings (2017), the e-commerce market of ASEAN region is estimated to be worth US\$200 billion by 2025. In addition, with the high smartphone usage which more than 90% smartphone user in ASEAN region, the mobile commerce is expected to ride on e-commerce growth.



The Growth of E-Commerce Revenue and GDP
(Source: Chen, 2020)

Figure 1 reflects the projected growths of the revenue of e-commerce and GDP ASEAN and the world. There will be an increase of 200% in ASEAN's total e-commerce revenue. ASEAN is forecasted as the world epicentre of e-commerce by 2023, dominating 40% of the world market.

According to the latest 2019 Global Connectivity Index (GCI), there are only 6 countries from ASEAN region been ranked in this index which Singapore, Malaysia, Thailand, Vietnam, Indonesia, and Philippines. In short, among the member of ASEAN region, Singapore, Malaysia, Indonesia, Philippines, Thailand and Vietnam are the countries that well ahead of Southeast Asia in most economic development indicators indicate they are more potential to gain the benefit from digital transformation. However, in this research we will only be focused on Malaysia, Thailand, Philippines, Vietnam and Indonesia, as Singapore was already far ahead compared to these five countries in term of most economic and digitalized indicators, the impact of digital transformation may not very significant on their economic growth, so we cannot categorize them as a same group to conduct our study.

To narrow down the gap toward the successful of digital transformation, these countries had implemented many important policies to achieve the digital transformation goal in recent year. Digital Free Trade Zone which is a policy that implement by the Malaysia government to focus on developed an ecosystem and accelerate the e-commerce activities in Malaysia. There are two goals been driven by this policy which first is the creation of an E-fulfilment hub by transform the KLIA Aeropolis into a regional e-commerce fulfilment hub. Next, help the local small and medium enterprise to grow, encouraging them to export their goods via e-commerce. Indonesia announced the roadmap called "Making Indonesia 4.0" in 2018. The development and integration of connectivity, technology, information and communication also been focused in this roadmap in order to turn Indonesia into a competitive country. In order to tap into the digital transformation trends, Thailand government also launched "Thailand 4.0" policy to promote the innovation as the key of Thailand's future economic development and transform Thailand into a competitive nation that driven by innovation and technologies. To realize these goals, Thailand government also declared the plans to build the Eastern Economic Corridor which create a region that consists of high-tech industrial clusters and increase digital technology across all industries. In Vietnam, the Government is aggressively seeking to boost the country capabilities. The National Development Program Tech 2020 has a major goal of promoting research, innovate and be adept in creating high-tech, and also effectively apply technology.

The world's economy is now totally digitally driven. Advanced technology can affect how the business perform and how economies function and prepare for future. For instance, they developed a master plan for ASEAN Connectivity 2025. The plan has given birth to an ASEAN digital data governance framework. ASEAN region countries policy makers seeing digital transformation as their tools to closer their gap with developed economies mainly due to the huge impact of digital transformation across the component GDP which consumption, investment, government spending and the net export. However, there is a problem of different level of connectivity development in various member countries. This study was conducted to investigate how the digital transformation impact on economic growth. We have chosen fixed broadband subscriptions as our indicator for the digital transformation and economic impact. In addition, we also include the other independent variable that not our study interest which is population, trade openness and global innovation index.

This study fills in the important gap in digital transformation research which there are less research of digital transformation focus in ASEAN country and finally comes out refreshment to existing research on digital transformation. Moreover, this study is very useful for the policy makers, especially ASEAN policy makers to understanding how the impact of digital transformation on their economic growth and implement the right policy that can gain the most benefit from the digital transformation. Furthermore, this study may also act as a tool for those country that does not focus much on digital transformation to acknowledge and increase their awareness toward the potential of digital transformation on their economic growth. Other than government, the study will give a signal for the business owner. It can help the business owner to examine their business's ability to tap into this future trend that may eliminate them in the future if they didn't make changes according to the changes of the preferences in the market.

2. Literature Review

There are many studies on the causal relationship between Individuals using internet, fixed broadband subscription, secure internet, Global innovation index, Population, Trade openness, Corruption perception index and economic growth. The literature on their relationship is contradictory. GDP per capita is a measure of a country's economic output that accounts for its number of people (Amadeo, 2020). Worldwide it is used by economists alongside GDP to analyse the prosperity of a country and its economic growth. According to Chappelow (2019), GDP per capita is an important indicator of economic performance and a useful unit to make cross-country comparisons of average living standards and economic wellbeing.

Fixed broadband subscriptions is referring to fixed subscriptions to high-speed access to the public Internet of at least 256 Kbit/s or more in either downloading and uploading (ITU, 2017). It includes cable modem Internet connections, DSL Internet connections, fibre and other fixed broadband technology connections such as satellite broadband Internet. Broadband has driven widespread changes in the information technology sector enabling services (Minges, 2016). It is influencing innovation across many other sectors. The effects of broadband subscription on the nation is therefore a subject of growing interest. There are many studies researching the actual outcomes with positive relationships between fixed broadband subscription and economic growth (Castaldo, Fiorini & Maggi, 2018, Minges, 2015, Czernich et al., 2011, Badran, 2012, Alshubiri, Jamil & Elheddad, 2019, Rohman, & Bohlin, 2012, Ng, Lye, & Lim, 2013, Kabaklarli, & Atasoy, 2019. On the other hand, Katz and Koutroumpis (2012) found negative relationship between fixed broadband subscription and economic growth in Senegal, and insignificant with economic growth in Philippines.

Population is referring the entire pool from which a statistical sample. According to Will Kenton (2019), population can be defined by any number of characteristics within a group that statisticians use to draw conclusion about the subjects in a study. For the purpose of a census, the total population of the country consists of all persons falling within the scope of the census. In the wider sense, the total may comprise either all usual residents of the country or all persons present in the country at the time of the census (OECD, 2001). According to Insee (2019), the total population of a municipality is equal to the sum of the municipal population. Thus, total population is an official population measure as it has been referenced in many legislative and regulatory texts. Numerous academic articles give a different view for the effect of the population and economic growth. For instance, Darrat and Al-Yousif (1999), Jorge and Cecilia (2016), Sarker, Khan and Mannan, (2016), Hájková and Hájek, (2014) and Adewole, (2012). Other studies that found out a negative relationship between Population and economic growth e.g. Huang and Xie (2013), Dao (2015), Afzal, (2009) and Yao, Kinugasa and Hamori, (2013). Nevertheless, Yet, Furuoka and Wong (2005) found no significant relationship between population and economic growth. The effect of Asian population is not necessary achieving economic growth.

Trade openness is referring to the orientation of a country's economy in the context of international trade (IGI Global). The degree of openness is measured by the ratio between the sum of exports and imports and gross domestic product (GDP). According to OECD (2011), trade openness is often called the trade-to-GDP ratio. According to economic theory mentioned by Cara (2009), trade openness will have an economic effect of increasing economic development and growth. The relationship between openness and economic growth remains to be one of the prominent issues in both theoretical and policy contexts.

Literature e.g. Das and Paul (2011), Moyo and Clement (2017), Jamilah, Zulkornain and Muzadar (2016), Adhikary, (2011), Soukhakian, (2007) and Yucel, (2009) found a positive relationship between trade openness and economic growth. However, other literature e.g. Huchet-Bourdon, Mouel, Vijil (2017) found negatively relationship between trade openness and economic growth. Besides, Shayanewako (2016), Menyah, Nazlioglu and Wolde-Rufael, (2014) and Gries, Kraft and Meierrieks, (2009) found no significant relationship between trade openness and economic growth.

The Global Innovation Index (GII) is a ranking of countries as per their success and capacity in innovation. (INSEAD, 2007). The GII helps to create an environment in which innovation factors are continually evaluated (Reynoso, 2015). According to Syekei (2019), GII acts as a global benchmark that supports policy makers in creating policies that encourage and gauge innovative activity. Past literature such as MOLNÁR (2015), Khanna and Oberoi, (2012), Niebel, (2018), Nasab and Aghaei, (2009), Majeed and Ayub, (2018) and Ahmed and Ridzuan, (2013) found a positive relationship between global innovation index and economic growth. However, literature e.g. Goliuk (2017) found out a negative relationship between GII and economic growth. On the other hand, literature such as Galindo and Picazo (2013) and Jankowska, Matysek and Mroczek, (2017) showed no significant relationship between global innovation index and economic growth.

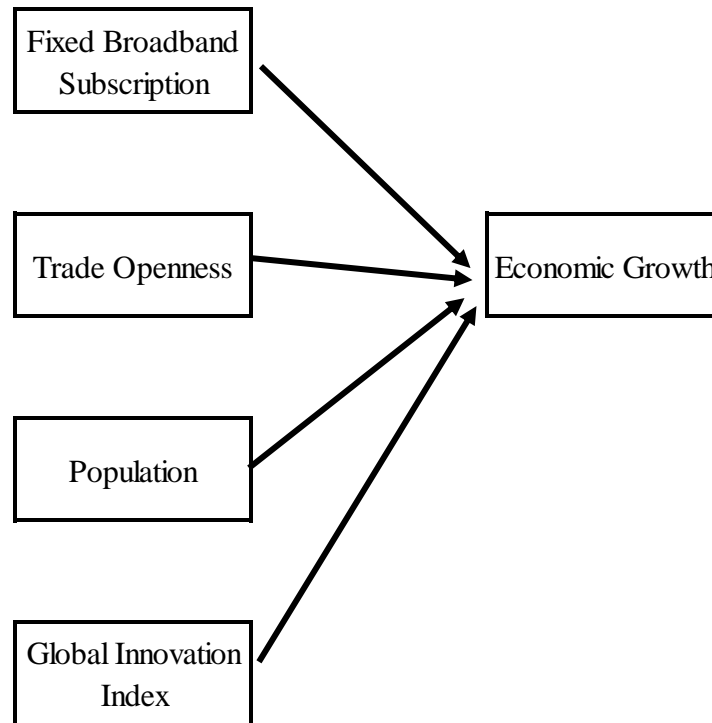


Figure 2: Research Framework

3. Methodology

In this study is to investigate the effect of fixed broadband subscription, trade openness, population and Global Innovation Index on GDP per capita growth. Data of 5 developing countries which are from Malaysia, Thailand, Indonesia, Vietnam and Philippine. The reason choosing ASEAN country is because the digital economy is taking a shape in Southeast Asia countries. The data set is collecting from year 2012 to year 2018 are use in our analysis. Those data are collecting from World Bank Indicator.

$$\text{LN}(\text{GDP})_{it} = \beta_0 + \beta_1 \text{LN}(\text{FBS})_{it} + \beta_2 \text{LN}(\text{TO})_{it} + \beta_3 \text{LN}(\text{POP})_{it} + \beta_4 \text{LN}(\text{GII})_{it} + \varepsilon_{it}$$

Where,

GDP = GDP per capita

FBS = Fixed broadband subscription

TO = Trade Openness

POP = Population

GII = Global Innovation Index

This study needed to get the variables based on yearly frequency from year 2012 to year 2018 and there are a total 5 countries include in this study. Due to the variables are based on various measurements such as in terms of percentage, score or dollars formats, a log-log regression model is used in this study. The reason using the log-log model is because to reduce the skewness of data and increasing the normality of the distribution to make sure the result is interpretable. There are 4 independent variables have been selected and it is to

include in this study, which is fixed broadband subscription (FBS), trade openness (TO), population (POP) and Global Innovation Index (GII). However, the dependent variable is the GDP per capita (GDP) growth, as an economic growth measurement.

In the study, to analyse the data, E-views has been picked as the tool. In econometric and finance field, E-views had built-up a well-known reputation in analyse the data. Right now, several test from e-views will be applied to guarantee the robustness and validity of the research. The Pooled Ordinary Least Square (POLS), Fixed Effect Estimation (FE) and Random Effect Estimation (RE) will be applied. On the other hand, Hausman test, LM test, Likelihood test, Multicollinearity test, Model specification test and Normality Test will be applied. To guarantee the information does not contain any mistake it must be used these tests because it has been used by many researchers on the investigation, so it is necessarily to carry out in study. There are homoscedasticity and no autocorrelation since the POLS assume the disturbances have constant variance and not correlated with each other. Next, Random Effect (RE) model as known as the Error Component model which assumes individual-specific effect is a random variable and not connected with any independent variable. Besides, RE no endogeneity between the disturbances and the regressor. Thus, RE model is more efficient compared with the FE model. Nevertheless, when the assumption of RE model does not hold (if individual-specific effect correlated with covariates in the model), the endogeneity problem will happen then the RE model will become not consistent at the same time. On the other hand, Fixed Effect (FE) and Random Effect (RE) model can be used for the presence of individual effect. FE model consider the time-invariant and it represent for any individual-specific effect is exclude from the model. Furthermore, FE model is allowed individual-specific effect connected with the independent variables. However, this statement will cause the endogeneity problem to happen where there is correlation explanatory variable and error term. In order to choose a best model in the equation, we decide to compare between the three model. Besides, we choose Likelihood Test to compare Pooled Ordinary Least Square (POLS) and Fixed Effect Model (FEM). In addition, we choose LM test to compare POLS and Random Effect Model (FEM). To compare FEM and REM we choose Hausman test. In conclusion, if using LM test, we reject null hypothesis, REM is preferable. If using Hausman test, null hypothesis is rejected, FEM is better than REM. In the study, to analyse the data, E-views has been picked as the tool. In econometric and finance field, E-views had built-up a well-known reputation in analyse the data. E-views also widely used by the government official, scientists to analyse the information in the study Diagnostic checking required are such as Hausman test, Unit Root Test, Cointegration Kao test, Multicollinearity test, Heteroskedasticity, Model specification test and Normality Test. That is all we need to apply a general test which is called Hausman Test what we do is we simply estimate beta 2 using both the fixed effect estimator and random effect estimator. Then we look at the difference between the estimates if this difference is significantly from 0 then that is evidence in favour of fixed effect if the difference between the estimates is very small and close to 0 well that is evidence in favour of random effect. So, in the Hausman Test we simply set up the null hypothesis that the individual specific effect is random that is the null hypothesis. If the null hypothesis is true, we expect our fixed effect estimate to be close to the random effects estimate and the difference to be close to 0. If we find the difference between the estimates is significantly different from 0, then we reject the null hypothesis. We have then found evidence in favour of fixed individual specific effects.

Unit root test is to test whether the data is stationary in the level because biased result can be avoided. Besides, this research will use Augmented Dickey Fuller (ADF) test and LLC test to determine first and second differences to check the stationary of the variable. The Kao test is similar with Pedroni test. It is then followed by a regression analysis. Next, the

normality test is used via the Jarque-Bera normality test. Another important regression analysis is heteroscedasticity test. Furthermore, heteroscedasticity may occur because of the omission of some relevant model variables, dispersion of one or more regressors is inconsistent, incorrect transformation of data and improper functional form.

4. Results

LLC test indicates that GDP, fixed broadband subscription, global innovation index, trade openness and population is non-stationary. The results of the ADF test indicate that most of the GDP, fixed broadband subscription and trade openness are non-stationary in the level form. All the variables turn into stationary in the first difference form. Based on the panel unit root test result, all the explanatory variables are integrated of order one while for the results of Kao test, the ADF statistic is significant at 10%. The lowest correlated variable in this model is only 0.00077 which is trade openness and population. However, trade openness and GDP show the highest correlated variable in this model with the value of 0.4749. It can be considered as medium positive correlation as the value is in between 0.30 to 0.49 Thus, our model did not suffer from multicollinearity problem.

We conducted POLS, REM and FEM at the same time in order to select the best model to explain the relationship between digital transformation and economic growth. Firstly, Lagrange Multiplier test had been applied to compare the POLS model with REM. The result stated that p-value (0.6068) is larger than the significance level (α) at 5%. Therefore, null hypothesis cannot be rejected, and it indicates that POLS is more suitable than the REM model. According to the result, the p-value (0.1651) shows that POLS is more suitable as compared to FEM model as null hypothesis is not rejected at 5%. REM is more appropriate as compared to FEM. In short, we can say that POLS is a better test compared to FEM and REM. So, we will apply POLS. In fact, we will apply POLS method based on the model comparison. Then, we had run heteroscedasticity test. The result shows that the p-value (0.0031) is smaller than the value at the significant level 1%. So, the model does not suffer from heteroscedasticity problem. Next, we had tested the normality of the model by using Jarque-Bera test with the result shows that this model is normally distributed.

Table 1: Estimation result of model POLS, REM, FEM
Model

Variable	POLS	FEM	REM
C	4.120245	2.183116	4.120245
(S.E.)	(0.599215)	(5.481708)	(0.599215)
(p-value)	(0.0000)***	(0.6947)	(0.0000)***
lnGII	-0.005100	0.006022	-0.005100
(S.E.)	(0.038709)	(0.050172)	(0.038709)
(p-value)	(0.8961)	(0.9057)	(0.8961)
lnFBS	0.043810	0.015725	0.043810
(S.E.)	(0.019375)	(0.026868)	(0.019375)
(p-value)	(0.0312)**	(0.5649)	(0.0312)**
lnPopulation	1.104224	3.073706	1.104224
(S.E.)	(0.437350)	(4.823285)	(0.437350)
(p-value)	(0.0171)**	(0.5312)	(0.0171)**

lnTO	0.104769	0.047098	0.104769
(S.E.)	(0.033947)	(0.055419)	(0.033947)
(p-value)	(0.0043)***	(0.4055)	(0.0043)***
R ²	0.410237	0.636316	0.410237
Adjusted R ²	0.331602	0.381737	0.331602
Durbin Watson Statistic	1.223225	1.568446	1.223225
Likelihood ratio	6.495092 (0.1651)		
Hausman test	0.0000 (1.0000)		
BPLM Test	8.225576 (0.6068)		
Heteroscedasticity	17.87907 (0.0031)***		
JB test	16.23431 (0.00298)***		

Notes: *(**) *** indicate 10% (5%) 1% level of significance, respectively.

Based on the results of POLS analysis as shown above, the model equation can be written as:

$$\ln(\text{GDP})_{it} = 4.1202 - 0.0051 \ln(\text{GII})_{it} + 0.04381 \ln(\text{FBS})_{it} + 1.1042 \ln(\text{POPULATION})_{it} + 0.1048 \ln(\text{TO})_{it}$$

(0.5992)
(0.038709)
(0.019375)
(0.437350)
(0.03394)

Note: Figures bolded denotes the standard error of the coefficients above.

In the POLS result shown in the table, R squared, R² (0.4102) means that 41.02% of the variation in the number of GDP is explained by the variation in global innovation index, fixed broadband subscription, population and trade openness

1.6 Discussion

In the result that we get, fixed broadband subscription (FBS) has positive relationship with our dependent variable gross domestic product at significant level 5%. The relationship that we get is same with our expected relationship of our study. In the result, it shows that positive impact fixed broadband subscription will boost up countries economic growth. According to Badran (2012), the researcher found a positive relationship between FBS and GDP which same with our empirical test. In this research, researcher also mention that the fixed broadband subscription plays an important role in the developing countries, it able to help in creating more jobs and investment. This result in increased economic growth for countries.

In the empirical result, we found that global innovation index (GII) has no significant relationship with the dependent variable gross domestic product at significant level 5%. The coefficient is not positive sign that we expected. According to Nayyar (2014), some developing economies show better economic growth even though they are low in innovation index.

In the empirical result, population (POPULATION) has positive relationship with our dependent variable gross domestic product at significant level 5%. In the result, it shows that positive impact population will boost up countries economic growth. Based on our research, an increase in population will lead to increase in economic growth of a country. When the population increases, the total output and GDP increase. Thus, the employer may opt to employ more workers to increase production (Jorge & Cecilia, 2016).

With the digital transformation, more and more people do involve themselves in participating cross-border e-commerce activities. Thus, trade will be increase and lead to increase in GDP of the country e.g. Das & Paul (2011). Thus, the economic growth of a country will be better when trade between countries increases.

5. Conclusion

The fourth industrial revolution is not only meant for the communication purposes, but it had widely used in a serious application including the digital economy. Digital economy plays an important role in the development of all economics. With consideration of these very interconnections that each country can get ready to achieve a better economic impact in digitization. The current study described the antecedents of digital economy by the broadband infrastructure, population, trade openness or innovation in ASEAN countries. Based on the empirical results and major findings, this research can be concluded that the fixed broadband subscription, population and trade openness are significant determinants of economic growth. However, global innovation index shows an insignificant relationship among the ASEAN countries. The empirical results indicate that trade openness is a statistically significant determinant of economic performance, which implies that the external sector is more vital compared to the overall economy. In terms of economic activities, the foreign trade has a greater impact on economic performance. For the study, one of the limitations is regarding the data collection. In this study, the data is only available between 2012 and 2018. Finally, our paper employed fixed broadband subscription, Global Innovation index, population and trade openness as the exogenous variables to examine their relationship towards economic growth (GDP). In the fourth industrial revolution era, digitisation is a pillar for a competitive economy. In the future, we will look on the most appropriate policies to implement the digital economy, an increasing interconnection of the government broadband infrastructure policies that reduce the digital divide between urban and rural, industry and globalisation can be expected, which requires to be approached in a sophisticated way if the transformation to digital economy is to succeed in ASEAN. ASEAN must strategically ensure that new technologies is adequate to drive a digital economy.

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Kandungan Berita Kepenggunaan di Akhbar Bahasa Malaysia Ketika Perintah Kawalan Pergerakan (PKP) Fasa 1: Analisis Kandungan

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Abstract – Penyampaian berita memainkan peranan yang penting di dalam masyarakat terutama ketika berlakunya sesuatu krisis. Pandemik COVID-19 yang melanda seluruh dunia telah menyebabkan berlakunya perubahan lanskap dalam kita menjalankan kehidupan seharian sehinggakan ianya digelar sebagai norma baharu. Akhbar memainkan peranan yang penting dalam penyampaian berita kepada khalayak masyarakat dengan menetapkan nada berita yang ingin disampaikan ketika berlakunya sesuatu krisis. Kertas ini bertujuan untuk mengupas tema-tema utama berkaitan kepenggunaan yang disiarkan di akhbar-akhbar utama Bahasa Malaysia di sepanjang Fasa 1 Perintah Kawalan Pergerakan (PKP) yang berlansung dari 18 sehingga 31 Mac 2020. Pendekatan analisis kandungan telah digunakan untuk mendapatkan tema-tema utama berita berkaitan kepenggunaan yang disiarkan disepanjang tempoh 2 minggu tersebut. Dapatan telah menunjukkan bahawa tema-tema utama untuk isu tersebut berkisar mengenai tanggungjawab kerajaan dalam memastikan bekalan barangan asas mencukupi. Selain itu tema-tema utama yang berkisar mengenai peranan kerajaan dalam meransang ekonomi dengan memperkenalkan bantuan-bantuan umum dan khas untuk rakyat serta penerangan mengenai prosedur sektor ekonomi untuk beroperasi juga menjadi keutamaan untuk disiarkan di akhbar-akhbar utama Bahasa Malaysia. Secara kesimpulan, nada yang ingin disampaikan oleh kedua-dua akhbar ini adalah bersifat positif yang memperlihatkan usaha kerajaan dalam memberi penerangan kepada rakyat mengenai perubahan norma kehidupan disamping memperkenalkan bantuan-bantuan yang akan diberikan oleh kerajaan disebabkan berlakunya Pandemik COVID-19 ini.

Keywords: COVID-19; Kepenggunaan; Berita; Akhbar; Analisis Kandungan

1. Pengenalan

Pandemik COVID-19 telah menzahirkan kesan yang belum pernah terjadi sebelumnya kepada seluruh dunia. Ini adalah satu peristiwa besar yang berlaku yang memerlukan penilaian dan tindakbalas yang pantas. Banyak negara telah membuat keputusan yang sukar untuk ‘menutup’ negara mereka untuk mengekang penularan wabak ini. Malaysia adalah antara negara pertama yang melaksanakan Perintah Kawalan Gerakan atau Sekatan di Asia Tenggara berikutan krisis wabak COVID-19 yang semakin meruncing. Wabak Coronavirus (COVID-19) adalah penyakit berjangkit yang boleh menyebabkan penyakit pernafasan, seperti selesema dengan gejala batuk, demam dan kesukaran bernafas yang boleh menyebabkan kematian. Sebagai langkah untuk membendung wabak ini, Perdana Menteri Malaysia telah mengisytiharkan Perintah Kawalan Pergerakan Fasa 1 pada 18 Mac 2020 sehingga 31 Mac 2020. Perintah ini adalah

bersandarkan pada Akta Pencegahan dan Pengawalan Penyakit Berjangkit 1988 dan Akta Polis 1967 (Majlis Keselamatan Negara, 2020)

Pada 25 Mac 2020, Perdana Menteri Malaysia telah mengumumkan bahawa Perintah Kawalan Pergerakan (PKP) telah dilanjutkan sehingga 14 April 2020 (Fasa 2) dan pada 10 April 2020, sekali lagi PKP telah dilanjutkan tempohnya sehingga 28 April 2020 (Fasa 3). Seterusnya pada 23 April 2020, Perdana Menteri mengumumkan bahawa Perintah Kawalan Pergerakan (PKP) Fasa 4 akan dilanjutkan sehingga 3 Mei 2020.

Perintah Kawalan Pergerakan Bersyarat mula diperkenalkan pada 4 Mei 2020 dengan objektif utamanya adalah untuk membuka kembali ekonomi nasional secara berstruktur dan ini membolehkan pengoperasian semula di beberapa sektor ekonomi, tetapi harus mengikuti peraturan dan prosedur operasi standard (SOP) yang telah ditetapkan. Pada 7 Jun 2020, Perdana Menteri mengisytiharkan bahawa Perintah Kawalan Pergerakan Bersyarat (PKPB) akan berakhir pada 9 Jun dan digantikan dengan Perintah Kawalan Pergerakan Pemulihan (PKPP). yang berkuat kuasa dari 10 Jun hingga 31 Ogos 2020 dan pada 28 Ogos 2020 Perintah Kawalan Pergerakan Pemulihan (PKPP) telah diumumkan akan dilanjutkan sehingga 31 Disember 2020. Pemantauan dilakukan dari semasa ke semasa untuk memastikan agar masyarakat dapat mematuhi SOP dalam norma baharu agar dapat diputuskan rantaian penularan wabak COVID-19 di negara ini. Kebanyakan kajian berkenaan media yang dilaksanakan ketika pandemik COVID-19 berkisar mengenai isu penyebaran berita palsu. Md Saiful Islam et. al. (2020) telah menjalankan kajian berkenaan 2,311 berita mengenai khabar angin, stigma dan teori konspiri di 87 negara dan mendapati kebanyakan berita palsu tersebut berkisar mengenai kaedah jangkitan penyakit dan juga kadar kematian. Selain itu, kewujudan berita yang mengelirukan juga telah mempengaruhi kesihatan mental pelancong dari China (Zheng, Goh, & Wen, 2020). Kajian yang dilaksanakan oleh Brennen et. al. (2020) telah mendapati bahawa 59% daripada maklumat yang tidak tepat di dalam berita adalah berita yang telah diolah semula dari berita asal manakala 38% daripadanya adalah berita yang dicipta sendiri.

Kajian-kajian media massa yang lain daripada Shelby et. al. (2020), Aslam et. al. (2020), dan Jurkowitz (2020) berkisar mengenai sentimen yang dimainkan oleh akhbar dan televisyen berkenaan isu COVID-19 pada suku pertama tahun 2020. Kriteria seperti ketakutan, kepercayaan, kesedihan dan marah banyak mempengaruhi sentimen pembaca terhadap berita yang disiarkan ketika pandemic COVID-19. Satu kajian berkenaan Surat kepada Pengarang telah dijalankan ke atas akhbar The Star Online oleh Siti Aesiha dan Syamimi telah mendapati bahawa surat yang merujuk kepada pandemic COVID-19 memiliki konotasi yang negatif serta sarat dengan emosi (Joharry & Turiman, 2020). Satu kajian mengenai kepenggunaan telah dijalankan oleh S.M. Yasir Arafat et. al. (2020) mendapati bahawa kebanyakan laporan pembelian panik yang membincangkan mengenai sebab dan impak berlaku di negara membangun.

2. Metod Kajian

Berita mengenai kepenggunaan yang dikaji adalah berdasarkan berita yang telah disiarkan di dalam media cetak utama Bahasa Malaysia iaitu akhbar Berita Harian dan Harian Metro. Menurut NSTP, jumlah pembaca Harian Metro telah meningkat sehingga

mencecah kepada angka 3 juta pada tahun 2019 berbanding 106,000 orang pada tahun 1993 (NSTP, 2020). Akhbar ini adalah merupakan tabloid Bahasa Malaysia yang paling laris di pasaran. Khalayak pembaca bagi Harian Metro adalah mereka yang berumur antara 18 – 35 tahun manakala untuk Berita Harian adalah untuk mereka yang berumur 35 tahun ke atas (Prima, 2020). Untuk kajian ini, penulis merasakan kriteria spektrum khalayak pembaca telah dipenuhi kerana kedua-dua akhbar Bahasa Malaysia ini mempunyai khalayak pembaca bermula dari 18 tahun ke atas yang merangkumi golongan belia dan golongan dewasa.

Kaedah yang telah digunakan oleh penulis ialah kaedah analisa kandungan. Kaedah ini dipilih atas kesesuaian dengan bentuk kajian yang dijalankan. Berita yang di analisa adalah berita bercetak dan bukannya berita yang bercorak digital. Berita-berita bercetak ini dikumpulkan secara fizikal dari tarikh 18 Mac 2020 sehingga 31 Mac 2020. Ini adalah bersesuaian dan berpadanan dengan tarikh Perintah Kawalan Pergerakan Fasa 1 yang dilaksanakan di seluruh Malaysia selama 2 minggu pada ketika itu. Berita-berita ini diambil hanya dari ruangan berita tempatan dan nasional tidak termasuk ruangan bisnes.

Kaedah analisa akan di bahagikan kepada dua bahagian. Pertama, berita-berita dari akhbar Harian Metro dan Berita Harian di asingkan mengikut tajuk, isu dan tema di bawah isu kepenggunaan. Kedua, pengiraan frekuensi dilaksanakan bagi gabungan tema yang terhasil dan pengiraan kumulatif peratusan akan dibuat atas tema yang terhasil.

3. Dapatan dan Perbincangan

Jadual 1 dan 2 menunjukkan tajuk-tajuk berita berkaitan perihal kepenggunaan dari tempoh 18 – 31 Mac 2020. Berita berkaitan kepenggunaan dari kedua-dua akhbar tersebut telah diasingkan mengikut tajuk isu dan tema. Bagi tempoh tersebut sebanyak 11 berita kepenggunaan di akhbar Berita Harian dan sebanyak 6 berita kepenggunaan di akhbar Harian Metro.

Jadual 1: Surat Khabar Berita Harian (Kepenggunaan)

TAJUK	ISU	TEMA
KPDNHEP JAMIN BEKALAN CUKUP	KPDNHEP menjamin barangan asas mencukupi. Pengeluaran ayam/ telur meningkat . Sebulan 800 juta biji telur terjual tetapi sebelum ini 620/630 juta biji telur.	Peningkatan permintaan stok barang asas dan keperluan secara mendadak
SEKTOR PEMBUATAN PRODUK KRITIKAL DIBENAR OPERASI	Kerajaan beri kelulusan untuk beroperasi yang ditakrifkan kritikal : Iaitu seperti makanan, minuman, pertanian, perikanan dan barangan rumah	Aliran produk kritikal seperti makanan, pertanian, perikanan menjadi tumpuan
TAK PERLU PANIK STOK BERAS CUKUP	Kementerian memaklumkan bekalan makanan import dan konsisten	Barang keperluan asas dijamin mencukupi oleh kerajaan

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KPDNHEP BENAR IMPORT TOPENG MUKA	Kerajaan menetapkan harga siling naik kepada RM2	Kerajaan mengawal harga barang dengan baik
SOROK TOPENG MUKA PUNCA HABIS DI PASARAN	Ada pihak kaut untung mudah jual dipasaran gelap dengan harga tinggi	Peningkatan kes penipuan dicatatkan semasa PKP terutama dalam urusan jual beli facemask
BEKALAN DAGING, TELUR MENCUKUPI	Bekalan daging, telur mencukupi untuk menampung permintaan domestik	Barang keperluan asas dijamin mencukupi oleh kerajaan
BEKALAN MAKANAN DIJAMIN CUKUP – ISMAIL SABRI	Kementerian pertanian dan industri makanan memberi jaminan bekalan makanan untuk keperluan rakyat	Barang keperluan asas dijamin mencukupi oleh kerajaan
JAWATANKUASA KHAS PASTIKAN BEKALAN TAK TERPUTUS	Jawatankuasa ini akan memastikan bahan dan bekalan makanan bukan sahaja dihasilkan boleh juga dihantar serta dibungkus	Barang keperluan asas dijamin mencukupi oleh kerajaan
PENYEWA PPR, DBKL DIKECUALIKAN 3 BULAN SEWA	Kementerian bersetuju mengecualikan bayaran sewa premis perniagaan kepada 6000 penyewa.	Kerajaan memberikan kemudahan kepada premis perniagaan
BEKALAN MENCUKUPI TIADA KENAIKAN HARGA	KPDNHEP gerak 2500 penguatkuasa pastikan peniaga patuh peraturan	Barang keperluan asas dijamin mencukupi oleh kerajaan
INTERNET PERCUMA BERMULA 1 APRIL	Pemberian Internet secara percuma dengan kuota 1 GB sehari bermula 1 april sehingga tamat PKP	Internet merupakan keperluan asas juga ketika PKP

Jadual 2: Surat Khabar Harian Metro (Kepenggunaan)

TAJUK	ISU	TEMA
TERKEJUT 900 PAPAN TELUR TERJUAL	Peniaga menyatakan kebiasaanya telur yang terjual lebih kurang 100 papan telur sahaja sehari, namun 900 papan terjual sewaktu PKP dan perlu ada 1000 lebih sehari untuk menampung permintaan	Peningkatan permintaan stok barang asas dan keperluan mendadak
PHARMANIAGA JAMIN UBAT CUKUP	Pharmaniaga membuat persediaan awal dan menjamin bekalan ubat ke semua hospital dan klinik kerajaan tak terganggu	Penyediaan stok dibuat persediaan awal
MASIH BELI DALAM JUMLAH BANYAK	Orang ramai masih berpusu-pusu dan membeli keperluan harian dalam jumlah banyak	Orang ramai risau akan ketidakcukupan barang keperluan dan panik
STOK BARANG LAMBAT MASUK	Pembeli terpaksa ke beberapa kedai untuk memenuhi keperluan	Orang ramai risau akan ketidakcukupan barang keperluan dan panik
370 KES TIPU BELIAN PENUTUP MULUT, HIDUNG DAN BARANGAN LAIN	Ramai yang menjadi mangsa kes penipuan membabitkan pembelian penutup mulut dan hidung serta barangan lain sepanjang penularan jangkitan	Peningkatan kes penipuan dicatatkan semasa PKP terutama dalam urusan jual beli facemask

SOKONG INTERNET PERCUMA	Menyambut baik pakej khas internet percuma pada 1 April hingga tamat PKP	Internet merupakan keperluan asas juga ketika PKP
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Jadual 3 menunjukkan kekerapan dan kumulatif peratusan untuk berita berkaitan kepenggunaan yang disiarkan di akhbar Berita Harian dan Harian Metro bagi tempoh 18 – 31 Mac 2020. Secara keseluruhan, sejumlah 17 berita berkaitan kepenggunaan disiarkan di kedua-dua akhbar tersebut ketika Perintah Kawalan Pergerakan Fasa 1 sedang berlangsung. Tema berita dengan kekerapan tertinggi berkisar tentang isu jaminan daripada kerajaan kepada rakyat sebagai pengguna bahawa barang keperluan asas adalah mencukupi dan tema ini telah disiarkan sebanyak 5 kali di sepanjang tempoh 2 minggu tersebut. Tema-tema yang mempunyai kekerapan sebanyak 2 kali setiap satu ialah kenaikan mendadak dari segi permintaan barangan asas, peningkatan kes penipuan pembelian barangan, Internet dianggap sebagai keperluan asas ketika PKP serta kebimbangan orang ramai akan kemungkinan berlakunya kekurangan barang keperluan. Selain itu, tema seperti penumpuan terhadap aliran produk kritikal, penyediaan stok awal, kawalan harga dari kerajaan serta kemudahan yang disediakan oleh kerajaan kepada pemis perniagaan telah disiarkan dengan kekerapan 1 kali sepanjang 2 minggu Fasa 1 PKP di antara 18-31 Mac 2020.

Jadual 3: Kekerapan Dan Peratusan (Kepenggunaan)

TEMA	KEKERAPAN	PERATUS
Barang keperluan asas dijamin mencukupi oleh kerajaan	5	29%
Peningkatan permintaan stok barang asas dan keperluan secara mendadak	2	12 %
Peningkatan kes penipuan dicatatkan semasa PKP terutama dalam urusan jual beli facemask	2	12%
Internet merupakan keperluan asas juga ketika PKP	2	12%
Orang ramai risau akan ketidakcukupan barang keperluan dan panik	2	12%
Aliran produk kritikal seperti makanan, pertanian, perikanan menjadi tumpuan	1	6%
Penyediaan stok dibuat persediaan awal	1	6%
Kerajaan memberikan kemudahan kepada premis perniagaan	1	6%
Kerajaan mengawal harga barang dengan baik	1	6%
	17	100%

4. Kesimpulan

Dalam ketidaktentuan ekonomi yang berlaku ketika mulanya Pandemik COVID-19 melanda Malaysia, sewajarnya isu mengenai kesihatan dan ekonomi menghiasi dada-dada akhbar utama. Kajian ini telah mendapati hanya 17 artikel bertemakan kepenggunaan disiarkan di akhbar-akhbar berikut. Tema-tema utama untuk isu kepenggunaan tersebut berkisar mengenai tanggungjawab kerajaan dalam memastikan bekalan barangan asas mencukupi. Selain itu tema-tema utama yang berkisar mengenai peranan kerajaan dalam meransang ekonomi dengan memperkenalkan bantuan-bantuan

umum dan khas untuk rakyat serta penerangan mengenai prosedur sektor ekonomi untuk beroperasi juga menjadi keutamaan untuk disiarkan di akbar-akhbar utama Bahasa Malaysia. Secara kesimpulan, nada yang ingin disampaikan oleh kedua-dua akhbar ini adalah bersifat positif yang memperlihatkan usaha kerajaan dalam memberi penerangan kepada rakyat mengenai perubahan norma kehidupan disamping memperkenalkan bantuan-bantuan yang akan diberikan oleh kerajaan disebabkan berlakunya Pandemik COVID-19 ini.

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SUB-SESSION 7

MARKETING

MSME Business Performance during Outbreak of Covid-19: A Perspective of Social Media Adoption and E-Commerce with Entrepreneurial Orientation as Mediation, Experience from Jambi, Indonesia

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Abstract

The Covid-19 epidemic that hit the world and Indonesia has had an impact on the health, economy and social sectors. In this Covid-19 pandemic situation, the MSME business has also experienced changes in its business processes. This study aims for the short term to examine the adoption of social media and e-commerce with entrepreneurial orientation as a mediation in improving the business performance of SMEs. Meanwhile, for the long term, this research is expected to become a model that will be implemented in improving the quality of MSMEs in Jambi Province so that they can move up from small to medium enterprises and from medium to large enterprises. This research was conducted in three districts in Jambi Province, namely Jambi City, West Tanjung Jabung Regency and Sungaipenuh City. Based on the findings of research and discussion, it can be concluded that social media adoption can affect MSME business performance during the Covid-19 period, while social media adoption can affect entrepreneurial orientation. Likewise, e-commerce has also influenced the performance of MSME business during the Covid-19 period and entrepreneurial orientation. Meanwhile, entrepreneurial orientation also had a significant influence on the business performance of MSMEs during the Covid-19 period. Social media adoption has an effect on MSME business performance during the Covid-19 period through entrepreneurial orientation. Meanwhile, E-commerce was able to affect the performance of MSME business during the Covid-19 period through entrepreneurial orientation.

Keywords: MSME Business Performance, Social Media Adoption, E-Commerce, Entrepreneurship Orientation, Covid-19

1. Introduction

Currently the world is experiencing the impact of the new coronavirus disease (COVID-19). The World Health Organization (WHO) has coordinated global efforts to manage the impact and declared COVID-19 a global pandemic on March 11, 2020 (WHO, 2020). The scale of the impact is unprecedented, and research suggests it may take more than a decade for the world to recover, both socially and economically (UN, 2020). G20 countries

pledged \$ 5 trillion to defend the global economy against COVID-19 (G20, 2020). As it is known, the pandemic started in the city of Wuhan, Hubei province, China and has brought many new challenges to public health in various countries. The world has experienced a global public health crisis in the last 20 years caused by new infectious viruses, such as HIV, Influenza A virus subtype H1N1, Influenza A virus subtype H5N, SARS-CoV1, MERS-CoV, and Ebola. However, epidemiologically the novelty of COVID-19 (SARS-CoV2), which is caused by a strain of the coronavirus, reveals a lack of preparedness due to its sudden and rapid spread that plagued many governments around the world unprepared.

Indonesia is the fourth most populous country in the world, and as such is expected to suffer greatly and over a longer period of time, when compared to other less densely populated countries (ADB, 2020). When Covid-19 hit China badly during December 2019 - February 2020. Meanwhile, in the same period, Indonesia reported no cases of infection at all. Only on March 2, 2020, President Joko Widodo who reported the first to confirm two cases of COVID-19 infection in Indonesia. According to data from the National Covid-19 Prevention Task Force, nationally on the report as of May 31, 2020, 26,473 people were exposed to the Covid-19 virus, 17,552 people were in care, 7,308 people recovered and 1,613 people died from the Covid-19 virus. Meanwhile, for reports as of the same date, the distribution per province, especially Jambi Province, recorded 97 people exposed to the Covid-19 virus, 15 people recovered, and zero people died. (<http://covid-19.go.id>, 2020).

From the conditions it has experienced, Indonesia has had quite a heavy impact from the health, economic and social aspects. The Indonesian government has issued an appeal to all people to be disciplined in 3 things, namely, using masks, maintaining distance from other people, and washing hands with hand washing soap in running water. This appeal is to break the chain of spreading the Covid-19 virus by transmitting locally. Economically, the Covid-19 epidemic has disrupted the business sector of various types, which has resulted in home workers, decreasing income, and heavy obligations to other parties. However, there are several business sectors that have shifted from being a conventional business to a digital business. Many business people are turning to digital platform businesses using both social media and e-commerce.

Internet innovation has played a very important role in business performance in today's developments (Kim, Li, & Brymer, 2016). The use of Web 2.0 applications has provided opportunities for the transfer of internet capabilities to a social environment where individuals can interact online using social media. (Sigala & Chalkiti, 2014). The development of social media has made an effective virtual space for accessing reliable information (Sigala, 2012). The adoption of social media makes users without the need for physical presence to communicate and produce content (Zhang, Guo, Hu, & Liu, 2017). Furthermore, almost all companies use social media to increase interaction between consumers and companies.

Various studies have examined the use of social media in business and there are also findings that it has many benefits (Kenly and Poston, 2016; Pan and Crofts, 2012; Arora and Predmore, 2013; Siamagka et al., 2015; Venkataraman and Das, 2013; Zolkepli and Kamarulzamn, 2015). Such social networking sites are therefore considered an electronic

marketplace, where businesses and customers interact (Gazal et al., 2016). The use of social media allows MSMEs to access markets outside their direct geographic area, without the necessary physical presence (Bilbao-Osorio et al., 2014). This is attractive to MSME owners because it can make geographic location, distance, and time irrelevant (Alarcon et al., 2015). Durkin et al. (2013) also found that MSMEs may gain certain benefits from using alternative business management tools such as social media, as they often lack the resources necessary for traditional forms of management.

Besides the adoption of social media as one of the MSME business strategies to improve its business performance and be able to compete with competitors. MSMEs can also adopt e-commerce as a tool to carry out their business strategies. E-Commerce today is increasingly becoming an important technology medium for businesses which serve their customers, expand business reach, respond to competitive pressures and reduce operating costs (Martin and Matlay, 2003; Beck et al, 2005; Wymer and Regan, 2005) . Despite the tremendous growth in e-commerce adoption worldwide, there are still significant differences between MSMEs and large and established companies (Formin et al., 2005; Prat, 2002).

Internet access that is getting cheaper and easier has been able to increase the number of internet users in Indonesia. Data from the We Are Social report shows that there has been an increase in internet users in Indonesia for a year, from January 2017 to January 2018, as much as 17 percent. The survey illustrates that internet users in a year have increased. Most of the Indonesian people are starting to realize the presence of the internet, even the internet is not just a medium for obtaining information, communication and entertainment but can also be used as a means for online business (business via internet media).

Based on Idea's data, 2018 explains that e-commerce activities in Indonesia can be described as follows, there are 48 percent of internet users in Indonesia looking for online products; 46 percent visited online stores; 41 percent buy products online; 34 percent buy via PC and 33 percent buy via mobile. This also explains that there is potential for MSMEs to adopt e-commerce because there are 41 percent of internet users in Indonesia buying online products. Data from the Jambi Province Cooperative and UMKM Office, (2015), reports that in Jambi Province, there were 81,959 MSMEs recorded, where Jambi City was the city that contributed the largest number of MSMEs, namely 13,723 businesses (). The business consists of Micro, Small and Medium Enterprises. The MSMEs are grouped based on capital and assets, where Micro Rp. 0-50 million, Small Rp. 50 - Rp. 500 million and Medium Rp. 500 million - Rp. 10 billion.

The results of the previous study reported that there were 40 MSMEs that actively adopted e-commerce in their trading activities, with the composition of the business group consisting of 34 small businesses (85%) and 6 medium enterprises (15%). This explains that there is still low utilization in trading activities (e-commerce) at MSMEs in Jambi. This of course needs special attention, given the low perception of most SME owners on the adoption of e-commerce and also the adoption of social media for the progress of their business.

In addition, Shah and Ahmad (2019) also reported that entrepreneurial orientation as a whole shows a strong positive influence on the business performance of MSMEs.

Therefore, during the Covid-19 epidemic, an empirical study was needed to reveal the extent of the influence of the adoption of social media and e-commerce with entrepreneurial orientation as mediation on the performance of MSME sustainable businesses in order to obtain a real description of its benefits for MSMEs in Jambi Province.

2. Literature Review

2.1. Social Media Adoption

There are several possible definitions of social media (Kietzmann et al., 2011), because it is understood and used differently by different people. This study uses Kaplan and Haenlein's (2010) definition, because it is simple but comprehensive. Kaplan and Haenlein (2010) define social media as “a group of Internet-based applications that are built on the ideological and fundamentals of Web 2.0 technology, and which enable the creation and exchange of User-generated Content.” When used successfully, social media enables organizations to grow. These may include, for example, relationships with trading partners, sharing information and managing communication and logistics across the supply chain (Humphrey et al., 2003). There have been a number of studies on social adoption and its impact on SME performance, in both developing and developed countries, although more in developed countries. It is important to note that generalizing the results of previous studies on the use of social media in MSMEs in developed country to developing country contexts can be a cause for concern. in a country progress and develop (Dewan and Kraemer, 2000).

In a theoretical model of social media adoption for small companies, Durkin et al. (2013) identified two basic perspectives. The first perspective is sales and business development, which aims to increase sales, e-commerce and referrals and deepen relationships. It integrates the ideas of profitability, commitment and loyalty (Kim et al., 2009) and focuses on gathering new customers, sales and after-sales service. Social media is a new communication channel that companies can leverage to generate direct or indirect sales. Social commerce encourages consumer interaction via social media (Hajli, 2013, 2014), enabling businesses to be more universally attractive (Chen et al., 2011). The second perspective on social media adoption is reputation management (Durkin et al., 2013), which concerns brand perception, online PR, and price comparisons. Companies can become visible if they also provide customer support aimed at continuous integration with brands and engagement with customers (Murdough, 2009). Visibility may have several benefits such as co-creation, with customers helping to design new products according to their needs (Hensel and Deis, 2010).

2.2. E-Commerce

Kalakota and Whinston (2014) state that E-commerce adoption is a perspective from B2C (Business to Consumer) as the buying and selling of information, products and services through computer networks. Most of the current literature describing e-commerce adoption in MSMEs focuses on factors that influence adoption and non-adoption decisions (Riemenschneider et al, 2004; Fomin et al., 2005; Wymer and Regen, 2005). A number of studies on e-commerce adoption have also examined a number of internal and external factors that influence adoption in MSMEs (Grandon and Pearson, 2004;

Sutanonpaibon and Pearson, 2006; Saffu et al., 2008). Pearson and Gardon, 2004 found that organizational readiness, external pressure, and perceived ease of use significantly influence e-commerce adoption. Meanwhile, Raymond et al. (2005) examined the assimilation of the e-business activities of manufacturing MSMEs with the findings that most of the benefits and business capabilities derived from e-business adoption can be categorized as communication / information functions, business intelligence, and transactional and collaborative functions.

Previous research has shown that the adoption of e-commerce in MSMEs increases efficiency not only in internal business processes but also in a broader supply chain (Johnstan and Wright, 2004; Kim et al., 2008). However, one of the main drawbacks of MSMEs is the size and weakness of their resources compared to their larger competitors. Therefore, MSMEs face significant challenges by identifying and developing a wider customer base and competing with global competitors (Etemad, 2004; Loan, 2006). In line with that, the development of e-commerce capabilities for MSMEs can be done by increasing global visibility and attracting new customer bases with geographic boundaries (Mehta and Shah, 2001; Moodley, 2003); serve existing customers with more efficiency and increased convenience, because customers can access e-commerce platforms anywhere and anytime (Johnston and Wright, 2004; Beck et al., 2005); and better understand and fulfill the dynamic nature of existing and prospective customers (Auger, 2005).

2.3. Entrepreneurial Orientation

Entrepreneurial orientation was first developed by Miller (1983) and after it was refined by Covin and Slevin (1989), "entrepreneurial orientation" refers to managerial attributes in risk-taking, innovation and proactivity. Entrepreneurial orientation references the managerial characteristics of risk-taking, innovation and proactivity (Covin and Slevin, 1989). It also describes the level of interest of the firm's activities for the identification and exploitation of new opportunities (Shane and Venkataraman, 2000) from the dynamics of the macro environment and its scope. Previous research has also shown that it is related to but different from market orientation. They argue that while market orientation emphasizes customer and competitor intelligence, "entrepreneurial orientation" is largely driven by markets that have not taken advantage of opportunities. Covin and Slevin (1989), the construct "entrepreneurial orientation" has three main dimensions: 1) innovation; 2) be proactive; and 3) taking risks.

"Entrepreneurial innovation" is defined as a willingness to support creativity and experimentation in introducing new products / services, and novelty, technological leadership and R&D in developing new processes (Lumpkin and Dess, 2001). The risk-taking behavior of entrepreneurs has been extensively researched in the Internet literature and is generally associated with the willingness of entrepreneurs to engage in quantified business-related risks (Brockhaus, 1980; Kreiser et al., 2002).

"Proactive" is defined as the perspective of exploring opportunities, being future-minded by engaging new products or services in front of the competition and acting as anticipation of future demands to create change and shape the ecosystem (Lumpkin and Dess, 2001, p. 431). This construct has been extensively validated by several cross-sectional, longitudinal and even cross-country studies (Kreiser et al., 2002).

Previous study on entrepreneurial orientation has argued that corporate entrepreneurship tends to take more risks than non-entrepreneurial firms and that these firms are proactively looking for new business opportunities (Khandwalla, 1977). In addition, Miller and Friesen (1982) in their research stated that corporate entrepreneurship tends to have a high emphasis on new product innovation. Such organizations are characterized by a willingness to innovate boldly and regularly while taking great risks in their product market strategies.

2.4. Business Performance

Wheelen & Hunger (2014) say business performance is measured by sales, market share and profitability. Meanwhile, Best (2009: 66) argues that business performance is the output or result of implementing all activities related to business activities, so the indicators of business performance are sales growth and profitability. Hubbard & Beamish (2011), business performance indicators seen from the marketing and financial performance aspects of the company. Measurement of business performance, especially marketing performance, can be measured, among others, by sales, market growth and market share. The financial performance perspective is measured by using the following measures: (1) return on investment ROI, (2) revenue mix, (3) asset utilization (measured by asset turnover), and (4) significant cost reduction.

This study uses a balanced scorecard approach to measure MSME business performance, because the balance scorecard is a group of integrated performance benchmarks derived from corporate strategy and supports corporate strategy throughout the organization. Measuring the success of business unit performance based on the balanced scorecard approach is divided into four perspectives (Kaplan & Norton, 1996), namely: financial perspective, customer perspective, internal business process perspective, and learning and growth perspective.

Based on the results of previous research above, the State of the art of this study is based on improving the quality of sustainable business performance of MSMEs in Jambi Province which was developed by implementing the adoption of social media and e-commerce mediated by entrepreneurial orientation. There are still few research proposals with this research model, so this research includes high originality.

2.5. Research Model

Based on the literature review above, a research model can be formulated which consists of variable constructs of social media adoption, e-commerce, entrepreneurial orientation and business performance of MSME as follows:

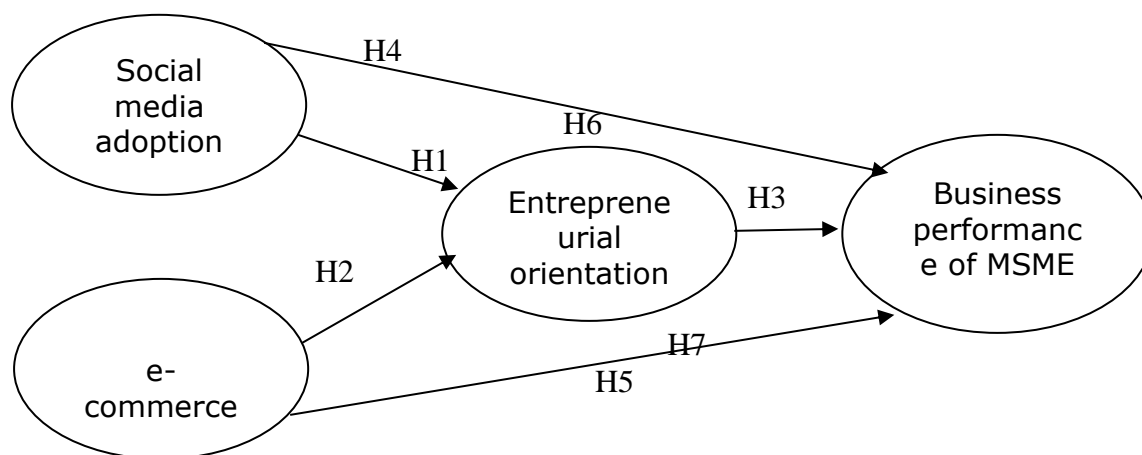


Figure 1. Research Model

2.6. Hypothesis

Based on the literature review, the research model mentioned above, research hypotheses can be formulated as follows:

- H1: Social media adoption has a positive effect on entrepreneurial orientation.
- H2: E-commerce has a positive effect on entrepreneurial orientation.
- H3: Entrepreneurial orientation has a positive effect on business performance of MSME
- H4: Social media adoption has a positive effect on business performance of MSME
- H5: E-commerce has a positive effect on business performance of MSME.
- H6: Social media adoption has a positive effect on business performance of MSME through entrepreneurial orientation.
- H7: E-commerce has a positive effect on business performance of MSME through entrepreneurial orientation

3. Research Method

This study used a survey using a questionnaire and identified target populations. The main questionnaire uses a closed questionnaire, but still uses an open questionnaire technique. To support data collection from quantitative data, data collection using qualitative approaches is part of strengthening quantitative data.

The sampling unit is the UMKM business actor, while the unit of analysis is the UMKM in Jambi Province (especially in Jambi City, West Tanjung Jabung Regency and Sungaipenuh City). To meet these criteria, a stratified random sampling method was used to collect data. The number of samples that will be used as respondents is as many as 150 UMKM entrepreneurs, each with 50 sample units per research object.

Primary data consists of two main sources, namely 1) individuals and 2) groups. Individual data (MSME owners) were obtained by submitting questionnaires while data

from groups were obtained from in-depth interviews with relevant stakeholders. The data relates primarily to: 1) social media adoption; 2) e-commerce; 3) entrepreneurial orientation, 4) MSME sustainable business performance. These data sources include the government which is directly related to the development and empowerment of MSMEs during the Covid-19 period in Jambi Province.

Secondary data is data that includes the number of MSMEs per year, the number of workers absorbed by MSMEs, the profile and characteristics of MSMEs business as well as the number of MSME transactions that adopt social media and e-commerce and other secondary data relevant to this study.

The variables of this study consist of four main variables consisting of: 1) social media adoption 2) e-commerce, 3) entrepreneurial orientation, and 4) MSME business performance during the Covid-19 period.

Two forms of data analysis were used: 1) Qualitative analysis. This analysis is used to collect data obtained with in-depth authority, FGD, and observation. As generally there are two approaches used, namely the content analysis approach and triangulation analysis. This analysis is based on the field notes or process notes of each researcher. 2) Quantitative Analysis. The approach used here is to use SEM analysis with the PLS version 3.0 application.

4. Result and Discussion

4.1. Overview of Respondent

Characteristics of respondents in this study are based on gender, age, latest education, business field, turn over per month, business experience, social media owned by MSME owners, E-commerce chosen by MSMEs in marketing products / services, Length of time using social media per day in hours, Use of social media as a marketing tool, and This was felt the most by MSME during the Covid-19 Period. For more details, the characteristics of the respondents can be described in Table 1 below.

Table 1. Characteristics of Respondents

Characteristics	Criteria	Amount	Percentage (%)
Gender	Male	86	57,33
	Female	64	42,67
Total		150	100
Age (Years)	17 – 20	6	4,00
	21 – 30	37	24,67
	31 – 40	42	28,00
	> 40	65	43,33
Total		150	100
Education Level	SD / equivalent	3	2
	Junior high school / equivalent	4	2.67
	Senior High School / equivalent	40	26.67
	Bachelor degree	44	29.33
	Graduate	51	34

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	Postgraduate	8	5.33
Total		150	100
Business Field	Trade, hotel and restaurant	45	30.00
	Private services	22	14.67
	Financial services, leasing, and company services	11	7.33
	Transport and communication	15	10.00
	Building	12	8.00
	Agriculture, livestock, forestry and fisheries	14	9.33
	Mining and excavation	8	5.33
	Processing industry	11	7.33
	Electricity, gas and clean water	12	8.00
Total		150	100
Turn over per month (IDR)	< 10.000.000	13	8.67
	11.000.000 – 20.000.000	18	12.00
	21.000.000 – 30.000.000	21	14.00
	31.000.000 – 40.000.000	23	15.33
	41.000.000 – 50.000.000	42	28.00
	> 50.000.000	33	22.00
Total		150	100
Business Experience (Year)	1-3	38	25.33
	4-6	41	27.33
	7-10	37	24.67
	More than 10	34	22.67
Total		150	100
Social Media owned by MSME owners	Youtube	24	16
	Whatsapp	35	23.33
	Facebook	38	25.33
	Instagram	28	18.67
	Tiktok	4	2.6
	Liner	8	5.33
	Twitter	11	7.33
	Etc	2	1.33
Total		150	100
E-commerce chosen by MSMEs in marketing products / services	Tokopedia	27	18
	Bukalapak	29	19.33
	Shopee	36	24
	Lazada	17	11.33
	Blibli	21	14.00
	JD	9	6.00
	Zalora	11	7.33
Total		150	100
Length of time using social media per day (hours)	Less to 5	53	35.33
	6-10	61	40.67
	11-15	29	19.33
	More than 16	7	4.67

Total		150	100
Use of social media as a marketing tool	At least	8	5.33
	A few	16	10.67
	Fair	62	41.33
	Very much	64	42.67
Total		150	100
This was felt the most by MSME during the Covid-19 Period	Decreased turnover of 30 percent from before the Covid-19 pandemic	25	16.67
	Decreased turnover of 50 percent from before the Covid-19 pandemic	31	20.67
	Delayed payment of MSME loan installments to banks	17	11.33
	A decrease in production capacity of 50 percent from before the Covid-19 pandemic	28	18.67
	There is a reduction in the workforce of 50 percent of the total number of workers owned by MSMEs	28	18.67
	There are no new loans for MSMEs from banks, when compared to before the Covid-19 pandemic	21	14.00
Total		150	100

Based on the table above, it can be illustrated that the characteristics of respondents based on the majority of gender are male by more than 57.33 percent with 43.33 percent aged more than 40 years old and most of them have 4-6 years in business experience around 27.33 percent. Furthermore, based on social media owned by MSME owners that most of them has facebook around 25.33 percent and they are using social media per day around 40.67 percent with range 6-10 hours per day. In fact, more than 42.67 percent they were used social media as a marketing tools. When respondent ask about whether they felt the most by MSME during Covid-19 period mentioned that most of them around 20.67 percent had decreased turnover of 50 percent from before the Covid-19

4.3. Reliability and Validity Test

The results of the reliability and validity test of each construct variable can be seen in table 2 below.

Table 2. Construct Reliability and Validity

Variable Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Social Media Adoption	0,926	0,933	0,923	0,550
E-commerce	0,947	0,958	0,943	0,659
Business Performance of MSME in Covid-19 Period	0,875	0,800	0,787	0,628
Entrepreneurial Orientation	0,941	0,943	0,888	0,573

Base on the table above, it can be explained that the social media adoption variable was 0.926, the e-commerce variable was 0.947, the MSME business performance variable

during the Covid 19 period was 0.875, the entrepreneurial orientation variable was 0.941. The results show the accuracy and reliability of all variables, where the score is more than 0.7. In the other hand, the social media adoption variable was 0.923, the e-commerce variable was 0.943, the MSME business performance variable during the Covid 19 period was 0.787, the entrepreneurial orientation variable was 0.888. The results show that the overall variable is declared reliable, where the score is more than 0.7

Overall, it can be explained that the social media adoption variable is 0.550, the e-commerce adoption variable is 0.659, the MSME business performance variable during the Covid 19 period is 0.628, the entrepreneurial orientation variable is 0.573. The results show that the overall variable is declared to meet the validity, where the score is more than 0.5

Furthermore, the results of statistical testing also obtained the R square value to see the contribution of its influence on the research model. The following table 3 describes the results of the R Square value.

Table 3. R Square Value

Variable	R Square	R Square Adjusted
Loyalty of rural tourism destination	0.700	0.691
Behavior Intention	0,480	0,462

Based on the table above, it can be explained that the R square value of MSME business performance during the covid 19 period obtained a value of 0.700 with a criterion of 0.3 meaning that the adoption of social media and e-commerce was able to contribute or influence as much as 0.700 on the performance of MSME business performance during the covid 19 period

Meanwhile, the value of Rsquare of entrepreneurial orientation obtained a value of 0.480 with a criterion of 0.3 which means that the adoption of social media and e-commerce are able to contribute or influence as much as 0.480 on entrepreneurial orientation

Furthermore, to describe the measurement results using Smart PLS version 3.0, it can be seen in Figure 2 the full model as follows.

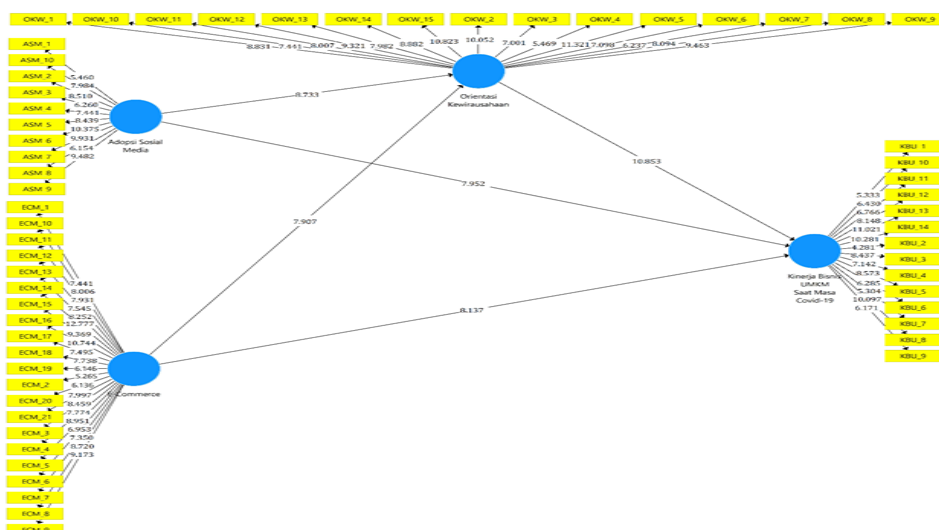


Figure 2. Full Model

Path Coefficients

In order to test the research hypothesis, it can be explained by the path coefficient value that has been processed from the results of data processing with the Smart PLS version 3.0 application, which can be presented in table 4.

Tabel 4. Path Coefficients

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Result
Social Media Adoption -> MSME Business Performance During the Covid Period 19	0.432	0.427	0.342	7.952	0.000	Accepted
Adoption of Social Media -> Entrepreneurial Orientation	0.501	0.524	0.456	8.733	0.008	Accepted
E-Commerce -> MSME Business Performance During the Covid Period 19	0.349	0.337	0.392	8.137	0.004	Accepted
E-Commerce -> Entrepreneurial Orientation	0.332	0.314	0.627	7.907	0.000	Accepted
Entrepreneurship Orientation -> MSME Business Performance During the Covid Period 19	0.488	0.493	0.522	10.853	0.000	Accepted
Adoption of Social Media -> Entrepreneurial Orientation -> MSME Business Performance During the Covid 19 Period	0.433	0.475	0.614	8.640	0.000	Accepted
E-Commerce -> Entrepreneurship Orientation -> MSME Business Performance During the Covid 19 Period	0.597	0.566	0.385	7.009	0.003	Accepted

Statistical T value > 1.96 and P value with a significant level of 0.05

Based on the results of the P value in the table above, it can be stated that all these hypotheses are accepted as acceptable because the value is close to 0.00 and is below the significant level of 0.05. This proves that all research hypotheses provide the same answers as the initial assumptions in this study. Social media adoption have positive on

entrepreneurial orientation, e-commerce which is able to have a positive influence on entrepreneurial orientation. Entrepreneurial orientation also has a positive influence on MSME business performance during the Covid-19 period.

Furthermore, the social media adoption has a positive effect on MSME business performance during Covid-19 period, as well as e-commerce adoption on MSME business performance during Covid-19 period. Based on the findings of the research on entrepreneurial orientation that are able to mediate social media adoption towards the MSME business performance during Covid-19 period, likewise entrepreneurial orientation are also able to mediate e-commerce adoption with MSME business performance during Covid-19 period. These findings are in contrary to those found by (Ahmad et al., 2019) that social media adoption has no effect on SME performance, where these findings can help managers and decision makers in the SME sector try to balance research on social media innovation, and enable they are now becoming more and more ubiquitous to benefit from social commerce. Meanwhile, reported by (Hajli, 2012) that the model predicts forums and communities, ratings, reviews, referrals and recommendations to help introduce new business plans for electronics vendors. The model also shows that trust is an ongoing problem in e-commerce and can be built through the construction of social commerce.

However, as a whole, the findings of this study show a relationship that has a positive effect on one variable with another. These findings can also contribute to the results of previous studies.

5. Conclusion and Recommendation

5.1. Conclusion

Based on the findings of research and discussion, it can be concluded that the adoption of social media can affect the business performance of MSMEs during the Covid-19 period, while social media adoption can influence entrepreneurial orientation. Likewise, e-commerce has also influenced the performance of MSME business during the Covid-19 period and entrepreneurial orientation. Meanwhile, entrepreneurial orientation also had a significant effect on the business performance of MSMEs during the Covid-19 period. Social media adoption has an effect on MSME business performance during the Covid-19 period through entrepreneurial orientation. Meanwhile, E-commerce was able to influence the performance of MSME business during the Covid-19 period through entrepreneurial orientation.

5.2. Recommendation

From the research results and conclusions above, several things can be recommended as follows; For the government, in the context of making policies in the MSME development sector, it can be formulated that the performance of MSME business during the Covid-19 period will be influenced by the ability of MSMEs to adopt social media and the use of e-commerce, for MSME business players, they can consider the need for the ability to adopt social media and e-commerce while still having an entrepreneurial orientation. As for academics, the results of this research can be used as a contribution in the science of marketing strategy management, especially in the field of MSME marketing strategy.

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Loyalty of Rural Tourism Destination: A Perspective of Destination Quality Perception, Satisfaction, and Behavior Intention, Experience in Jambi Province, Indonesia

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Abstract - The tourism sector is developing very rapidly nowadays and is able to make a major contribution to Indonesia's economic development. One of the tourism product portfolios offered to tourists is nature which includes tourist villages that are developed and encouraged by the government to become new and attractive tourist destination alternatives. . This study aims for the short term to examine the loyalty of tourist village destinations as a perspective of the perception of destination quality, satisfaction and intentions of practice in Kerinci Regency, Jambi Province. Whereas for the long term this research is expected to increase the loyalty of tourist village destinations in Jambi Province. This research was conducted in three selected tourism villages, namely Lempur tourism village, Pendung Talang Genting tourism village and Jernih Jaya tourism village, Kerinci Regency, Jambi Province. Based on the findings of research and discussion, it can be concluded that tourist satisfaction is able to influence tourist destination loyalty, behavioral intention and besides that behavioral intention also affects the loyalty of tourist village destinations. Meanwhile, the perception of the quality of tourist destinations is able to influence the loyalty of tourist destinations. Perceptions of the quality of tourist destinations actually influence the behavior of tourists to return to tourist village destinations. Tourism satisfaction also affects the loyalty of tourist village destinations. However, the perception of the quality of tourist village destinations is able to influence the loyalty of tourist village destinations through the intention of tourist behavior.

Keywords: Tourism Destination Loyalty, Perception of Destination Quality, Tourist Satisfaction, Behavioral Intention

1. Introduction

The national tourism industry continues to experience massive growth during one period of the current administration. This is related to the decline in the traditional agricultural industry sector, so various tourism stakeholders (namely local communities/local communities, government, and industry players) have shifted to starting to focus on tourism villages that have the potential as alternative solutions in generating income (Moric, 2014; Ruiz-Molina et al., 2010). In fact, tourism villages have been recognized as an important tool for improving local welfare and living standards (Aliman et al., 2016; Peptenatu et al., 2009; Pröbstl-Haider et al., 2014). However rural tourism has grown and developed over the last few years, however, there are a number of challenges experienced by tourist villages as tourist destinations. Previous studies have observed increased

competition among tourist destinations (Gursoy et al., 2014; Ramseook-Munhurrun, P., Naidoo, P., Seebaluck, V. N., & Pillai, 2016; Zainuddin et al., 2013) into attract more international tourists and domestic tourists. Furthermore, Adeyinka-Ojo et al., (2014) also found that it is increasingly important to clearly compare destinations between tourist villages to maintain their position in the tourism market. As a consequence, studies on tourism village destinations with competitiveness are getting more and more attention from tourism stakeholders (I et al., 2015), and various previous researchers' efforts in assessing and identifying the main attractiveness factors of tourist village destinations.

The broad potential for rural tourism as a major pull factor for attracting tourists to specific destinations has led to a broad study based on a number of factors: understanding of previous experiences (C. F. Chen & Chen, 2010; Nair et al., 2015; Rajaratnam et al., 2014), service quality (Albacete-Sáez et al., 2007; Butnaru & Miller, 2012; Martínez Caro & Martínez García, 2008), visitor motivation (Devesa et al., 2010) and tourist ratings (Weiermair & Fuchs, 1999). Despite the importance of understanding service quality attributes in destinations and tourist satisfaction, research on tourist behavior intentions, based on destination attributes, is still limited in the context of rural destinations. Previous studies were able to identify service quality attributes as a factor that affects loyalty either directly or indirectly ((Shawn) Jang & Feng, 2007; Bowen & Shoemaker, 2003; J. S. Chen, 2001; Chi & Qu, 2008; Hosany et al., 2007; Lee et al., 2007; Martina G. Gallarza, Irene Gil Saura, Haydée Calderón García, 2002; Yoon & Uysal, 2005). Studies also show that the overall image of a destination not only influences the destination selection process but also the general intention of tourist behavior (Qu et al., 2011; Bigne et al., 2001).

Fitriani, (2019), reported that the tourism sector was able to become the largest contributor to Indonesia's GDP in 2019, displacing the oil and gas sector whose contribution continued to decline. Indonesia is visited by 20 million foreign tourists (tourists) with foreign exchange of around Rp. 280 trillion. The labor absorption in the tourism sector reaches 12.6 million people and Indonesia's tourism competitiveness index will be ranked 30th in the world. This has become an attraction for tourism development in all sectors. One thing that is getting attention today is the development of village tourism. Rural tourism products in Indonesia as suggested by tourism providers in the country include, homestays, nature and environmental tourism, agro tourism, culture and tourism based on heritage and this diversity shows that rural tourism has the potential to play a major role in increasing tourism output and increasing contribution. tourism industry both nationally and locally.

Tourist destination loyalty is the main result of the successful delivery of quality and experience of tourism services in tourist destinations. Several studies reveal that the relationship between service quality and customer loyalty is well established but this relationship has never been fully investigated in the context of tourist destinations (Vinh and Long, 2013; Yang et al., 2014). The tourist destination environment is in a state of constant change and overlap prompting more investigation and analysis for such a relationship (Najdic, 2011; Vinh and Long, 2013). Regarding the above, tourist destination loyalty is the main concept and one of the main results of the successful delivery of quality in tourist destinations (Moon et al., 2011; Demir, 2013). Empirically, this research focuses mainly on tourist loyalty in tourist destinations. However, recent studies show that the phenomenon of tourist destination loyalty cannot be approached

without thoroughly understanding other tourism marketing concepts at the local and international levels and various tourism contexts.

One of the provinces that also develops the tourism sector is Jambi Province. Visiting interest in tourism in recent years has shown an increase. Data from the Jambi Province Tourism and Culture Office, 2019 shows that for 2017 the total number of tourists was 2,162,155 people and in 2018 2,399,560 people. This is an increase of 11 percent from the previous year. Whereas for the distribution of foreign and domestic tourist visits, it is as follows in 2017 the number of foreign tourists was 5,378 people and in 2018 the number of foreign tourists was 10,887 people, an increase of 102 percent occurred. Furthermore, the number of domestic tourists in 2017 was 2,156,777 people and 2018 amounted to 2,388,673 people with an increase of 11 percent. Meanwhile, the number of tourist visits to Kerinci Regency in the last two years has also shown a very significant increase, this can be seen from the data on visits by foreign tourists and domestic tourists. Based on 2017 data, the number of foreign tourists was 8,000 and domestic tourists were 221,287 people, while for 2018 the number of foreign tourists was 10,000 and domestic tourists were 265,544, an increase of 20 percent from the previous year.

A tourist village is a rural area that has unique and special characteristics to become a tourist destination (Ariani, 2017). In essence, a tourism village is the development of a village by utilizing the ability of elements in the village community which function as attributes of tourism products into a series of integrated tourism activities and have certain themes according to village characteristics (Murdiyanto, 2011). Perceptions of the quality of destinations that affect tourists can be used as a reference for actors in rural tourism services starting from the local government, tourism service providers, managers of tourist attractions in determining policies and decisions in accordance with the wants and needs of the tourists themselves, either through the (market) approach. driven or product driven) in a tourist village. (Batti and Baiquni, 2013).

This study adopts the term tourist experience for tourist destination loyalty to characterize this study from a visitor's point of view to examine the views of tourists as important factors for the development of tourist village destination loyalty.

Based on the explanation above, it is necessary to conduct a research study entitled "Loyalty of Rural Tourism Destination: A Perception of Destination Quality, Satisfaction, and Behavioral Intention in Kerinci Regency, Jambi Province, Indonesia". Where this research aims to examine the perceptions of visitors to tourist villages from the point of view of destination quality towards tourist behavior intentions through satisfaction and behavioral intentions as factors that make tourists loyal to tourist village destinations.

2. Literature Review

2.1. Perception of Destination Quality

Destination is defined as the location of a group of attractions, tourist facilities and services (Kim and Brown, 2012), and the combination of these features is a product of tourism at the destination level (Zabkar et al., 2010). Zabkar highlighted the existence of two frameworks for grouping the attributes of a destination, which are "four A" (Attractions, Access, Facilities and Additional Services) and "six A" (Attractions, Access, Facilities, Available Packages, Activities, and Services). In addition). Apart from this

general classification, the relevant features of a destination are highly contextual and an assessment of destination quality should reflect the specific attributes that characterize the destination (Zabkar et al., 2010). Previous studies (Lopez-Toro et al., 2010); Eusebio and Vieira, 2013; Chen et al., 2011; Moutinho et al., 2012), therefore, have used different important attributes to assess destination quality. This study, however, did not focus on rural tourism destinations. of the growth of rural tourism in many developed and developing countries, limited research has been carried out in this area. The studies mentioned have assessed the quality of rural accommodation (Loureiro and Gonzalez, 2008) or livestock tourism (Rozman et al., 2009). Therefore, for the scope of this study, the attributes relevant to measuring the quality of rural tourism destinations can be identified and used.

2.2. Tourist Satisfaction

According to literature, customer satisfaction, or tourist satisfaction refers to the results of the evaluation of tourists and the comparison of the perceived performance of the product / service with expectations (Heung and Cheng, 2000). If performance exceeds expectations, the result is tourist satisfaction; However, when expectations exceed performance, the result is dissatisfaction. Tourist satisfaction is important in destination marketing because it affects destination choice, consumption of goods and services, number of repeat visits, word of mouth publicity, and destination loyalty (Kozak and Rimmington, 2000; Kozak, Bigne, and Andreu, 2004). Tourist satisfaction can be determined by the comparison of tourists regarding their expectations of a destination and destination perceptions of evaluative experiences at tourist destinations (Yoon and Uysal, 2005). An understanding of tourist satisfaction is a basic tool for evaluating the performance of destination products and services (Yoon and Uysal, 2005). Therefore, monitoring tourist satisfaction is an important task for destination authorities / planners to obtain feedback and detect problems causing tourist dissatisfaction that may have a negative impact on future visits (Reisinger and Turner, 2003). Traveler satisfaction assessments associated with island destinations can help destination managers adjust their efforts to enhance tourist travel experiences and to develop effective destination marketing strategies (Kozak and Rimmington, 2000; Yoon and Uysal, 2005).

Previous studies on measuring tourist satisfaction have often been carried out by creating a collection of destination attributes and asking tourists to evaluate them on a ranking scale (Dmitrovic et al., 2009). These attributes "comprise all the elements of a 'non-home' place that keep tourists away from their homes" (Lew, 1987, p. 554) and can be seen as a "pull factor" that directs a person to choose one destination over another. once the decision to travel has been made (Dann, 1977). Cooper et al. (1993) define destination as the focus of facilities and services designed to meet the needs of tourists. Most destinations consist of the following core attributes, which can be characterized as a four-A framework: Attractions, Access, Facilities, and additional services. Buhalis (2000) further developed the attributes of tourist destinations into 6 A, an extension of the four A framework proposed by Cooper et al. (1993). These are Attractions, Accessibility, Facilities, Packages available, Activities and additional services. Due to the multi-dimensional nature of objectives, it has been suggested that tourist satisfaction should be operationalized at the global (overall satisfaction) and attribute (attribute satisfaction) levels (Chi and Qu, 2009; Chung and Petrick, 2013; Kozak, 2003). Tourists experience mixed feelings about a destination, and they can feel satisfied and dissatisfied with

various aspects of the same destination. It is the combination of perceptions about the various goal attributes that results in the overall level of satisfaction. The existing literature has analyzed tourist satisfaction from various contexts; Most tourist satisfaction assessments at the destination level are based on general attributes that can be applied in all cases and do not necessarily refer to a particular destination type (Song et al., 2011). It should be noted that some attributes of a destination appear to be agreeable and universally important, but others may not and are only important for certain types of destination (Lin et al., 2007). Therefore, it raises an urgent need to explore sector-specific destination attributes that result in minimum tourist satisfaction levels in the context of industrial tourism. Moreover, the relative impact of each level of satisfaction attributes is the same neither on overall satisfaction nor on intention to recommend and review (Chi and Qu, 2009; Kozak, 2003).

2.3. Behavioral Intention

The study of behavioral intention is still an important area of research in tourism as good intentions show tourist loyalty (Prayag et al., 2013). Recent empirical research has assessed tourists' behavioral intentions or tourist loyalty as their goal of intent to revisit goals and their willingness to recommend goals to others (Eusebio and Vieira, 2013; Ozdemir et al., 2012; Sun et al., 2013) because these two indicators are the steps most often used in tourism (Zhang et al., 2014; Phillips et al., 2013), these two measures of behavioral intention are also used in this study.

Much of the research on tourists' perceptions of destinations and their behavior in future intentions has also focused on tourist satisfaction, as it influences tourist satisfaction on their decision to return (Huh et al., 2006). Recommendations from word of mouth (Ozdemir et al., 2012) are another important factor, because satisfied tourists are more likely to visit and recommend destinations to others, when contrasted with dissatisfied tourists (Sun et al., 2013).

However, the results of this study have conflicted with satisfaction of either having a full mediating effect, a partial mediating effect or a non-mediating effect on the relationship between destination quality and intention behavior (Zabkar et al., 2010). Previous studies have examined the influence of moderating socio-demographic characteristics on tourists' perceptions of a destination, satisfaction and behavioral intention or loyalty.

2.4. Loyalty of Rural Tourism Destination

Loyalty is generally defined as the intention or behavior of a customer to repurchase or duplicate a particular product or service; thereby causing repeated purchases of the same brand (Hawkins, Best and Coney, 1995; Oliver, 1999). In the marketing literature, loyalty measures the strength of consumer affection for a brand (Backman and Crompton, 1991). It is based on the consumer's brand preference or the brand's intention to buy. Customer satisfaction, customer experience, value, service quality, performance, price, and brand name can all contribute to loyalty (Backman and Crompton, 1991; Oliver, 1999). In relation to the tourism literature, tourist destination loyalty refers to the intention of tourists to revisit the same destination, and their intention to recommend the destination to their friends / relatives (Toyama and Yamada, 2012). The concept of destination loyalty

has been extensively researched to develop effective ways to attract more tourists to destinations (Kim and Brown, 2012; Toyama and Yamada, 2012; Mechinda, Serirat, and Gulid, 2009). Destination loyalty, thus, is an important indicator used to develop a destination's competitive advantage and an effective marketing strategy (Yoon and Uysal, 2005). In general, destination loyalty can be measured by the intention of tourists to revisit the same destination, and their intention to recommend a destination to others (Toyama & Yamada, 2012). Of these two measures, repeat visits are considered a very strong indicator of future behavior (Mechinda et al., 2009). However, gaining traveler loyalty is one of the main challenges of destinations (Kim and Brown, 2012), including destinations. Understanding the determinants of destination loyalty will help destination managers develop island tourism and increase its competitiveness.

2.5. Research Model

Based on the literature review above, a research model can be formulated which consists of variable constructs of perception of destination quality, tourist satisfaction, intention of tourist behavior and loyalty of tourist village destinations as follows:

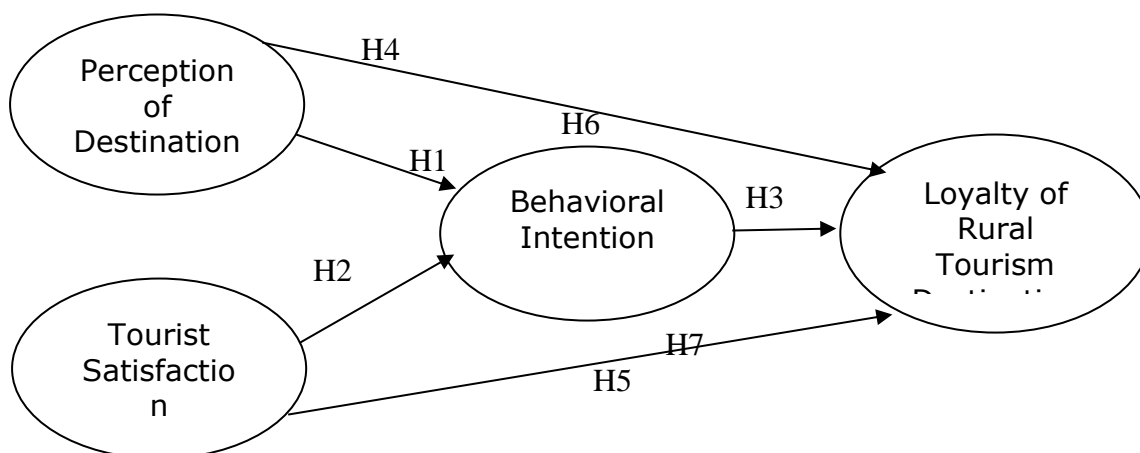


Figure 1. Research Model

2.6. Hypothesis

Based on the literature review, the research model mentioned above, research hypotheses can be formulated as follows:

- H1: Perception of destination quality has a positive effect on tourist behavioral intentions.
- H2: Tourist satisfaction has a positive effect on tourist behavioral intentions.
- H3: Behavioral intention has a positive effect on the loyalty of tourist village destinations.
- H4: Perception of destination quality has a positive effect on the loyalty of tourist village destinations.
- H5: Tourist satisfaction has a positive effect on the loyalty of tourist village destinations.
- H6: Perception of destination quality has a positive effect on the loyalty of tourist village destinations through the intention of tourist behavior.
- H7: Tourist satisfaction has a positive effect on the loyalty of tourist village destinations through the intention of tourist behavior.

3. Research Method

The study used a survey characterized by the use of a questionnaire and an identified target population. The main questionnaire uses a closed questionnaire, but still uses an open questionnaire technique. To support data collection from questionnaires, quantitative data, and also data collection with a qualitative approach to strengthen quantitative data.

Tourists who visit Kerinci tourism village is observed unit, while the unit of analysis is Kerinci tourism village. To meet this criterion, a data collection method with convenience sampling was used. To draw the number of samples, this study refers to the opinion of Hair et al. 2010, the number of samples can be calculated from the number of indicators multiplied by 4-5 variables. Given that the population of tourist visitors to the tourist villages in Kerinci Regency cannot be calculated accurately, the sample size in this study is as follows: $4 \times 37 = 148$ respondents.

Primary data consists of two main sources, namely 1) individuals and 2) groups. Individual data (tourists) were obtained by submitting questionnaires while data from groups were obtained from in-depth interviews with relevant stakeholders. The data relates primarily to: 1) perceived quality of destinations, 2) tourism satisfaction 3) behavioral intentions, and 4) loyalty of tourist village destinations. This data source includes the government which is directly related to tourism development in Kerinci district and Jambi Province.

Secondary Data. includes the development of the tourism industry sector in Kerinci Regency and Jambi Province, the number of lodgings in tourist villages, the development of domestic and foreign tourism, the number of tour guides, the number of tourist objects in tourist villages and in Kerinci district and other secondary data relevant to this study. The variables of this study consist of each of the main variables consisting of: 1) Perception of destination quality (X1), 2) Tourist satisfaction (X2), 3) Behavioral intention (Z) and 4) Loyalty of tourist village destinations (Y).

There are two types of data analysis used: 1) Qualitative analysis. This analysis is used to collect data obtained with in-depth authority, FGD, and observation. As generally there are two approaches used, namely the content analysis approach and triangulation analysis. This analysis is based on the field notes or process notes of each researcher. 2) Quantitative Analysis. The approach used here is to use the Partial Least Square (PLS) version 3.0 application.

4. Result and Discussion

4.1. Overview of Respondent

Characteristics of respondents in this study are based on gender, age, latest education, occupation, monthly income, selected tourist village destinations, tourist destinations, frequency of travel, traveling, lodging in tourist villages, information about tourist village destinations in Kerinci, length of stay in the Tourism Village and Average Expenditures during the Tour. For more details, the characteristics of the respondents can be described in Table 1 below.

Table 1. Characteristics of Respondents

Characteristics	Criteria	Amount	Percentage (%)
Gender	Male	87	58,78
	Female	61	41,22
Total		148	100
Age (Years)	17 – 20	28	18,92
	21 – 30	39	26,35
	31 – 40	45	30,41
	> 40	36	24,32
	Total		148
Education Level	SD / equivalent	4	2,70
	Junior high school / equivalent	8	5,41
	SMA / equivalent	21	14,19
	Diploma	31	20,95
	Bachelor degree)	58	39,19
	Postgraduate	26	17,57
Total		148	100
Profession	Government employees	29	19,59
	Private employees	38	25,68
	TNI / POLRI	12	8,11
	Entrepreneur	22	14,86
	Student / Student	27	18,24
	Not yet working	17	11,49
	Others	3	2,03
Total		148	100
Income per month (IDR)	< 2.000.000	4	2,70
	2.000.000 – 4.000.000	19	12,84
	4.000.000 – 6.000.000	42	28,38
	6.000.000 – 8.000.000	51	34,46
	8.000.000 – 10.000.000	24	16,22
	> 10.000.000	8	5,41
Total		148	100
Selected Tourism Village Destinations	Desa Wisata lempur	51	34,46
	Desa Wisata Pendung Tanah Genting	44	29,73
	Desa Wisata Jernih Jaya (Rawa Bento)	48	32,43
	Desa wisata lainnya	5	3,38
Total		148	100
Tourist Aim	Holiday	111	75,00
	Research	12	8,11
	Business	17	11,49
	Etc	8	5,41
Total		148	100
Travel Frequency	Sometimes	27	18,24
	Very often	59	39,86
	Always traveling at all times	62	41,89

Total		148	100
With who Take a Tourist Trip	Alone	39	26,35
	Together	109	73,65
Total		148	100
Information about tourist village destinations in Kerinci	Newspapers, Magazines	8	5,41
	Radio, Television	7	4,73
	Website / social media / Internet	129	87,16
	Others	4	2,70
Total		148	100
Lodging in the Tourism Village	Home residents	37	25,00
	Inn	29	19,59
	Homestay	43	29,05
	Budget hotel	28	18,92
	Two or three star hotel	11	7,43
Total		148	100
Length of Stay in the Tourism Village	One night	21	14,19
	Two to three nights	48	32,43
	Three to four nights	39	26,35
	Five to six nights	24	16,22
	More than six nights	16	10,81
Total		148	100
Average Expenditure During Tour	Less than Rp. 750,000	11	7,43
	Rp. 751,000 - Rp. 1,000,000	28	18,92
	Rp. 1,001,000 - Rp. 1,250,000	37	25,00
	Rp. 1,251,000 - Rp. 1,500,000	32	21,62
	Rp. 1,501,000 - Rp. 1,750,000	26	17,57
	More than Rp. 1,751,000	14	9,46
Total		148	100

Based on the table above, it can be illustrated that the characteristics of respondents based on the majority of gender are male by more than 58 percent with 30.41 percent aged 30-40 years on average. Furthermore, from the education level, it turns out that more than 39 percent have a bachelor's degree and have the most jobs as private employees at 25.68 percent and 34.46 percent have an average monthly income of between 6 million and 8 million rupiah. Whereas for the tourism village destinations that were chosen by the respondents, the largest number of tourism villages was lempur village at 34.46 percent, followed by 32.43 percent for choosing the destination of Jernih Jaya village (Rawa Bento) and 29.72 percent choosing the pendung tourism village of Isthmus. The main purpose of the respondents to visit a tourist village stated that 75 percent of the time was for holidays. It turns out that almost more than 87 percent of respondents get information from the website / social media / internet about tourist village destinations in Kerinci. Tourists prefer to stay at homestays around tourist villages as much as 29 percent and the rest stay at family or residents' homes, jasmine hotels and two or three star hotels. The average stay in a tourist village is two to three nights with the number of respondents amounting to more than 32 percent of the total number of respondents and they spend on average between 1 million and 1 million two hundred and fifty thousand rupiah as much as 25 percent.

4.3. Reliability and Validity Test

The results of the reliability and validity test of each construct variable can be seen in table 2 below.

Table 2. Construct Reliability and Validity

Variable Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Tourist Satisfaction	0,945	0,946	0,945	0,775
Rural Tourism Destination Loyalty	0,935	0,950	0,937	0,752
Behavior Intention	0,916	0,918	0,916	0,733
Perceptions of the Quality of Rural Tourism Destinations	0,960	0,962	0,960	0,511

Based on the table above, it can be explained that the tourist satisfaction variable is 0.945, the tourism village destination loyalty variable is 0.935, the tourist behavior intention variable is 0.916, the tourist destination quality perception variable is 0.960. The results show the accuracy and reliability of all variables, where the score is more than 0.7. Meanwhile, the tourist satisfaction variable was 0.945, the tourism village destination loyalty variable was 0.937, the tourist behavior intention variable was 0.916, the tourism destination quality perception variable was 0.960. The results show that the overall variable is declared reliable, where the score is more than 0.7

Overall, it can be explained that the tourist satisfaction variable is 0.775, the tourism village destination loyalty variable is 0.752, the tourist behavior intention variable is 0.733, the tourism destination quality perception variable is 0.511. The results show that the overall variable is declared to meet the validity, where the score is more than 0.5. Furthermore, the results of statistical testing also obtained the R square value to see the contribution of its influence on the research model. The following table 3 describes the results of the R Square value.

Table 3. R Square Value

Variable	R Square	R Square Adjusted
Loyalty of rural tourism destination	0.777	0.770
Behavior Intention	0,501	0,487

From the table above, it can be explained that the R Square value for the loyalty of tourist village destinations obtained a value of 0.777 with a criterion of 0.3, which means that the perception of the quality of tourist destinations and tourist satisfaction is able to contribute or influence as much as 0.777 on the loyalty of tourist village destinations.

Meanwhile, the value of R Square for the intention of tourism behavior obtained a value of 0.501 with a criterion of 0.3 which means that the quality of tourist destinations and tourist satisfaction are able to contribute or influence as much as 0.501 on the intention of tourist behavior.

Furthermore, to describe the measurement results using Smart PLS version 3.0, it can be seen in Figure 2 the full model as follows.

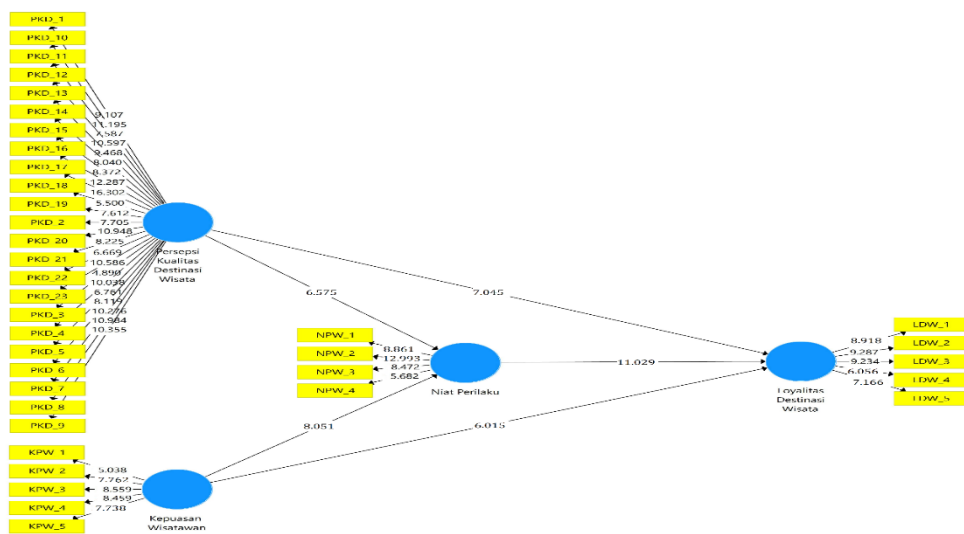


Figure 2. Full Model

Path Coefficients

In order to test the research hypothesis, it can be explained by the path coefficient value that has been processed from the results of data processing with the Smart PLS version 3.0 application, which can be presented in table 4.

Table 4. Path Coefficients

Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Result
Tourist Satisfaction - > rural tourism Destination Loyalty	0,468	0,421	0,131	6,015	0,003	Accepted
Tourist Satisfaction - > Behavioral Intention	0,377	0,319	0,293	8,051	0,000	Accepted
Behavioral Intention - > rural tourism Destination Loyalty	0,551	0,497	0,325	11,029	0,007	Accepted
Perceptions of the Quality of rural tourism Destinations - > Tourism Destination Loyalty	0,389	0,370	0,538	7,045	0,004	Accepted
Perceptions of the Quality of rural tourism Destinations -> Behavioral Intention	0,302	0,343	0,473	6,575	0,000	Accepted
Tourist Satisfaction - > Behavioral Intention -> rural tourism Destination Loyalty	0,523	0,508	0,268	7,138	0,000	Accepted
Perceptions of Tourism Destination Quality -> Tourism Behavior Intention -> rural tourism Destination Loyalty	0,611	0,596	0,456	5,546	0,002	Accepted

Statistical T value > 1.96 and P value with a significant level of 0.05

Based on the results of the P value in the table above, it can be stated that all these hypotheses are accepted as acceptable because the value is close to 0.00 and is below the significant level of 0.05. This proves that all research hypotheses provide the same answers as the initial assumptions in this study. Perceptions of the quality of rural tourism destinations have positive on behavior intention, tourist satisfaction which is able to have a positive influence on behavior intention. Behavior intention also has a positive influence on the loyalty of rural tourism destinations.

Furthermore, the perception of the quality of tourist village destinations has a positive effect on the loyalty of tourist village destinations, as well as satisfaction has a positive effect on the loyalty of tourist village destinations. Based on the findings of the research on behavioral intentions that are able to mediate the quality of tourist village destinations towards the loyalty of tourist village destinations, likewise behavioral intentions are also

able to mediate tourist satisfaction with tourist destinations. Ana Ma Castillo Canalejo, Juan Antonio Jimber del Río, (2018) also reported that a direct and positive relationship between and the influence and impact of expected and perceived quality and perceived value and customer satisfaction is related to customer loyalty. Meanwhile, according to Alves (2019), it shows that the influence of relationship relationships (namely trust, attachment and satisfaction with relationships) on tourist satisfaction and destination loyalty, more specifically in rural tourist destination areas. In connection with the findings of the researchers above, it can be said that this study also enriches the results of previous research.

5. Conclusion and Recommendation

5.1. Conclusion

Based on the results of research findings and discussion, it can be concluded that tourist satisfaction is able to influence tourist destination loyalty, behavioral intention and besides that behavioral intention also affects the loyalty of tourist village destinations. Meanwhile, the perception of the quality of tourist destinations is able to influence the loyalty of tourist destinations. Perceptions of the quality of tourist destinations actually influence the behavior of tourists to return to tourist village destinations. Tourism satisfaction affects the loyalty of tourist village destinations through the intention of tourist behavior. Likewise, the perception of the quality of tourist village destinations can affect the loyalty of tourist village destinations through the intention of tourist behavior.

5.2. Recommendation

From the research results and conclusions above, it can be recommended for the government, in order to make policies in the tourism development sector, it can formulate that increasing the interest in tourist visits to tourist villages needs to be considered the perception of the quality of tourist village destinations with tourist satisfaction, for tourism service providers, can identify and map the tourists well by paying attention to the perception of the quality of tourist village destinations, tourist satisfaction, and tourist behavior intentions, while for academics, the results of this study can be used as enrichment in marketing strategic management science, especially in the tourism sector.

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A Study on Social Media Marketing for Business Among Magazine Publishing Company during Covid-19 Pandemic

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Abstract: Social media marketing is a powerful way for businesses of all sizes to reach prospects and customers. Every business today needs to leverage proper social media channels in the best possible way. This study is important to explore the effectiveness of social media marketing to businesses and to specifically answer what is the type of social media platform used by the company to reach their target market especially among the magazine publishing company in Malaysia during the pandemic of Covid-19. Using a qualitative method by an in-depth interview with staff and editorial units from the magazine publishing company, the result is tremendous when all the companies agreed that any kind of business needs a social media presence. As a result, great marketing on social media can bring remarkable success to any business, creating devoted brand advocates and even driving leads and sales. This study shows that it does not matter if you run a small local shop or a big national company; social media is an essential piece of business digital marketing strategy. A practical implication of this study comprises the effectiveness of social media marketing to the magazine publishing company in daily business operations. The limitations of this research include the limitation of the scale and scope of the interview; hence there is a need for further studies in other nature business companies. Besides, this study provides insights into how practitioners see the effectiveness of social media marketing and may help with decision making and strategy making towards better performances of these magazine publishing companies in general.

Keyword: Social media, Digital marketing & Magazine Publishing Company

Introduction

The pandemic Covid-19 began as a health issue that gradually developed into a global financial meltdown at a pace and scale that we have not seen in our history. The economic consequences are still occurring on a global scale and it is impossible that the real effects of this pandemic will be determined before the situation has stabilized.

It is already clear that this pandemic Covid-19 would have deeply damaging consequences on both the Malaysian macroeconomy and the economic well-being of the people. The key causes of economic harm in Malaysia are twofold: The first is the knock-on effect of the Covid-19 impacts worldwide, while the other is produced domestically by the newly imposed movement control measures.

So, at the global stage, the closing of companies and services, along with travel and movement restrictions, would have far-reaching impacts on private consumption and business investment. Its adverse effects on individual livelihoods and enterprises would be more harmful. Individuals and companies impacted by temporary closures would be at high risk of experiencing acute cash flow constraints as their earnings decrease.

However, this leverage tightening would be felt overwhelmingly by small and medium-sized enterprises (SMEs) and disadvantaged groups such as low-income individuals, part-time, and unemployed workers. This can have knock-on effects on the economy as a whole – leaving companies insolvent, people bankrupt, and the financial system saturated with non-performing loans.

Report by News Strait Time (2020), the Malaysian economy contracted 17.1 percent in the second quarter of 2020 from a 0.7 percent growth in the first quarter during this pandemic of Covid-19. Bank Negara Malaysia stated that the decline reflected the unprecedented impact of the stringent containment measures to control the Covid-19 pandemic globally and domestically. Due to the Movement Control Order (MCO) in Malaysia, most economic sectors registered negative growth including restricted production and consumption activities, while most expenditure components declined.

Literature Review

Marketing strategies are very essential element for any company that plans to expand its business. This would be very beneficial to achieve the aim which is to increase sales other than to support the goods generated by participating in the right marketing practices (Lieber & Syverson, 2012).

The latest advances in the fields of marketing, communication, and information lead to new creative business and customer models, in which consumers are taking a leading role and are becoming increasingly relevant. Social networking is evolving rapidly as the next big frontier for consumer communication and interaction.

Historical trends, the publishing magazine industry has become highly competitive with rapid developments in computer, web, and digital technology growth and convergence (Hesmondhalgh, 2013). Also, the interactive elements of Internet-based digital technologies have increased readers' interest (Nawwar, 2013). Not only does technology impact the published goods of the magazine but it also affects to the reader or viewer all the procedures involved, including the marketing process, to the very end.

Marketing is also seen as the mechanism by which a business provides a customer in a market with a product or service. This is also understood in the marketing process by adding several main components that cover the 4P aspects of Product, Price, Promotion, and Place. Through time, the marketplace of the traditional values has slowly shifted through its digital segment towards a new type of media and has since created a fusion of medals that not only serve the population, but also the younger generation (Ballatore & Natale, 2016).

Magazine publishers or publishing companies involving in the print media industry have experienced many limitations and challenges, specifically when it comes to the emergence of technology and innovation which brings new innovative technologies. The

attention has now moved to the promotional strategies programs or methods adopted in the new millennium to improve the revenue and high-quality of an advertised product (Greco, Milliot, & Wharton, 2014). The increasing growing investment in this technology has shown an effect on the use of digital technologies such as blogs, social media, and applications or development resources within an organization.

Currently, developing a social media account such as Facebook, Instagram, Twitter, blog sites, and relevant company websites, despite any marketing risk that may occur, has now become the latest trend in the magazine publishing industry.

Social Media Marketing in a Business

Social media is being used by billions of people across the world and has rapidly been among the dominant innovations of our day. For example, as of March 31, 2019, Facebook reported having 2.38 billion active users per month and 1.56 billion active users per day (Facebook, 2019).

Over the last few years, social media platform has evolved exponentially. Due to the ability to access the large and diverse population worldwide, many companies have used social media as forms of marketing and promotion. Previous studies also have shown numerous benefits, such as promoting user interaction, engagement, reuse of information, and collective creativity (Kasemsap, 2018).

According to Sarah Cox (2012), small businesses needed to understand today's that social media driven to the new environment of digital transformation. They should also know the strategies behind using social media such as Facebook and Twitter for growing their business to stay competitive and reach their target markets. However, many small businesses did not have a strategy when they began using social media.

The research was conducted to acquire an initial understanding of how small businesses were recognized for using social media to grow their business and increased their customers.

The respondent of this study was Bandee, an Internet-based accessory retailer and wholesaler established in 2009. The results showed that with the help of social media, Bandee doubled the number of their client who was aware of their products and services. Not only were that social media also important to communicate and create relationships among customers. It also enabled Bandee to develop many relationships with other businesses and clients that would not have normally developed. The study also concluded that social media marketing increases brand exposure, sales, and business profit.

Social media gives a new environment to society. The dissemination of information is quicker and easier through the advent of technology; since it can be accessed by mobile devices like smartphones and tablets.

Social media has become popular in recent years and has attracted much attention among researchers and practitioners (Gan & Wang, 2015). Thus, according to Bernabe-Moreno, Tejada-Lorente, Porcel, Fujita & Herrera-Viedma (2015), social media began as space where other users might communicate, share content, and express their personal opinions.

Social media comes in different types, including social networking sites (Facebook), forums, microblogs (Twitter), user communities (YouTube), virtual social environments (Second Life), and virtual game worlds (World of Warcraft) (Olsen & Christensen, 2015). The way people interact with each other and with companies (Hanna, Rohm & Crittenden, 2011) has changed in social media.

Owing to the existence of hundreds of social media sites with various features and user groups, Internet users have several choices about their intention to use social media (Zolkepli & Kamarulzaman, 2015). The social media environment becomes a central area for communication, networking, and sharing of content (Paniagua & Sapena, 2014).

As Internet users recognize the effectiveness of social media, it facilitates immense media acceptance and helps Internet people to gain control over the collection of content, thus influencing their actions and attitude (Durukan, Bozaci, & Hamsioglu, 2012).

Research Objective

The objective of this research study is to:

- i. Discover the effectiveness of social media marketing to magazine publishing companies during the Covid-19 pandemic;
- ii. Identify social media platform mostly used by the company to reach its target market during the Covid-19 pandemic.

Research Methodology

The method used for this study was qualitative. Responses were extracted through semi-structured in-depth interviews. This study utilized the sampling method for purposes; where the sampling technique for intensity was used to select the respondents. The interviewees were involved in a magazine publishing company in Malaysia that used any social media platform as a medium for selling products or services such as Facebook, Instagram, YouTube, or others.

The data and interview sessions were collected in June 2020 in Nu Ideaktiv Sdn. Bhd.. Then, in-depth interview was carried out with a team of Content and Editorial unit that lead by a representative from Mingguan Wanita is Mrs. Nur Syazwani Mehat as Digital Content Writer have been interviewed. The researcher used the interview as the primary data collection and triangulated it with supporting records and Google analytics data.



Figure 1: Case Study- Nu Ideaktiv Sdn. Bhd.

Case Study- Profile of Magazine Publishing Company

Nu Ideaktiv Sdn Bhd.

Nu Ideaktiv Sdn Bhd; a joint venture project between Astro and Karang kraf; was established on May 2, 2018. Ideaktiv seeks to spread the power of knowledge and entertainment through inspiring, informative and aspiring content made for all.



Figure 2: Two Media Company in Malaysia- Astro & Kumpulan Karang kraf

The company builds values for others and values for the community, promotes growth and show a strong will to succeed. They hold 39 intellectual properties, spanning a variety of genres and leading market segments with 14 active IPs. They also are leading as the core of Malay culture. The product and content can be enjoyed through print, radio,

application, television show, and on-the-ground events, and is expanding to include more possibilities for Malaysian and Asian audiences.

Nu Ideaktiv continues to deliver fantastic content to the public, with more than 40 years of industry experience. Under Nu Ideaktiv, 14 brands of magazine captivate and spark a monthly conversation with over 20 million people.



Figure 3: Nu Ideaktiv Sdn. Bhd. Brand Magazines

Result and Discussion

The findings of this study revealed that these entrepreneur or magazine publishing company implemented social media marketing strategies to promote their businesses. Besides, social media marketing indicated a positive impact on business performance; either in financial and non-financial aspects.

- **Embrace Digital Transformation to Survive 'The New Normal'**

Buyers have undergone a transformative shift in the way they gather information about the goods or services they are interested in, the way they make decisions about current or potential purchases, the aspirational or ordinary acquisitions, the way they buy, and also the way they provide feedback about their purchases, especially in online environments during the MCO.

Covid-19 has dramatically disrupted every business aspect. Through the robustness of supply chains to the stability of financial markets, the availability of manpower, and the challenge of rapidly decreasing consumer demand.

This might not be another turn of the business cycle, but a shake-up of the world economic order. It is significant that a business firm is looking at more permanent, systemic shifts in the way we live, function, and play.

Digital transformation is more known as a central factor of the future. This affects the developments of small and medium-sized (SME) companies to date. The growth of the digital economy in Information, Communication and Technology (ICT) has dramatically changed and shifted the function of the global economy at a rapid rate. Despite the varying paces of digital transformation between economies, there is no doubt that the global economy will undergo rapid and dramatic changes under the waves of digitalization.

The editor also agreed that all magazine publishing company should embrace the digital transformation to survive in this difficult period of Covid-19 when the printed order of magazine numbers decrease each month. Business organizations within this mega-trend should therefore possess sufficient knowledge and understanding while reconsidering how to create, allocate, and gain value in this brand-new environment.

- **Optimizing Media Social Marketing for Business**

Given that social media is a relatively new phenomenon, particularly in emerging countries, the lack of understanding of its potential, believes that social media marketing is an issue that deserves to be studied, in particular, it's potential as a digital marketing tool for the magazine publishing industry in Malaysia.

New media channels are seen as the driving force behind the conduct of corporate practices and activities (Nolan & Dane, 2018). Malaysia is one of the countries that highlight digital businesses, enabling businesses to use social media approaches as a catalyst for business. The advancement of digital technology, such as social media, has had a huge effect on all the business sector fields.

The emergence of this new media, in particular the Internet, has brought major improvements in the digital marketing dimension used by activists in our country's magazine publishing industry. The rise of digitalization has brought a number of possibilities and potential to the world over the past few years, making it easier for business owners or companies to make their goods and services available to the public.

In addition, when digital marketing approaches were created and businesses began to visible online through various digital marketing tools like websites, blogs, social media and many other platforms, people can see that the Internet's power is to engage, keep in

touch, and communicate with their customers. Amid some marketing challenges that may occur, the digital marketing platform has become the latest trend in the industry.

The growth of the Internet has made social media marketing as one of the most important tools and cost-effective ways to advertise goods and services. The social media platform has offered every business company a massive digital marketing tool. New era companies are promoting their goods and services on social media due to the worldwide scope and popularity (Gomez, Lopez & Molina, 2019).

Priyanka and Srinivasan (2015) claim that social media has given significant exposure to prospective customers through the interactive and viral tool for social networking marketing and advertisement in order to educate, convince, and remind customers of the goods and services. An organization can upload marketing and advertising contents via social media to attract target audiences and obtain product reviews of products or services (Husain, Ghufra, & Chaubey, 2016).

A list of the top 20 popular social media websites is available that include social media channel such as Facebook, Twitter, LinkedIn, Google+, Youtube, Pinterest, Instagram, Tumblr, Flickr, Reddit, Snapchat, WhatsApp, Quora, Vine, Periscope, BizSugar, StumbleUpon, Delicious, Digg and Viber networking platforms. As to the authors (Gomez et.al, 2016), in terms of the total number of users and name recognition, Facebook has become the most popular social media website among all top 20 popular social media websites.

The importance of social media for the purpose of business continuity today is undeniable. It is increasingly accepted by most organizations in various industries as a new marketing medium. This study aims to look at the use and effectiveness of social media for business as a new marketing medium for the magazine publishing sector in Malaysia during a hard time of pandemic Covid-19.

- **Reader More Active On Media Social Platform**

Due to the vast potential audiences available who spend several hours a day using social media through multiple channels, it is no doubt that marketers have embraced social media as a marketing platform. The entire respondent personally prefers to market their products and services via social media platforms as their digital marketing tool.

Almost all of them believed they could easily access and updates their business products and activities via smart phones and did not need a personal computer to do so anymore. The majority of them also regularly update on social media platforms about their business activities nearly every day. There are also some respondents with their own marketing plan to target the niche audience.

According to the editor of *Mingguan Wanita* magazine, social media is one of the opportunities for a business in expanding its wings to a higher level. Such a platform provides an opportunity for business brands to be better known by the community. This is because; social media is used by all walks of life. With a more targeted audience, traders can influence more potential buyers.

This study also showed that consumers buy goods from the business brands they follow on social media. The process of disseminating information and information on social media is very easy because traders only need to create articles, posts, pictures, videos, or

any other form of information and put it on certain social media that can be seen by all users on the internet easily and effectively. Users can also share about a product with other users. With this exposure, traders can increase the sales revenue of their business.

Through social media platforms, traders can communicate directly with buyers. Merchants can also meet the needs of consumers by looking at the development of consumer demand in social media. Consumers who buy a product can also leave reviews whether they are satisfactory or not. This opportunity should be used by traders as much as possible to improve their products and services. In addition, this can increase the confidence of new users in the merchant through reviews given by previous buyers. With credibility, these merchants can increase the number of buyers who trust their brand. Buyers are also more likely to get a quicker response from merchants about a product that interests them. This two-way communication relationship can further boost the marketing of a business.

Since social media platform is becoming more widespread and most commonly used during the Movement Control Order (MCO), the team especially Digital Content unit, have seen significant changes in digital marketing strategies. Through social media platforms, the targeted audiences of the magazine publishing company have been seen as active and engaged.

The informant also adds that the traditional way (such as reading printed magazines) to gain information has not become the main medium as the audience chose social media to obtain the information. The editorial unit should therefore prepare their teams to produce content that is relevant to the audience via social media.

Google Analytics Data Via Social Media- Digital Segment Data

Nona Magazine

Visitors: 2.16 Mil

Page Views: 8.29 Mil

FB: 274 K

Average FB Reach: 1.01 Mil

IG: 256 K

Mingguan Wanita Magazine

Visitors: 3.33 Mil

Page Views: 8.21 Mil

FB: 1.39 Mil

Average FB Reach: 1.73 Mil

IG: 324 K

Maskulin Magazine

Visitors: 580.9 K

Page Views: 1.02 Mil

FB: 233 K

Average FB Reach: 209 K

IG: 51.2 K

Remaja Magazine

Visitors: 1.30 Mil
Page Views: 2.28 Mil
FB: 1.21 Mil
Average FB Reach: 512 K
IG: 297 K

Hijabista Magazine
Visitors: 1.01 Mil
Page Views: 2.36 Mil
FB: 862 K
Average FB Reach: 445 K
IG: 154 K

Pa&Ma Magazine
Visitors: 3.46 Mil
Page Views: 8.57 Mil
FB: 1.46 Mil
Average FB Reach: 1.61 Mil
IG: 228 K

Keluarga Magazine
Visitors: 4.88 Mil
Page Views: 15.1 Mil
FB: 322 K
Average FB Reach: 2.23 Mil
IG: 97 K

Pesona Pengantin Magazine
Visitors: 1.20 Mil
Page Views: 2.20 Mil
FB: 1.05 Mil
Average FB Reach: 437 K Mil
IG: 197 K

Impiana Magazine
Visitors: 2.31 Mil
Page Views: 6.53 Mil
FB: 553 K
Average FB Reach: 1.44 Mil
IG: 65.4 K

Kashoorga Magazine
Visitors: 299 K
Page Views: 423.5 K
FB: 1.18 Mil
Average FB Reach: 45 K
IG: 109.8 K

Media Hiburan Magazine

Visitors: 3.13 Mil
Page Views: 10.31 Mil
FB: 2.32 Mil
Average FB Reach: 1.37 Mil
IG: 761 K

Libur Magazine
Visitors: 200 K
Page Views: 296 K
FB: 32 K
Average FB Reach: 3 410
IG: 7 143 K

Umpan Magazine
Visitors: 639.6 K
Page Views: 1.17 Mil
FB: 264 K
Average FB Reach: 383 K
IG: 37.9 K

Vanilla Kismis
Visitors: 2.95 Mil
Page Views: 6.54 Mil
FB: 282 K
Average FB Reach: 1.33 Mil
IG: 19 K

Source: Google Analytics June 2020

- **Media Social as an Effective Digital Marketing Tool**

Social media is one of a business' chances to spread its wings to a higher level. Having a forum offers company brands the ability to become better established in the culture. That's because, all walks of life are using social media. Traders will affect more potential buyers with more target audience.

Studies often indicate customers are purchasing products from the brands they follow on social media. The process of disseminating knowledge and information on social media is very simple as traders can create blogs, tweets, pictures, images, or some other form of information and place it on other social media that can be accessed easily and efficiently by all users on the Web. Users too can communicate with other users about a product. With this exposure traders will increase their business' sales revenue.

Social media provides a great opportunity for customers and companies alike. Again, on one hand, with the use of social media, consumers have created new ways of communicating with brands, sharing their views on individual brand interactions, which have also allowed them to browse, compare, and select which purchase products and services.

But at the other hand, companies have the ability to improve their social media platforms and build more tailored strategies, to connect with consumers, to use the platform to drive direct sales, to gain insight into how customers view and enjoy a brand, as well as life-long value goals, such as attracting and retaining customers.

- **Social Media Platform Mainly Used by Publisher**

The findings also found that most small business owners preferred to use Facebook, Instagram, Twitter, and YouTube rather than other social media marketing platforms such as Pinterest, and Flickr. Most informants were aware of the current technology needs in the business and competitive pressure indirectly influenced them to adopt social media marketing.

Response from Mrs. Nur Syazwani, social media platforms are useful for targeting wider audiences. By actively using these social media channels, the team can increase the exposure of their magazine brand, advertise their goods or services generate new leads, and drive sales. Things like user-generated content and implementing best practices make it easier for companies to sell their offerings as effectively as possible.

Social media is a required marketing tool for any company that wants to stay important and accessible in today's busy online environment. From the interview session, responses from the informant, the company has set a standardized social media platform for each magazine brand which was Facebook, Instagram, Twitter, and YouTube. These four platforms were operated individually by the respective editorial units from each magazine brand but under the supervision of the company's digital units Nu Ideaktiv Sdn. Bhd.

Magazine Brand/Title	Facebook	Instagram	Twitter	YouTube
Nona	√	√	√	√
Mingguan Wanita	√	√	√	√
Maskulin	√	√	√	√
Remaja	√	√	√	√
Hijabista	√	√	√	√
Pa&Ma	√	√	√	√
Keluarga	√	√	√	√
Pesona Pengantin	√	√	√	√
Impiana	√	√	√	√
Kashoorga	√	√	√	√
Media Hiburan	√	√	√	√
Libur	√	√	√	√
Umpan	√	√	√	√
Vanilla Kismis	√	√	√	√

Table 1: Social Media Mainly Used by Nu Ideaktif Sdn. Bhd.



Figure 4: Magazine Brand Published by Nu Ideaktiv Sdn. Bhd.

- **How Magazine Publisher Adapt to the New Norm**

It is not easy to get a lay of the land in the middle of a multi-pronged crisis – much less to foresee what will look like tomorrow. But publishers are required to do it every day as Covid-19 made revolutionary change possible.

In these difficult times, when people were (many places are still) confined to their homes, content creators provided their audience with a steady flow of information, art, and even gossip material to binge on. Newspapers, books, and magazines have played a part in providing ample analytical, thought-provoking material.

Today, users have more media power than ever before, because the viewer will determine what messages they are searching, ignoring, and forwarding on. With the vast expansion of recent years of online video traffic, companies need to be able to be involved in user volunteer content consumption (Nele, Ann & Thorsten, 2018).

This pandemic is generating massive views and significantly changing media consumption habits as the Editor explained. For time being, creative digital content like content video, live session, and animation series is taking over. Given the fact the growth and benefits of digital content video of this kind, and the value of branding to publishers, the potential in their combination is clear. Brand marketers are forced to publish and take a bigger stance in producing original and compelling material for their consumers to engage in.

With the situation being increasingly manageable, sooner or later the constraints are lifted. Yet, it is fair to assume that the transition in user behavior is here to remain. As an example of content consumption during the Covid-19, the champions of the internet age were Generation Z or Millennia. Apparently, they favor digital technologies for content consumption at anytime, anywhere, and on multiple platforms due to the diminished circulation of magazines, closed bookshops, and restricted distribution of print editions. Most publishing houses have had to either temporarily or permanently cancel their print publications or reduce the page count. Within this dissimilar environment, the widening

gap between sales and overheads has forced businesses to reconsider their strategies to succeed.

Conclusion

Today's technology shows that access to the Internet can be done anytime and anywhere. These developments have influenced the desire of magazine publishing companies to use social media for the purpose of business continuity. This study explores the use of social media by magazine publishers through an in-depth interview, that provides direct insights into the use of social media and factors that motivate them in an organization to use social media marketing.

The importance of social media for the purpose of business continuity today is undeniable. It is increasingly accepted by most organizations in various industries as a new marketing medium. This study aims to see the use and effectiveness of social media as a new marketing medium for the magazine publishing sector in Malaysia.

Future studies should concentrate on analyzing customer behavior in social media marketing, by introducing and validating a scale that would clarify this behavior. Besides, researchers could examine variations in online user behavior based on various social media networks (Facebook, Twitter, Instagram, and YouTube). Social media factors are still in the early stages of research into their scope for digital marketing.

In conclusion, there is a tendency among small and medium enterprises (SMEs) in the publishing industry, especially the magazine publishing sector to apply technological elements in their business operations.

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Emphasizing enviropreneurial marketing strategy in SMEs businesses: A conceptual paper

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Abstract - Environmental degradation gives severe impact to all livings. An environmental practice by companies called enviropreneurial marketing strategy is an effective way to control this matter. However, the adaptation of enviropreneurial marketing strategy is not really known by SMEs businesses. The purpose of this paper is to discuss past studies findings related to business environmental sustainability practices that can give further recommendation for SMEs to conduct enviropreneurial marketing strategy in their businesses. By following the justification in Natural Resource-Based View theory, this paper propose a conceptual framework to make a novel contribution to existing marketing theory and practices. The discussions lead to suggestion for SMEs businesses to implement this strategy and further research is suggested to explore this issue in different perspectives.

Keywords: Enviropreneurial marketing strategy, 4Ps, Natural Resource-Based View theory.

1. Introduction

Nowadays, the world is dying and facing critical condition due to robust harmful activities conducted by human that destroy the environment. The issues of global warming, ozone depletion, air and water pollution, natural disasters such as flood and earthquake and visible climate change are the things that often happen around the world (Khan & Mohsin, 2017). All these chaos must be controlled before it becomes severe and cannot be protected. There are some organizations that aware on this issue begin to develop environmental corporate social responsibility (CSR) programs and offering green products to their targeted customers (Sony & Ferguson, 2017). By producing ecologically products, it will influence the consumers to change their buying patterns towards green consumptions.

The terms of eco-marketing (ecological marketing) has been introduced to the market in the mid of 1970s and the researches on marketing and human physical environment have been conducted tremendously until today (Katrandjiev, 2016; Park & Lee, 2016). A lot of researches have been conducted to explore various environmental marketing perspective such as the relationship between natural environment and; consumer

behaviour (Diamantopoulos et al., 2003, Quoquab et al., 2020), marketing strategy (Menon & Menon, 1997; Shivani & Kumari, 2014), public policy initiatives (Press & Arnould, 2009) and macro-marketing (Kilbourne & Carlson, 2008).

Revolution has changed the concept of marketing where ecological and sustainability in marketing activities becomes a major concern for the marketers. Thus, marketing perspectives has gone through diverse innovation in terms of theoretical and practices where the concept of positioning, segmenting and targeting is no longer become a main concern for every marketer. The concept of contemporary marketing has expanded vigorously and directs it focus on the issue of natural environment and merges the marketing activities into environmental sustainability practices (Minor & Morgan, 2011; Anwar & Jan, 2016). In addition, currently the firms are facing new challenges to become competitive where the balance between the market demand and society demand must be deliberated simultaneously (Fraj et al., 2011). The merging concept of marketing and environment not only being practiced by the large firms, however, extensive exposure from the academicians and practitioners and also positive government support on this issue has trigger the awareness among entrepreneurs (Song-Turner & Polonsky, 2016). Therefore, the term of enviropreneurial marketing has been introduced by Varadajan (1992) that describe the entrepreneurial approach that come across on both ecological and marketing perspectives.

Enviropreneurial marketing (EM) can be defined as marketing practice conducted by a firm that concerning on the environmental-friendly activities in order to gain competitive advantage and encouraged by the firms that realize on their obligation to serve both the citizen and environmental well (Vadarajan, 1992). It means that the firms need to balance its organization and societal concerns simultaneously (Song-turner & Polonsky 2016). Besides, other researcher identifies EM as a resource that enables capabilities (Baker & Sinkula, 2005). Therefore, by practicing EM strategy, this will lead to green practices by the firms in terms of developing new product, procurement and supply chain activities, distribution process and creating sustainable development which in turn crafting the firm's competitive advantage.

Past studies have found that the adaptation of corporate green policies will significantly influence the firms' competitive advantage (Richey et al., 2014). Furthermore, a significant body of literature found that the resource commitment and environmental commitment is the influential factors for gaining competitive advantage and enhance the firm's performance (Kim, et al., 2016; Namagembe, 2017; Richey et al., 2014). However, there is a dearth of research that examines the effect of managerial commitment in enviropreneurial marketing strategy from the perspective of SME business. It is reported that SME business operations contribute to a significant portion of environmental pollution globally (Namagembe, et al., 2016). Therefore, examining enviropreneurial marketing strategy from the context of SME businesses can expand the existing literature and alleviate this matter more effectively. Hence, the purpose of this study is to propose a conceptual framework to better understand the practice of EM strategy to enhance SMEs' business performance as well as control the environmental pollution as a whole.

2. Literature Review

Natural Resource-Based View Theory

The theory of Natural Resource-Based View (NRBV) emerge after past researchers found out the Resource-Based View (RBV) theory does not measure on natural environment circumstances (Hart, 1995). Specifically, Resource-Based View (RBV) theory is design to formulate the correlation between the firm resources, capabilities and competitive advantages and recommends that firms should evaluate its internal organization to look for competitive advantage rather than assessing its external competitive environment (Hart, 1995). There are tremendous researches describing on the concept of competitive advantage in the management literature. Prior research illustrated two main sources of competitive advantage, which are cost leadership and competitors' differentiation. Here, the cost leadership concept allows the firms to execute aggressive pricing strategy and high sales volume, while the concept of differentiation will lead to brand loyalty, good reputation of the firms and assist in setting up premium pricing (Porter, 1980).

Basically, RBV theory concern on two basic requirements in gaining competitive advantage through managing their resource and capabilities where the firms should maintain valuable resource and the other competitors could not copy it (Hart, 1995). Meanwhile, NRBV theory basically is an expansion from the existing theory (Resource-Base View) where the element of natural environment is added in this theory. Additionally, NRBV is the movement of competitive advantage to sustainable competitive advantage (Miemczyk et al., 2016). The basic concept of NRBV is still focusing on the management of resources and capabilities to achieve competitive advantage. Thus, the sustainability works relies on the new product development where the element of green marketing has been injected throughout the process for the purpose to secure the environment. The theory of NRBV arises when the deterioration of the environment becomes severe and triggers the awareness among academicians and practitioners (Anthony, 2018).

Prior technologies and production methods expand the usage of resources and waste generation that mostly damage the environment (Scarpellini, 2020). Hence, the bad impact of human activities toward environment cause public health crisis and new direction comes into the corporate social responsibility (CSR) works where ecological products being produced and the sustainability becomes the main concern of the firms later. To further justify the concept of NRBV, Table 1 describes the three categories of strategic capability under this theory.

Table 2.1: The Natural Resource-Based View

Strategic Capability	Environmental Driving Force	Key Resource	Competitive Advantage
Pollution Prevention	Minimize emissions, effluents and waste	Continuous improvement	Lower costs
Product Stewardship	Minimize life-cycle cost of products	Stakeholder integration	Preempt competitors
Sustainable Development	Minimize environmental burden of firm growth and development	Shared vision	Future position

Table 1 describes NRBV theory that consists of three stages of strategic capability, which are pollution prevention, product stewardship and sustainable development. The first strategic capability is pollution prevention that focus on minimizing emission, effluent and waste in business activities where it required continuous improvement from every department (Hart, 1995). This strategy is effective due to it result in achieving lower cost competitive advantage and also give positive impact towards the firms' performance.

Product stewardship is the next strategy that focuses on minimizing the life cycle cost of products. In this strategy, the business will request for external opinions that consist of the stakeholders to propose environmental practices in the process of development and designing the product (Fiksel, 1993). At this point, the business apply Life Cycle Analysis (LCA) to analyse the damage created by the products from beginning of the process until the products ready to the market (Keoleian, 1993).

Sustainable development is the third strategic capability that aims to dissolve the negative relationship between business and environmental in developed and developing countries (Hart, 1995). Two indications will appear once the firms opt for the strategy of sustainable development, which are gain substantial investment and long-term commitment to market development (Hart, 1995). As the basis for market entry and development, the developing market required minimum impact of technology and products to create long-term vision in influencing its environmental strategy (Schmidheiny, 1992).

Enviropreneurial Marketing Strategy for SMEs Businesses

Enviropreneurial marketing (EM) can be described as conducting entrepreneurial activities by applying environmental procedures with the aim to gain competitive advantage and achieve economic and social performance objectives (Menon & Menon, 1997). The evolution of enviropreneurial marketing occurred because of the damage done by contemporary marketing that result in severe consequences to the environment and humanity as a whole. Despite of knowing the consequences of conventional marketing, there are still high levels of ignorance among the top managers due to satisfying the customers is their main objective without considering the need of future generation (Farzana & Jihad, 2016). This critical situation receives significant research interest of many studies in recent years.

In order to perform environmental activities, the managers, which are entrepreneurs, must become environmental concerns. Thus, EM should be placed in organization's philosophy and vision to ensure the implementation process will be carried out successfully. There are tremendous studies conducted that investigated the integration of decision-making in marketing strategy and natural environment (Hart 1995; Song-Turner & Polonsky, 2016; Tollin et al., 2015). Earlier, Baker and Sinkula (2005) have extended the perspective of environmental into three elements, which are "environment as commitment", "environment as opportunity", and "environment as righteousness". Then, these three elements lead to environmental constructs that comprises of "corporate environmentalism", "environmental orientation" and "environmental strategy focus" (Banerjee, 2002).

The first construct, which is corporate environmentalism brings huge indication of organization on the importance and validity of environmental perspectives in developing organization strategy and integrate this into strategic planning process (Banerjee, 2002; Ture & Ganesh, 2018). There are two major components of corporate environmentalism, which are environmental strategy that consist of two focuses, corporate and marketing

and environmental orientation that consist of internal and external. In environmental orientation, it explains on the perspective of employees' acceptance on the environmental issues and the implication towards the firm. There are two components of environmental orientation, which are internal and external. Internal environmental orientation is the values and standards pose by the firms. It means that, the perspective of environment is stated in the mission statements of the firms, policies and procedure and also nurture it into the behavioural and norms among the staffs. Meanwhile, the external environmental orientation responds the requirements of business's stakeholders regarding the environmental interests (Banerjee, 2002).

The third construct, which is environmental strategy focus and reacts on strategic planning process that involve in environmental issues (Banerjee, 2002). This construct focuses on the concentration of managers to think of environment while creating marketing plans. By applying EM in business operations, marketers are able to see market opportunity and conducting the right thing (Baker & Sinkula, 2005). Baker and Sinkula (2005) suggested that, EM strategy should be applied at corporate level that is divisional or functional level or top and middle management. However, applying this strategy is not necessarily will give positive return in firm's performance. Therefore, to successfully implement it, this requires a full commitment from the management level to successfully implement it in business' operations. Thus, the environmental commitment form in the organization is the determination of the firms' strengths or weaknesses that lead to corporate behaviour (Baker & Sinkula, 2005).

Relationship between EM strategy towards business performance

In developing EM strategy, green activities can be conducted in three different levels, which are strategic, quasi-strategic and tactical (Menon & Menon, 1997). Tactical actions are aims to achieve marketing objectives implemented by functional decisions, whereas quasi-strategic actions required further changes in marketing activities. However, quasi-strategic actions are not able for the business to achieve competitive advantage. Strategic actions using the whole method that combine the environmental decision-making and planned action conducted by all divisions and corporate levels (Menon & Menon, 1997).

Even though many past researches had focused on EM strategy in developed countries (McDonagh & Prothero, 2014; Leonidou & Leonidou, 2011; Chamorro et al., 2009; Kilbourne & Beckmann, 1998), however, the research on green marketing also expanded in other Asian countries (Jaini et al., 2020; Pintea et al., 2014; Mishra & Sharma, 2010). Song-Turner and Polonsky, (2016) had conducted a study on enviropreneurial marketing in Chinese economy and indicated that China environmental regulations are less efficient and green activities are still at the beginning stage. However, Chinese firms begin to practice green marketing activities and apply EM strategy from both internal and external organizations. Meanwhile, the research on environmental marketing in India also confirmed the adaptation of environmental not only to maintain CSR responsibility, however, appropriate control in green marketing activities able to develop competitive advantage among businesses (Mishra & Sharma, 2010).

In Malaysia, the acceptance of environmental marketing has growth dramatically in recent years. However, the implementation of this activity is still minimum especially among SMEs not only in Malaysia, however, throughout the world (Musa & Chinniah, 2016). The level of understanding regarding environmental concepts among SMEs managers is still low and they are unable to apply it in their business operations. many companies are still not positively reacting on this enforcement and having inconsistent

efforts towards the implementation of environmental marketing in their firms (Hasan and Ali, 2015). Based on the study conducted by Musa and Chinniah (2016), most SME businesses are unwilling to apply EM strategy in their business operations due to they are not technology-oriented, lacked of skilled workers, limited economy of scale, minimum research and development (R&D) on new products and having problem in changing the traditional work process. However, Musa and Chinniah (2016) has proved that, by applying EM strategy, it can give positive feedback on the firm's performance to be more competitive in the marketplace and increase the profitability and productivity of SME business in the long run.

In addition, many studies have proved that EM strategy was positively enhanced the firms' performance and the usage of Natural Resource-Based View theory was applicable in measuring this relationship (Miemczyk et al., 2016; Sharma & Vredenburg, 1998). Pinteá et al. (2014) agreed that by applying green strategies in firms' operations will improve their competitiveness in the marketplace. In addition, Miles and Covin (2000) stated that, applying EM strategy not necessarily improve the financial performance, however, it will become a source for sustainable competitive advantage. Thus, to confirm on this matter, the performance of the firms must be measured appropriately. Based on the previous justification, this study proposes a conceptual framework (Figure 1) explaining the relationship between the constructs of EM strategy and firms performance.

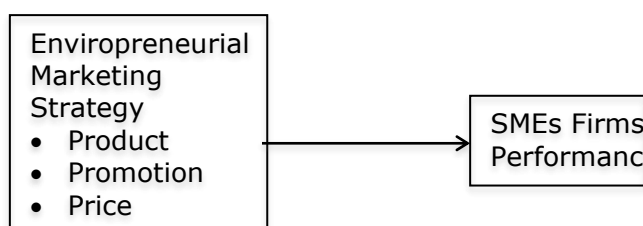


Figure 1: Conceptual Framework

Based on Figure 1, four elements in enviropreneurial marketing strategy that consist of product, price, promotion and place are considered important elements in measuring superior firms' performance. Product is considered as a value offered by the firms to their targeted consumers (Polonsky, et al. 2003). In EM strategy, the firms should re-examine their product features and redesign their products to have green characteristics such as natural, organic, eco-savings and eco-friendliness, and also look for the companies' environmental R&D efforts. In terms of pricing strategy, it has been found that, the implementation of green activities in producing the products able to reduce the cost price (Fishman, 1998). It is because green production process required lower costs. However, contradict results found by Song-turner and Polonsky (2016) stated that most companies set higher price to present high quality image and performance of green product offerings. This condition also supported by prior study stated that premium price has been offered to green products (D'Souza, 2004; Widegreen, 1998). Even green products are sold at premium prices, customers are still willing to pay such prices to consume green products (D'Souza et al., 2006; Laroche et al., 2001).

Furthermore, promotion strategy creates awareness among consumers to purchase green products. Promotion strategy encourages the consumers to change their buying patterns toward green consumptions. The desire of an individual customer to purchase

and consume green products is due to represent his/her social status and image (Dean and Pacheco, 2014). Thus, marketing strategy should emphasize on these message to cater the attention of customers. Marketing to status and image is a very powerful marketing strategy (Reinhardt, 1998). Then, place or distribution strategy also plays an important function to deliver the product or service available for use or consumption without destructing the environment. This is because supply chain activities contribute to higher risk in environmental pollution (Namagembe, et al., 2016). According to the statistic, supply chain activities contribute to more than 50 per cent of an average corporation's carbon emissions (Carbon Disclosure Project, 2011). Destructive environmental impact is particularly gathered in manufacturing supply chains activities due to inbound, outbound and reverse logistics merged with internal firm operations create extensive environmental pollution (Sarkis, 2003; Tamyez et al., 2015; Zhu et al., 2013). Hence, it is needed to improve physical distribution activities that involve with optimal resource planning for inbound, outbound, and reverse logistics (Neto et al., 2008).

3. Discussion and Conclusion

The environmental issues direct the marketers to restructure their marketing strategy in more suitable manner. The sustainability of the business is not only concentrate on customers satisfaction and react to the competitors' strategy, nevertheless, providing social value by securing the environment is a crucial businesses' objectives. Given the importance of sustainability in today's competitive marketplace, this study develop conceptual framework of enviropreneurial marketing strategy to enhance the SMEs' performance in terms of business sustainability as well as delivering environmental value towards the society.

The previous justifications explained on the theory of Natural Resource-Based View (NRBV). This theory emphasized on the need of natural environment by managing the resources effectively in order to achieve strategic competitive advantage and contribute to social obligations (Hart, 1995). Three main strategies have been underlined to incorporate the business operations and environmental sustainability that comprise of pollution prevention, product stewardship and sustainable development. All these strategies must be conducted based on existing business condition that associate with the environmental driving forces.

Based on past empirical findings, a proper execution of EM strategy (product, price, promotion and place) give positive effect towards the firms' performance (Hasan and Ali, 2015; Polonsky and Song-turner, 2016). By conducting EM strategy, it can increase customer satisfaction and also the profitability of business in the long run. The sustainability of the business remains stronger when adapting environmental approach in marketing activities. From an inductive perspective, taken together, the proposed conceptual framework provides a theoretical rationale that goes beyond competitiveness and profitability and result in increase sustainability or value for society at large.

Thus, this paper suggests incorporating other elements of environmental capabilities in marketing perspective by emphasizing the role of EM strategy in SMEs' business activities in terms of its product, price, promotion and place. The present study provides the platform for other researchers to provide more in-depth understanding of EM strategy. Therefore, it is suggested for future research to expand the concept of 4Ps in different contexts in other developing countries. The expansion of 4Ps is necessary to resolve

future marketing constraints in achieving sustainability in business and meet future market demand (Pomeroy, 2017).

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SUB-SESSION 8

HUMAN RESOURCE

Human Resource Management Challenges in COVID 19

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Abstract: Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as MERS-CoV and SARS (Cov). It was first identified in Wuhan City, in Hubei Province, China. Coronavirus disease, now officially named COVID-19, was declared a global health emergency by the World Health Organization in January 2020. Since then, it has spread to all over the world. It has spread Sri Lanka too. During first wave, Sri Lanka was lockdown three month times from March 20 to May 2020. Later second wave attacked Sri Lanka since October 2020, Government has not locked down whole Island but some places only lock down and passed curfew. In Sri Lanka, 5354 people having contracted the virus. Covid-19. Lock down and unlocked locks down are challenges to managing Human resources in organization. During COVID, most of the employees fear to come work place, want to work at home, fear to travel from their home to work place etc.. Some of the challenges are business continuity plans, manage flexible work arrangements, manage employee communication, address employee concerns on workplace policies etc. The purpose of this study is to explore the human Resource Management (HRM) challenges in Sri Lanka during covid 19 and recommend effective HRM practices to overcome the challenges for success and survival of the organizations. The study adopted quantitative and qualitative methodology for collecting data and analysis them. The data collected using structured questionnaire. 220 Sri Lankan managerial level staff responded questionnaire via google form. The study contributes to the growing literature and understands the challenges similar situation in the organization. It may help to overcome the challenges using effective or strategic HRM practices. The organization success and survival in the similar situation depend on the HRM practices.

Keywords: Pandemic, Human Resource Management, Challenges, Covid 19, Lock down.

1. Introduction

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as MERS-CoV and SARS (Cov). The official name for this new disease, not previously seen in humans, is COVID-19. It was first identified in Wuhan City, in Hubei Province, China. COVID-19 spreads in a similar way to flu, where there is close contact between people.

Coronavirus disease, now officially named COVID-19, was declared a global health emergency by the World Health Organization in January 2020. Since then, it has spread to all over the world. The World Health Organization (WHO) declared in a global pandemic on March 11, 2020. A pandemic, in WHO terms, is ‘the worldwide spread of a disease’. It has spread Sri Lanka too. At initially, Sri Lanka was lockdown three month times from March 20 to May 2020. Second wave of COVID 19 in Sri Lanka, since October 2020 with more than 5000 Sri Lankan having contracted the virus.

1.1 Human Resource Management

Human Resource Management (HRM or HR) is the strategic approach to the effective management of people in a company or organization such that they help their business gain a competitive advantage. It is designed to maximize employee performance in service of an employer's strategic objectives (Johnason, 2009). Human resource management is primarily concerned with the management of people within organizations, focusing on policies and Systems (Collings, D. G., & Wood, G. 2009). HR departments are responsible for overseeing employee benefits design, employee recruitment, training, development, performance appraisal and reward management (Paauwe, & Boon, 2009).
HRM Challenges in Covid19

Covid lock down and unlocked lock down are challenges to managing Human resources in organization. Some of the challenges are business continuity plans, manage flexible work arrangements, manage employee communication, Address employee concerns on workplace policies etc.

Organizations have to look after employee safety, travel restrictions, forming a response committee for prompt decision-making, split-working arrangements for specific functions and roles, differentiated measures to boost employee welfare, Top priorities have been providing employees with protective equipment like masks, family care support like flexi-work for staff and Employee Assistance Programs.

A Hongkong and Taiwan-based technology organisation has offered paid leave for employees who have children below the age of 12.

A financial services organisation has started sharing food coupon e-vouchers with employees to order their lunch at home. While other organisations have offered employees free vitamin packs to help them focus on their health. Create guidelines and support networks for those working from home. Keep workers safe by maintaining a healthy work environment.

The sudden shift in work culture has brought new challenges for HR. how to keep the employees engaged, provide the right communication channels and tools for remote work
The global Covid-19 pandemic has presented serious mental, physical and financial complications to people everywhere. Organizations now have to rely more than ever on their HR departments to ensure their workforce feel as safe as possible during this unprecedented and unpredictable time. Almost 7 in 10 HR leaders cite crisis management or business continuity planning as their top challenge during the COVID-19 outbreak.

1.2 HRM Challenges in Covid19

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Former president of CIPM Mr. Dhamika talked HRM Challenges of Post COVID-19, featuring a cross-section of Country representatives of APFHRM via webinar list out several people challenges in the world of work in Sri Lanka. They are leave matters, pay issues, health and safety, additional employee cost, performance measurement, social stigma, remote work facilitation, cultural challenges, moral issues, wellbeing of workers etc.

2. Purpose of the study

The purpose of this study is to explore the human Resource Management challenges during COVID-19 in Sri Lanka. Further, this study identifies the effective HRM practices to overcome the challenges for success and survival of the organizations.

3. Methodology

Researcher adopted quantitative and qualitative methodology for data collection and analysis. The data collected using structured questionnaire. The questionnaire consists of 21 questions which are related profile, Human Resource Management and its challenges. 220 Sri Lankan managerial level staff responded questionnaire via google form. Respondents are from different organizations such as public sector, private sector and non-governmental organization. Descriptive statistics and content analysis were used to analyse the collected data.

4. Data Analysis

4.1 Respondents Profile

Respondents are from different organization such as public sector, private sector, non-government organization in Sri Lanka. 50% of the respondents from Public sector, 31.8% private sector and remaining from other organizations. The pie charts show the respondents designation. Most of the respondents are from Academic (38%), Engineers (24%) others from corporate sectors.

4.2 HRM practices and Challenges during Covid 19

Staff Attendance

The attendance practices before covid mostly organization used finger machine during covid most of the employees want to change from finger to manual. Government of Sri Lanka also accepted or no restriction whatever way practice. Trade unions also did not like finger they like manual attendance. It was big challenge for HR managers in Public sector organization than private sector. It is evidence from the responses ie attendance practices have changed in most of the organization. 95% of the respondents changed the attendance practices because of government granted grace time and union pressure.

Organization adopted different attendance practices such as Flexible time, rotation, work at home, change finger to manual and finger to face recognition in Covid 19. The result shows that more than one method and mostly they adopted work at home (90.9%), Flexible time (72.7%) and Rotation (59.1%). In addition they have adopted the followings finger to manual 27.3% and finger to facial recognition (4.5%).

Salary to staff

The study analysis reveal that 80% of the respondents responded that they paid basic salary and allowances during Covid 19 pandemic period March, April and May 2020. Remaining 20% of the respondents responded that they have paid only basic salary. In Sri Lanka public sector organization paid salary and allowances during the above period. The government of Sri Lanka instructed the organization do not deduct the loan settlement from their salary. Most of the private sectors paid only salary without allowances and some paid half salary.

Facilities for Healthy environment

The result of the analysis depict that most of the organization provided all three facilities such as Face Mask (86.4%), Handwash/Sanitizer (90.9%) and Social distance (95.5%). In Sri Lanka health department was very strict to fulfil these basic requirements as preconditions/request to reopening the organization. When they reopening the organization, employees and customers accepted to adopt all health department suggestions later they were given up or not followed. After second wave of COVID, Government of Sri Lanka brought government Gazzet as rules to be followed every one if any one breach it they will be punished. Now everyone in organization follow health instructions.

Trade Union and Covid 19

63.6% of the organization had trade union remaining 36.4% do not have trade union. Most of the respondents (62%) responded that Trade unions supported to Management to the new normal. 14% of the respondents only did not provide their support. Further trade union demanded health and safety of the employees. Organizations responded their request favourably to motivate staff availability.

Respondents responded that unions focus on the overall well-being of the organization and employees (52%), focus on the well-being of the employees (29%) and focus only on the well-being of the organization (19%).

Covid and its impact on HRM

Covid impact on human resource Management practices. These impact were positive, negative and no impact. 50% of the organization responded that Positive impact on HR but 40.9% responded that negative impact and 9.1% responded that COVID no impact on Human Resource. In interview managers responded that COVID impact on HRM practices such as attendance, motivation, recruitment and selection, training and development, performance appraisal, compensation, health and safety, human resource planning, socialization, career guidance, employee relations, employee behaviour etc.

Changes in HRM practices to response Covid 19

Most of the respondent (72.7%) responded that they have made changes their HRM practices and 27.3% of the respondent responded that they have not made any changes. In order to response Covid 19, organizations have taken some steps such as termination of contract or temporary staff, halt allowances, overtime and benefits, flexible working hours. Most of the organization (45.5%) implemented halt allowance, overtime and benefits.

Human Resource Management Challenges in Covid 19

Respondents responded that there are challenges for managing human Resource in their organization. They are motivation (63.6%), Engagement (63.6%), dealing with covid fear of employees (59.1%), inadequate resources to work at home (50%), carrying out HR practices (45.5%), and getting things from employees (4.5%).

Remote work force was challenge during covid 19. The respondent (54.5%) responded that it was challenge because they could not measure and supervise their performance in some duty and responsibility. Managers responded that the challenges were providing resources individually, getting the required output, providing appropriate technology, workers capacity to work remotely, time constraints, difficulties in contact and communication, difficulties work at home, lack of infrastructure and payments of wages in time.

The employees always complaining during COVID their managers/superior. It was responded that work load too high (36.4%), dissatisfaction with employees health (45.5%), work life balance (4.5%). Employees felt that less employees' attendance and flexi time increase their work load. They fear about their peers, suburbanites, and superior health conditions. No one look after their children at home. No engagement to their children at home (No schools, No tuition classes, no sports, and engage with mobile phone, internet and Television). They fear that they may take covid to their home from work place.

Overcome Human Resource Management challenges

Managers responded that adopting best practices, well planning with give and take policy, educate employees on the situation to change, get cooperation of the staff, adhering to the policy guidelines and instructions issued by Government of Sri Lanka, be flexible, and accommodate new ways of working, being innovative and flexible, motivation, education

and staying firm on unreasonable unions demands, innovative ideas and cost cutting to overcome HRM challenges during covid.

5. Summary of Findings

- 1) During covid and post covid attendance practices has changed in most of the organization.
- 2) The result shows that more than one method adopted for attendance
- 3) Public Sector Organization paid basic salary and allowances and private sector paid basic salary, half salary only.
- 4) The organization provided basic facilities such as Face Mask, Hand wash/Sanitizer.
- 5) Trade unions supported to Management to the new normal.
- 6) Trade unions focus on the overall well-being of the organization and employees.
- 7) Covid make positive impact on Human Resource Management
- 8) Covid made changes their Human Resource Management Practices
- 9) Remote work force was challenge for organization.
- 10) Motivation, Engagement, dealing with covid fear of employees, inadequate resources to work at home, carrying out HR practices, getting things from employees were challenges.

6. Recommendations

- 1) It is better adopt best practices to overcome HRM Challenges in COVID 19
- 2) Management develop effective plan with give and take policy,
- 3) HR Department conduct training or awareness programme on Educate employees on the situation to change
- 4) Management get cooperation of all the staff,
- 5) Accommodate new ways of working, being innovative and flexible
- 6) Ensure employee safety and health
- 7) Maintain regular communication with staff
- 8) Equitable employee policies
- 9) Collect employee feedback
- 10) Reward and recognize employees

7. Conclusion

The study contributes to the growing literature and understands the challenges similar situation in the organization. It may help to overcome the challenges using effective or strategic HRM practices. The organization success and survival in the similar situation depend on the HRM practices.

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Key Employability Skills in Brunei: Reviewing the perceptions of employers and employees in the private and government sectors

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Abstract - Nowadays, the notion of employability has become a common area of concern for various countries all around the world. However, the fluctuations in the unemployment rate concerns the people of Brunei Darussalam as high percentage of youth face complications in finding jobs in Brunei. The study purposes to investigate the perceptions of employers and employees in Brunei on the significance of the employability skills as well as determine the relationship of these employability skills with respect to gender, age differences and years of work experiences. Four major components of employability skills were incorporated in the study to account for the key employability skills including Managing Self; Communicating; Managing People and Task; and Mobilizing, Innovation and Change. Following that, the study utilized quantitative methods to collect data, involving 200 individuals in Brunei's workforce, where descriptive analysis showed that majority of the respondents valued employability skills in the Managing Self and Communicating components as the most essential skills needed in the workforce. Apart from that, inferential analysis revealed that there are significant differences that existed between the perceptions of the key employability skills with respect to gender and age differences of the employers and employees, with no significant difference in the years of work experience. The study provides insights to youth regarding the relevant information and knowledge associated with employability skills that can help them be employable in the job market and maintain their performance when they acquire the job. Moreover, findings of the study would not only be a great value to training program designers or educators in easing the career journey and success of youth in the future, but valuable for the employers in terms of equipping their new trainees and present employees with the above-mentioned employability skills that are believed to be essential in the workforce.

Keywords: Employability Skills; Youth Employability; Labour Market; Youth Unemployment; Brunei Unemployment.

1. Introduction

Nowadays, the notion of employability has become a common area of concern for various countries all around the world. One of the main reasons behind this is no other than the presence of fluctuations in worldwide unemployment rates, at which it was reported that an estimated population of 172 million are still struggling to enter into an employment in 2018 (ILO, 2019). Moreover, current emphasis is projected more towards youth as they are viewed as more likely to be susceptible to unemployment rather than the adults due to the fact that their unemployment rates is reported to be three times higher than that of the adult (ILO, 2019). This has also concerns the people of Brunei Darussalam, as this phenomena is not new to the country. Brunei Darussalam is one of the countries that is located in the Southeast Asian region, currently ruled by a Monarch, Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah (Syed & Omar, 2017). Also running the government of Brunei, the monarch is further aided by a total of thirteen ministries and a number of

government departments and agencies (“Government of Brunei Darussalam,” n.d.). Additionally, with an estimated population of 421,300 in the year of 2017, statistics implied that there were 56.9% of the population are working in the Brunei workforce, of whom 62.8% are male and the remaining are female (DEPD, 2018b). Majority of them (82.5%) are mostly employed in the services sector, a small percentage (1.4%) are in the agriculture sector and the remaining are employed in the industry sector such as manufacturing, construction and other industrial activities (DEPD, 2018b).

According to the International Monetary Fund (IMF), Brunei is currently labeled as the country with the highest youth unemployment rates among the ASEAN countries and Gulf Cooperation Council (GCC) countries (IMF, 2019). There is no denying that there are quite a number of youth who have a hard time searching for jobs in Brunei and this is clearly shown by the statistics where youth unemployment rate among locals in the country has risen from 29.9% in 2014 to 31.7% in 2017 (IMF, 2019). Furthermore, the overall unemployment rate was 8.7% in the following year, which is found to be the highest among the female groups (10.1%) while the male groups’ unemployment rate was about 7.7% (DEPD, 2018a). Though, initiatives have been taken by authorities in Brunei to mitigate unemployment issues that arises among youth which include active labour market programs involving JobCenter Brunei, I-Ready, and the Center for Capacity Building (IMF, 2019). Nevertheless, recent study conducted by Musa and Idris (2020) revealed that youth in Brunei possess insufficient information on the essential employability skills that can better prepare themselves and their performance upon entering the labour market. What is more, acquiring employability skills is considered as an important aspects in contributing to the employability of youth in terms of gaining successful careers and becoming more employable throughout their career (Forrier & Sels, 2003).

This calls for research to be implemented on employability skills that can give better insights to the youth, especially on those skills that are critical to the employers and employees in Brunei. The present study purposes to assess the perceptions of the employers and employees in private and government sectors with regards to the key employability skills in Brunei, particularly, by assessing how they rate the employability skills based on the level of its significance. Not only that, the study also investigates the relationship of these employability skills with respect to gender, age differences and years of work experiences of the workforce through hypotheses testing. As the paper begins with the introduction section, the review of literature further discusses the employability skills in general, followed by the research methodology utilized for the study, results and discussions of findings; and finally, the conclusions and recommendations.

2. Literature Review

Employability skills, which is the skills or attributes essential in the workforce, is frequently linked with the issue of unemployment. Individuals who acquire these skills and are capable of utilizing them are seen highly attractive by most employers as it is believed that it can contribute to the success of their career and would further enables them to adapt and remain in the employment settings (Robinson, 2000; Overtoom, 2000; Brewer, 2013). In addition to that, Saterfiel and McLarty (1995), claimed that employability skills aids in to facilitate the employment. However, it is frequently

observed that youth often deal with complications in securing a job as a result of the mismatch or gap that present between education and training; and the job market demands (Brewer, 2013). For instance, it was discovered that there is still a presence of a gap between employability skills possessed by graduates and the entry level work requirements (Ibrahim & Dandago, 2013). This is often referred to as the skills gap, where it exists when the skills possessed by applicants do not meet the level of employability skills required for the job (Robinson, 2000). Reports further implied that employers are facing difficulties in recruiting individuals to fill in the available job vacancies due to the inadequacy of applicants with the essential skills for the job (LSC, 2003, as cited in Newton et al., 2005). Following the emergence of skills gap, there is also plenty of job seekers who appeared to have little or no information concerning how to properly make use of the essential employability skills that they sought or possessed (Brewer, 2013; Robinson, 2000). Therefore, relevant information and knowledge associated with employability skills should be made available to youth so as to not only help them be employable in the job market, but also to maintain their performance when they get the job. Once they get accessed to these knowledge, they would be able to seek for the available opportunities to develop and properly utilize the employability skills.

Employability skills is said to be crucial for employees in the workforce, and it is noted that acquiring these skills can assist in achieving workplace success and provide a basis for lifelong learning (Abas & Imam, 2016). Robinson (2000) defined employability skills as “those basic skills necessary for getting, keeping, and doing well on a job” (Robinson, 2000, p.1). Additionally, Abas and Imam (2016) stated that these skills represents the attributes possessed by employees, apart from the technical competence, which are capable of transforming them to an asset of an employer. Communication skills, thinking and problem solving skills, adaptability and teamworking skills were some of the skills included into this attributes (Abas & Imam, 2016). Apart from that, the Australian Chamber of Industry and Commerce and Business Council of Australia (2002) referred employability skills as the skills that are significant for securing an employment and advancing forward within an organization, with the aims to attain one’s potential and influence successfully to the strategic directions of that organization (as cited in Wibrow, 2011). On the other hand, Overtoom (2000) has labeled employability skills as “transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required by the 21st century workplace” (p.1).

Furthermore, there are a number of countries, including Australia and Canada, who frequently used the term Employability skills interchangeably with the term Generic skills (Weligamage, 2009). Sometimes it is also referred to as job readiness skills (Azmi, Hashim & Yussof, 2018). However, there might be a difference in the way they interpret each term. In general, scholars often interpreted employability skills as a series of skill sets or groups. For instance, the Australian Chamber of Commerce and Industry & Business Council of Australia (2002) has referred employability skills as a collection of eight main skill groups and assorted personal attributes (as cited in Wibrow, 2011). These skill groups include self-management, problem-solving, communication skills, teamwork skills, learning skills, technology, planning and organizing; and initiative and enterprise skills. Additionally, according to Carnevale (1990), employability skills can be referred to as those fundamental skill groups that are valued by employers, which include Basic Competency Skills; Communication Skills; Adaptability Skills; Developmental Skills;

Group Effectiveness Skills; and Influencing Skills. Not only that, employability skills can be composed of different categories such as basic academic skills, higher-order thinking skills and personal qualities in which it can be further broken down into various individual skill sets (Robinson, 2000). Basic academic skills includes Math, Science, Reading skills as well as communication skills in the form of oral, written and listening. Higher-order thinking skills takes into account the ability to think creatively, make decisions, solving problems, reasoning and learning skills. On the other hand, the personal qualities encompassed attributes possessed by individuals that are valued by employers such as having self-confidence, self-control, self-motivated, integrity, honesty and so on (Robinson, 2000).

Employers' Perceptions of Employability Skills

As it is noted that the employer plays a major role in transforming employability to employment, thus having an understanding and knowledge regarding their views on the employability skills essential in the workforce is significant. According to Brewer (2013), employers demanded new hires who can potentially display a range of skills crucial for employability as well as demonstrate unique personal attributes, which can make the latter be more appealing than other job seekers. This is due to that fact that literature has suggested that with the possession of these employability skills, an individual would be able to manage the substantial changes that takes place in the economy and cope with the ever-changing operational processes of a company or an organization (Gibb & Curtin, 2004, p.16).

According to Chan et al. (2018), most studies conducted in the past revealed that employers tend to look for specific types of employability skills or behaviors that they want their employees to possess. In addition, Smith and Comyn (2003, p.8) stated that the ability to work in a team and communication skills were often seen as the most important employability skills whereas being reliable, enthusiastic and having a good sense of humour were frequently labeled as the most valuable attributes. Furthermore, core skills for employability such as the ability read, write, listen, communicate effectively, managing self at work, solving problems and working in a team are also believed to be significant towards the recruitment of employers and the enhancement of an individual's ability to acquire a job, hold onto the job and not only to adapt themselves in the labour market, but also to take part in the lifelong learning (Brewer, 2013).

In Malaysia, it was indicated that Problem-solving and Adaptability skills was the most important skills viewed by employers in the country, when it comes to employability skills necessary in the workplace (Singh, G. K. G. and Singh, S. K. G., 2008). Particularly, a high number of employers in Malaysia valued those graduates who are capable in adapting or adjusting themselves to changing situations; have the skills to identify problems and solve them; as well as identifying other possible routes in attaining objectives. Other skills that are included in the frame were by Interpersonal and Teamwork skills; Time Management Skills; English Language Proficiency Skills; ICT Skills and Leadership Skills respectively. Communication Skills was observed to have the lowest significance in this study (Singh, G. K. G. and Singh, S. K. G., 2008). Moreover, it was specified that the human resource managers in the United States, who were participating in the study conducted by Rosenberg et al. (2012) on employability skills, viewed that literacy and numeracy skills, leadership skills and work ethics were

the top three most valuable employability skills that can influence job performance. This is followed by interpersonal skills; critical thinking skills; management skills; system thinking skills; and IT Skills respectively. Not only that, a similar study was also carried out in the United Kingdom which aimed to investigate the opinions of a number of sandwich students, new graduates and employers on the relative significance of various employability skills as well as their perceptions on the readiness of both students and graduates for employment (Saunders & Zuzel, 2010). The analysis of Saunders and Zuzels' study concluded that most employers perceived personal attributes; especially enthusiasm and willingness to learn; as well as generic skills in the form of questioning/listening, as the most essential employability skills for graduates that can influence their employment as contrast with the technical skills and subject-specific skills (Saunders & Zuzel, 2010).

What is more, based on the study performed by Nabi and Bagley in 1998 in the UK, it was revealed that the male and female groups have different views on the importance of employability skills and its quality (as cited in Chan et al., 2018). In particular, most male respondents viewed that the quality of employability skills related to communication and problem-solving competencies are more significant than the female respondents, as the latter chose to rate other skills higher than these two competencies. The scholars also observed obvious dissimilarities in the perceptions on other employability skills including time management skills, planning or organizing skills, listening, flexibility and information and technology skills. In terms of the importance of employability skills, majority of the female respondents perceived that time management skills, team working skills, planning or organizing skills and prioritizing skills as highly significant as opposed to male respondents (Nabi & Bagley, 1998, as cited in Chan et al., 2018). However, on the other hand, the findings of Nabi and Bagley contradicted with the analysis of the study carried out by Singh, G. K. G. and Singh, S. K. G. (2008), on assessing the views of employers in Malaysia of different gender in relation to how they rate employability skills of graduates. They discovered that the perceptions of employers among different gender are similar in a way that there was no significant difference in the opinions among the male and female respondents on the employability skills. Apart from that, Singh, G. K. G. and Singh, S. K. G. (2008) also made another discovery upon their investigation on employability skills such that employers of diverse age categories were concerned. In particular, their findings suggested that the older the employer, the less satisfactory they are when it comes to assessing the employability skills of their graduates. In short, these employers tend to place great expectations onto the graduates in terms of their employability skills, in comparison to the younger group of employers. Hence, based on these arguments and findings, the following hypotheses have been proposed:

H1: Employers and employees of both genders have different perceptions on how they rate the level of significance of the employability skills.

H2: Employers and employees of different age groups have different perceptions on how they rate the level of significance of the employability skills.

Furthermore, as gender and age groups are to be investigated in terms of their relationship with the perceptions of employers and employees on the employability skills, the study also aims to assess whether there is a significant difference in the employers and

employees' years of work experience on their perceptions on the level of significance of employability skills:

H3: Employers and employees of different years of work experience have different perceptions on how they rate the level of significance of employability skills.

3. Research Methodology

The targeted population of the study composed of 200 individuals who are currently employed in the workforce of private and government sectors in Brunei. Specifically, a number of government departments from two ministries and a private organization were selected to represent the population of employers and employees in the government sectors and private sectors respectively. In addition, the study was conducted on a cross-sectional basis and a quantitative method of approach in the form of questionnaire was developed as the research instrument. In this case, the study is utilizing the use of both online surveys and paper surveys to collect data, which are then administered to the respective organizations via email or directly mailed to the office once the permission to conduct research is granted. The questionnaire are structured into two sections, which was designed to firstly determine the demographic profile of the respondents and secondly, to investigate the respondents' views on the employability skills respectively.

Measurement scale

This study utilizes a total of thirty items scale into the questionnaire as a measure of the variables in the research model that were adopted from the work of Robinson (2006), Singh, G. K. G. and Singh, S. K. G. (2008) and Brewer (2013). These items represent the employability skills which are believed to be essential in the labour market and they further corresponds to the Four Bases of Competence established by Evers et al (1998) that include Managing Self; Managing People and Task; Communicating; and Mobilizing Innovation and Change. In this study, the respondents were asked to assess the level of significance of the thirty employability skills based on their perceptions. A four point Likert scale measurement has been used to evaluate their views on employability skills ranging from: "0 = no significance, 1 minor significance, 2 moderate significance, and 3 major significance.

Component 1, which is Managing self, takes into account the ability of an individual to manage and control themselves upon facing different situations including four employability constructs such as Organization and time management; Personal strength; Problem solving as well as individual Learning. This component is measured by a ten-item scale and some example of the items include "Willing to learn and gain new knowledge" and "The ability to understand and manage priorities". Following this, Communicating, which represents the second component of employability skills is measured by a seven-item scale. It involves how an individual apply their communication skills to different people in terms of collecting, transmitting and integrating information in various forms including written, oral, interpersonal communication as well as listening. An example of the items include "Ability to write well to the needs of an audience." As opposed to Component 1, the third component, Managing People and Task takes into account the ability of an individual to manage, not themselves, but the people and tasks that surround them. This component further contains Coordination, Decision making,

Leadership and Managing conflict as the skills constructs and they are measured by a nine-item scale and examples of the items include “Giving direction and guidance to others” and “Making decisions in a short time period”. The last component is Mobilizing, Innovation and Change, which includes how an individual can be innovative and creative to initiate change, able to take risks and adapt to changing situations. “Adapting well to situations of change” is one of the examples of the four-item scale used to measure the fourth component.

Furthermore, the questionnaire which was originally presented in English Language, was further followed translation and back translation processes in order to account for the official language of Brunei Darussalam, Malay Language. According to Brislin and Freimanis (2001), in a back translation process, a second bilingual is supplied by the researcher with the formerly translated document with the purpose to translate it back into the original language. In particular, the original questionnaire was translated to Malay Language and further back translated to English Language to maintain the consistency of both languages, which was assisted by associated language experts. Following this, slight amendments have been made on the research instrument upon feedback received throughout this process.

Prior to data collection, a small-scale pilot study was firstly carried out on the measurement scale involving 20 individuals who are employed in the service sectors so as to account for the instrument’s reliability. As a result, the instrument demonstrates a strong internal consistency among the 30 items as the Cronbach’s alpha ranging from 0.73 to 0.90 were attained for each of the components. According to Hinton et al. (2014), Cronbach’s alpha value exceeding 0.90 reveals that the instrument achieved excellent reliability, whereas Cronbach’s alpha values of 0.50 and below is classified as low reliability, moderate reliability for alpha of 0.50 to 0.70 and high reliability for alpha values between 0.70 - 0.90.

Data Analysis

The analysis of the collected data was carried out in the form of descriptive analysis and inferential analysis. In descriptive analysis, the mean, frequency and percentage were used to describe the results and the characteristics of the data. Specifically the demographic profile of the respondent is displayed in a manner that it is easily understood. The analysis further allowed the researcher to identify the employability skills that are the highly valued in the workforce from the perspectives of the employers and employees, which is through the mean score values. This is followed by an inferential analysis, which was performed to run the hypothesis tests. In this case, Mann-Whitney test was used to identify the relationship between employability skills and gender of the respondents, whereas Kruskal-Wallis test was applied to investigate the connection of employability skills perceptions with regards to the age groups and the respondents’ years of work experience. These analysis was carried out through the statistical software package SPSS version 25, which is sufficient to attain the objective and execute the hypotheses of this study.

4. Results and Discussions

A total of 160 responses were received upon data collection out of 200 distributed questionnaires. However, among these collected questionnaires, six responses were removed due to the presence of large percentage of missing data and unengaged responses at which same ratings were given to all of the items in the questionnaire. Thus, only the remaining 154 questionnaires were considered for data analysis in the study, yielding to a response rate of 77%.

Demographic features of the respondents

Table 1 displays the demographic features of the respondents by gender, age and work experience. Prior to data collection, it was found that majority of the respondents were female, with a percentage of 54.5%. About 44.2% of the respondents were 40 years old and above, and a low percentage of them (5.8%) belonged to the age group of 20 - 25 years old. The rest of the respondents were between 30 - 40 years old and 25 - 30 years old with percentage of 33.8% and 16.2% respectively. Moreover, statistics further showed that most of the respondents (29.2%) have been working for more than 20 years, whereas 26.6% and 16.9% of them have 5-10 years and less than 5 years of work experience respectively.

Table 1: Demographic Information

Demographic Features of Respondent		Frequency	Percentage (%)
Gender	Male	70	45.5
	Female	84	54.5
Age	40 years old and above	68	44.2
	30 - 40 years old	52	33.8
	25 - 30 years old	25	16.2
	20 - 25 years old	9	5.8
Work Experience	More than 20 years	45	29.2
	10 - 20 years	42	27.3
	5 - 10 years	41	26.6
	Less than 5 years	26	16.9

Level of Significance of Employability skills

To attain the main objective of the study, which is to assess the key employability skills in terms of the level of its significance based on the perceptions of employers and employees in Brunei, the average mean score values have been computed for all of the four components. In this case, high score indicates greater significance. On average, it was observed that the respondents valued communication skills including oral, written, interpersonal communication and listening, much higher than the rest of the skills as Communicating has the highest average mean value of 2.73 as compared to other three components, followed by Managing self; Managing people and tasks; and Mobilizing, innovation and change with mean values of 2.71, 2.59 and 2.52 respectively.

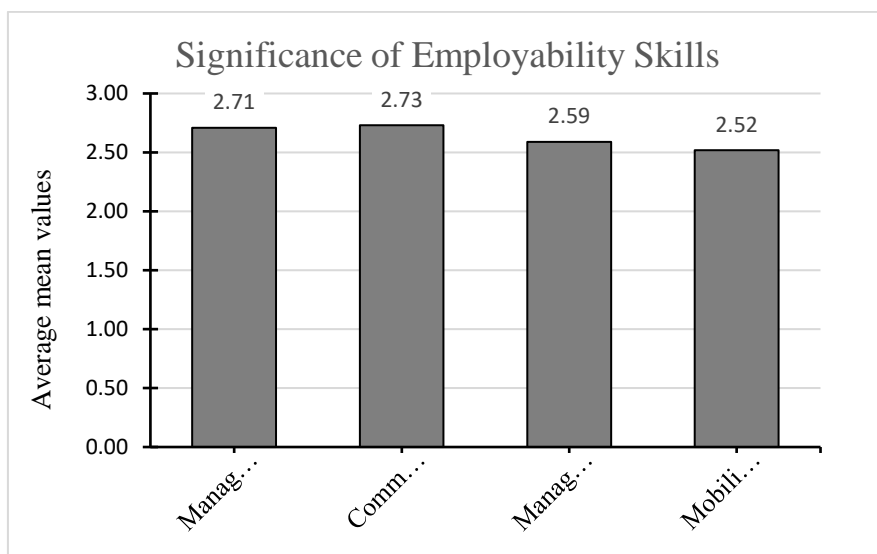


Figure 1: Level of Significance of Employability Skills by Components

What is more, the variations in the level of significance of the employability skills were more evident when taking into account each of the employability skills constructs. The resulting mean values and standard deviations of each construct are tabulated in Table 2, which were arranged in the order of the highest to the lowest mean values. It can be seen that the respondents viewed all of the employability skills in the study as highly important as their mean values were found to be greater than two, where 2 indicates moderate significance, and three implies major significance. In particular, it was revealed that Listening and Oral communication were perceived by majority of the respondents to be the most significant skills with reference to their high mean values of 2.79 and 2.75 respectively. This further implied that most employers and employees in both public and private sectors in Brunei believed that having an ability to listen attentively during an interaction and willingness to learn and gain new knowledge are considered to be essential skills needed in the workforce in Brunei. This is followed by Learning, Leadership and Interpersonal communication where each has a mean value of 2.73; Personal strength, 2.71; Organization and Time management, 2.70; Problem solving, 2.68; Creativity/Innovation/Change, 2.60; Written communication, 2.59; Decision making, 2.58 and Coordination, 2.52. While on the contrary, Managing conflict and Risk-taking were ranked the lowest in terms of their level of significance as their mean values were found to be 2.45 and 2.29 respectively.

Table 2: Level of Significance of Employability Skills by constructs.

Constructs	Mean	S.D	Rank
Listening	2.79	0.41	1
Oral Communication	2.75	0.33	2
Learning	2.73	0.44	3
Leadership	2.73	0.38	4
Interpersonal communication	2.73	0.37	5

Personal Strength	2.71	0.32	6
Organization and Time Management	2.70	0.36	7
Problem Solving / analytic	2.68	0.47	8
Creativity / Innovation / Change	2.60	0.38	9
Written Communication	2.59	0.56	10
Decision Making	2.58	0.40	11
Coordination	2.52	0.57	12
Managing Conflict	2.45	0.67	13
Risk-Taking	2.29	0.57	14

Hypothesis 1: Gender and Employability Skills

H1: Employers and employees of both genders have different perceptions on how they rate the level of significance of the employability skills.

The first hypothesis of the study is to investigate whether there is a difference that exist between gender of the employers and employees on how they perceive the employability skills in terms of its significance. Since the gender of employers and employees composed of two groups being male and female, Mann-Whitney test was carried out to analyze the relationship between gender and perceptions of employers and employees on the four components of employability skills. Based on the analysis, it was discovered that there is enough evidence to support the alternative Hypothesis 1 at 95% confidence level. In other words, the null hypothesis 1 can be rejected due to the fact that the significant (2-tailed) p-values for all of the four components were found to be less than 0.05, as shown on Table 3 below. Hence it can be deduced the gender groups of employers and employees have different perceptions on how they rate the level of significance of the employability skills.

Table 3: Mann-Whitney Test for Gender and Employability Skills (Hypothesis 1)

	Managing Self	Communicating	Managing People & Task	Mobilizing, Innovation & Change
Mann-Whitney U	2027.5	2000.5	2029	2105.5
Z	-3.359	-3.513	-3.333	-3.093
Asymp. Sig. (2-tailed)	0.001	0.000	0.001	0.002

Hypothesis 2: Age groups and Employability skills

H2: Employers and employees of different age groups have different perceptions on how they rate the level of significance of the employability skills.

The second hypothesis of the study is to identify whether there is a difference between employers and employees of various age groups and their perceptions on how they rate the level of significance of the employability skills. In order to undergo the hypothesis testing, Kruskal-Wallis test was used to clarify the relationship between the four different age groups of the employers and employees, and their perceptions on the four components of the employability skills. By referring to Table 4, it can be seen that the significant p-values of all four components of employability skills were found to be less than 0.05. In particular, Managing Self has a p-value of 0.008; Communicating, p= 0.007; Managing People and Task, p=0.009; and Mobilizing, Innovation and Change with p-value of 0.009. Hence, the Kruskal-Wallis analysis favors Hypothesis 2 which further indicates that there is a notable difference between the employers and employees of various age groups and their perceptions on how they rate the level of significance of the employability skills. In other words, the null hypothesis can be rejected.

Table 4: Kruskal-Wallis Test for Age groups and Employability Skills (Hypothesis 2)

	Managing Self	Communicating	Managing People & Task	Mobilizing, Innovation & Change
Kruskal-Wallis H	11.774	12.072	11.661	11.675
df	3	3	3	3
Asymp. Sig.	0.008	0.007	0.009	0.009

Furthermore, the Kruskal-Wallis test also showed the connections between the age groups of employers and employees with their perceptions on the level of significance of employability skills based on the four components through the mean rank scores. The statistics of the resulting analysis were displayed on Table 5 through Table 8 respectively and it was implied that the age group of 30 - 40 years old has the highest mean ranks. For instance, Managing Self has a Kruskal-Wallis H of 11.774, with a mean rank 88.37 for 30-40 years old age group, 82.10 for 25-30 years old age group, 72.83 for 40 years old and above age group, and the age group of 20-25 years old has the lowest mean rank of 37.22. Therefore, this further revealed that there is a significant difference in the perceptions of employers and employees of different age groups on how they rate the level of significance of the employability skills as the significant p-value (0.008) was found to be less than 0.05, specifically for Managing self.

Table 5: Kruskal-Wallis Test for Age groups and Managing Self

Age Group	n	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.
40 years old and above	68	72.83	11.774	3	0.008
30- 40 years old	52	88.37			
25 - 30 years old	25	82.10			
20 - 25 years old	9	37.22			

Table 6: Kruskal-Wallis Test for Age groups and Communicating

Age Group	n	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.
40 years old and above	68	79.35	12.072	3	0.007
31- 40 years old	52	87.76			
25 - 30 years old	25	64.7			
20 - 25 years old	9	39.78			

Table 7: Kruskal-Wallis Test for Age groups and Managing People and Task

Age Group	n	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.
40 years old and above	68	75.03	11.661	3	0.009
32- 40 years old	52	90.09			
25 - 30 years old	25	71.92			
20 - 25 years old	9	38.94			

Table 8: Kruskal-Wallis Test for Age groups and Mobilizing, Innovation and Change

Age Group	n	Mean Rank	Kruskal-Wallis H	df	Asymp. Sig.
40 years old and above	68	76.96	11.675	3	0.009
33- 40 years old	52	83.84			
25 - 30 years old	25	82.56			
20 - 25 years old	9	30.94			

Hypothesis 3: Work Experience and Employability skills

H3: Employers and employees of different years of work experience have different perceptions on how they rate the level of significance of employability skills.

Hypothesis 3 takes into account the relationship between the employability skills and work experience in such a way that the study purposes to determine whether employers and employees of different years of work experience have different perceptions on how they rate the level of significance of employability skills. Similarly, a Kruskal-Wallis test was adopted to test the hypothesis and the results have been recorded in Table 9 below. It was found that all of the employability skills components: Managing Self; Managing People and Task; and Mobilizing, Innovation and Change have achieved their p-values of 0.224, 0.378, 0.424 and 0.166 respectively, which are greater than 0.05. Hence, in this case, the analysis based on the Kruskal-Wallis test revealed that there is no significant

difference in the perceptions of employers and employees of different work experience on how they rate the level of significance of employability skills.

Table 9: Kruskal-Wallis Test for Work Experience and Employability Skills

	Managing Self	Communicating	Managing People & Task	Mobilizing, Innovation & Change
Kruskal-Wallis H	4.372	3.091	2.799	5.077
df	3	3	3	3
Asymp. Sig.	0.224	0.378	0.424	0.166

5. Conclusions and Recommendations

The main objective of the study is to assess the perceptions of the employers and employees in the sector with regards to the key employability skills in Brunei, particularly, by assessing how they rate the employability skills based on the level of its significance. Four major measures or components of employability skills were identified in the study to account for the key employability skills needed in the workforce: Managing Self; Communicating; Managing People and Task; and Mobilizing, Innovation and Change. The sample consisted of 45.4% of male and 54.5% of female respondents who are employed in Brunei workforce, where they were dominated by employers and employees of age 40 years old and above, and majority of them have more than 20 years of work experience. The findings revealed that high percentage of employers and employees have valued Managing Self and Communicating as the most essential employability skills needed in the workforce out of the four components of employability skills mentioned in the study. This further implies that they perceived the ability of an individual to manage and control themselves upon facing different situations such as organizing priorities and tasks, managing time, utilizing own strengths; and the ability to apply communication skills in terms of collecting, transmitting and integrating information in various forms are very significant and considerably essential in the workforce in Brunei. Whilst in terms of employability skills constructs, it was discovered that Listening, Oral communication and Learning were the top three employability skills that achieved the highest level of significance based on their mean score values. On the other hand, Managing Conflict and Risk-Taking were valued the least by the employers and employees in terms of their significance as their mean values were the lowest as compared to the rest of the skills constructs.

Following that, the study confirmed the hypothesis through independent sample Mann-Whitney test that the employers and employees in both private and public sectors among both genders have different perceptions on how they rate the level of significance of the employability skills. This finding is consistent with Nabi and Bagley in 1998 who indicated that the male and female groups have different views on the importance of employability skills and its quality (as cited in Chan et al., 2018). Furthermore, it was discovered that the Kruskal-Wallis test favors Hypothesis 2 in such a way that employers and employees of different age groups have different perceptions on how they rate the

level of significance of the employability skills. Employers and employees who were in the age group of 20-25 years old seemed to value the employability skills much lower than those in the higher age groups, in terms of the level of significance. Work experience could be one of the factors contributing to this difference in perceptions among the age groups, as it could be due to the fact that the younger employers and employees tend to have less work experience as opposed to the older groups in the workforce. However, this contradicts with the present study as the third hypothesis that aims to investigate the relationship between work experience and employability skills through the Kruskal-Wallis test, was not supported in such a way that there is no significant difference in the employers and employees' perceptions of employability skills between the different years of work experience. This further implies that the employers and employees of different years of work experience tend share similar perceptions on how they rate the level of significance of employability skills.

In conclusion, the study intended to provide youth with the information that can help them determine the employability skills that they need to acquire in order to, not only be employable in the market, but also maintain their job while facing the challenges that exist in the workforce in Brunei. What is more, as literature revealed that youth often deal with complications in securing a job as a result of the mismatch or gap that present between education and training; and the job market demands, the outcomes of the study can be beneficial to training program designers or educators in terms of designing programs or establishing curriculum for the youth to develop these essential employability skills for their career journey and success in the future. Not only that, the findings of the study would also be a great value to various employers in terms of equipping their new trainees and present employees with the above-mentioned employability skills that are believed to be essential in the workforce, that is, through the available training programs offered both locally and abroad, thus will not only contribute to the enhancement of the their employees' performance and work quality, but also improve the overall organization's productivity.

Nonetheless, the present study is limited to the respondents who were employed in three organizations. What is more, the perceptions of employers and employees on the employability skills may not inevitably account for the representativeness of the whole workforce population in Brunei. Employers' skills requirements may be different based on the regions, sectors and occupations (LSC, 2003, as cited in Newton et al., 2005). In light of this, the findings of the study can be enhanced by considering a larger sample size as well as extending the scope to include respondents from other different organizations. In particular, similar research could be carried out in the future to investigate the employability skills by focusing on specific industries and occupation backgrounds that would further help to reduce the mismatch that present between skills possessed by youth and the job market requirements.

Furthermore, it is recommended that higher education institutions should consider inviting a number of employers from different industries as guest lecturers so as to share their knowledge to the students to increase their awareness on employability as well as the skills they need to meet demands of the current labour market. Another suggestion is that educators and lecturers could take into account the key employability skills into the classroom practices that would enable youth students to practice and learn how to properly utilize the skills for their upcoming career purposes. For instance, Singh, G. K.

G. and Singh, S. K. G. (2008) suggested that the classroom settings can be organized in such a way that it replicates the key characteristics of actual work environment and that the tasks given to the students would be made similar to those executed by employees in such environment. Apart from that, there is also a need to look deep into the current apprenticeship and industrial training programs in Brunei and review them further to assess their effectiveness in terms of providing youth with, not only the information of employability skills, but also the opportunities to explore themselves in the work environment as well as sharpen their skills. Positive initiatives that have been suggested by IMF (2019) including scaling up the quality of training programs and mitigate the skill gap problems that can better prepare people for future employment can further be taken into considerations when addressing the issue of unemployment in Brunei.

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The Assessment of Talent Remuneration Effect Towards Job Retention among State Public Servant

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Abstract - Maintaining public workforce is indispensable and there are eleven directories of staff that regulate at Public Veterinary Service organizational activities. Each Public Servant staff can be distinguished in terms of education standards, job responsibilities, and job benefits. There is remuneration gap among employees that affect job retention. This research aims to identify the relationship between talent remuneration and job retention of employees at Public Sector. The quantitative approach in the survey was carried out by using a questionnaire to obtain respondent feedback. Next, the collected data will be analysed and interpreted by using Statistical Package for Social Science (SPSS) 21.0 version. As a result, salary has become the most significant and factor that contribute for job retention. Therefore, government should primarily focus on salary in attracting the employees to retain as government servant.

Keywords: Talent Renumeration, Job Retention, Public Servant

1. Introduction

All public sectors in Malaysia use the same service circulars in which all states must practice remuneration systems based on the standards of the Malaysian Public Service Department despite the Public Service Department in Sabah itself. There is a difference in the way that workers being paid their salaries in every state, which not all government sectors funded by the Federal Government. DOVSAI is a government sector funded solely by the State Government where financially depends on the State Government, while government sectors such as education, medicine, and health as well as security and defence are funded by the Federal Government. The federal government's fiscal revenue is very high compared to the state government and this has caused many of the workers to move to another government sector under the federal government. Hence, the employee talents of the Federal Government are also higher, guaranteed and affordable as this will affect the retention of employment.

DOVSAI technically have a problem when the end of each month, the payment of the salaries will be paid late. This is due to the management of employees in a department where employees' remuneration should be first audited according to the procedure, but some of the assigned workers still do not perform their duties. Samsudin (2016) stated that the salaries are often being paid late because of the late in sending documents such as financial.320 salaries by the Accounting Department. Therefore, the late submission document of financial.320 (E-Salary Statement) will result the process of salary payments will be late updated through the computerized system. Not only that, there is other things

happening such as the state budget is insufficient to pay the workers' wages. Therefore, wage entry into the employee account becomes slow and most of the employees complain about each month when receiving salary.

Katz and Murphy (1992) stated that some employees' job responsibilities are too high but the work performed does not match the amount of remuneration received such as salary. Some employers at DOVSAI have breached the misconduct of workers discrimination in which an inexperienced employee was instructed to take over the duties of other non-working employees at that time. Most employers like to take the opportunity to impose duties to other employees, especially the older workers and new workers under his control. Resulting in high-pressure jobs, workers began to compare in scale salary with other work. Consequently, many workers are willing to pensionable early or turnover or make a choice to remain in the organization.

However, this problem cannot be underestimated and should be treated as if it had been going on for years and can affect new employees in the future. This will also affect the remuneration of talent towards job retention. Apart from that, it remains unclear to say if it is not supported by test results that affect the remuneration of talent to job retention. Therefore this paper aims two objectives, firstly, to identify the factors that effects talent remuneration towards job retention. Secondly, to examine the factors that effects talent remuneration towards job retention. Based on the effect of continuity between the remuneration of talent with the job retention can be described as stated in research questions such as: What are the factors that effects talent remuneration towards job retention? And to what extent the effect of talent remuneration towards job retention?

2. Literature Review

Talent Remuneration

Supply to the remuneration of talent can be seen as a mechanism that can motivate employees, but it is also considered that the manner in reward strategy can be used to contribute to the work commitment and quality of service of employees in an organization (Kessler, 1995). Kessler added that, the wage determination system is what provides the means by which all employees tend to base many aspects of their lives around their work. According to the view by Fitz-enz (2000), compensation is part of the remuneration of talent which consists of perquisites benefits that must be implemented by the company to ensure the safety of workers. The organization's ability to repay the commitment of employees also increased. Fitz-enz stated the type of non-salary compensation given to employees is a form of working benefits such as sick leave, vacation leave, social security, health and retirement benefits.

Remuneration of talent is also a number of benefits offered by different countries. According to ORC Worldwide (2004), many local governments in addition to replace the pay package of salary as perquisites and allowances to local employees who have become localization mainly work in the government or the private sector.

Based on the study by Kessler (1995); Fitz-enz (2000); Drucker (1999); and Mayo (2000), this talent's remuneration includes salaries, allowances, and perquisites as expressed by all researchers. It is clear that the talent remuneration is a package of all forms of

employment in which the employer attracts employees, retains employees and improves the performance of employees through the achievement of organizational goals.

H1: There is an effect between talent remuneration towards job retention within Public Servant

Salary

Despres and Hiltrop (1995) stated that wages are determined by the market salary which has a strong network to individual's work only. Where wages are also a source of reference by all companies in coordinating the specialized skills and knowledge. Therefore, companies need to monitor the market wage indexes in other companies so that it will not be below the market wage. For example, prior to attract highly skilled professionals which need to ensure the company's competitiveness in relation to other companies salary should be similar. In addition, wages are determined by the performance of previous workers where after completing the training and development, companies need to increase their salaries. Therefore, companies need to revise the salaries scheme. According to previous studies, most government department using the Employee Provident Funds (EPF) to protect the safety of workers and the interests in the old days. The company that makes the employee's contribution is always changing every year according to the rate fixed for example by 13 percent in one year. Goldman Sachs (1995) stated that the use of the Employee Provident Funds (EPF) will not only attract highly talented employees to remain in the department but workers who voluntarily leave the government department is not allowed to recover.

Williams (1994) stated that the basic salary is the number of contracts paid to an executive on a monthly basis based on the fixed salary that is contained in the employment contract. While, Crawford and Knoer (1981) informed that the labor market is the same and the employee has the right to accept or reject the offer of the company if the market salary is not commensurate with the workload. Therefore, companies need to make appropriate adjustments in salaries so that employees are willing to accept the offer from the company.

The accuracy of information about the most appropriate wages to improve job retention is based on views by Zainal (2013) and CUPEAC (2017). Zainal (2013) stated that setting minimum wages and salaries are between RM 802.00 and RM 11,900.00. Hence, the annual salary increment is given from RM 80.00 up to RM 320.00 according to the prescribed salary grade. Zainal (2013) stated that setting minimum wages and salaries are between RM 802.00 and RM 11,900.00. CUPEAC (2017) also championed the interests of public sector members where there was an increase next month salary after a salary increase in the previous month for that year.

H2: There is an effect between salary towards job retention within the Public Servant.

An Effect of Salary towards Job Retention

Clark and Senik (2010) stated that most workers prefer to contact their friends to compare wage information about what is implicit in the secrecy of the organization. They also informed the information about the compensation that causes the retention of their jobs

at the company. Thus, through the sharing of information with their work colleagues then arises a sense in deciding whether to remain within the company or turnover.

McLeana et al. (1996) stated that the performance evaluation of potential employees through a new learning experience in training and development work can increase opportunities for promotion. Ultimately, the salary received is also higher when the scale of the job is changed and the organization is able to maintain the credibility of their employees.

Verheyen and Guerry (2014) stated that the continued occupation by an employee in an organization will decline when demotion in a position held. Demotion not only demoralizing to work but it also showed a decrease in the level of employment, salary, and jurisdiction in its work. Therefore, these three dimensions, namely, the level of employment, salary and workforce are closely aligned with the retention of jobs. Meanwhile, according to the theory of Lazear (1995), the opportunity to get a promotion not only lead to higher wages but higher rankings lead to job retention for interesting assignments which lead to the absolute performance of employees against work also increased.

Allowance

Allowances Service is under the command of General Chapter B, which is managed by the Institute of National Accounting Accountant General's Department of Malaysia. The allowance is paid money while performing official duties outside the district headquarters, payment of allowances during the course (Dali, 2005) and allowance for exchange or moving house (Herbert, 1995). The Equal Employment Opportunity Commission (1992) stated that performing official duties means an employee has an important function in the tasks associated with their jobs. Due to an incumbent, the authority has to handle the basic job, then all the expertise used in their position will be hired. Where allowances are only eligible for individual services aimed at carrying out his official duties against external assignments that are not directly related to the service. Hitam (2003) stated that allowance is always based on the grade and the individual is only allowed to spend the non-money tokens for one purpose only, where there is a control on spending allocation. If the money is spent in excess of expenditure specified then it will be paid by the workers themselves. Thus, workers can apply for reimbursement allowances through a show-cause evidence receipt that states the type of allowances that are used and have been carrying out their duties formally whether inside or outside its headquarters.

Salas and Cannon-Bowers (2001) stated that the course means giving workers an opportunity to undergo practical training, academic seminars for workers and study visits. He added that the investment in training and development will benefit the workforce and also the organization. This is supported by the view of Arthur and Rousseau (1996) where they stated that job retention is caused by intensive self-training in which employees can develop itself into an experience when taking any initiative in job training. Not only that, even the workers involved in attending the course are also eligible to receive an allowance at the rate specified and based on the job grade.

Therefore, each employee is directed by General Headquarters to engage in research activities for the period of the course. Duration of the course consists of three parts, namely the long-term course of more than three months, which is outside the headquarters of the workplace or within the Headquarters and also abroad. As for short-term courses

are less than three months, which is outside the headquarters of the workplace or within the Headquarters and also abroad. Next, the part-time course is after office hours that are outside the headquarters of the workplace or within the Headquarters.

Herbert (1995) stated that allowance for exchange or move house where an officer is transferred to the outside of the station is eligible to claim their allowances for expenses as the cost of exchange. For example, the allowance used is the ease of transportation costs for moving goods from their own home or rental home or government to government house should be supported by evidence of receipt. Individuals are only eligible for exchange allowance if the distance between the area where the old office is 25 km from the new office, and has made a claim within one year. If all the facilities have been provided by the government, therefore an officer is not entitled to claim the allowance.

Based on the views from previous researchers (Dali, 2005; Herbert, 1995; The Equal Employment Opportunity Commission, 1992; Hitam, 2003; Salas and Cannon-Bowers, 2001; Arthur and Rousseau 1996), we find that the allowance can mitigate the financial burden of workers when performing their official duties outside the Headquarters. The allowance is based on the grade of work and the salary is followed, where the prescribed expenses are subject to the Treasury Circular. Hence, such opportunities will not only provide opportunities for employees to undergo practical training but can enhance their working experience and retention of their work. The most suitable allowances given are as set by the Public Service Department to DOVSAI.

H3: There is an effect between allowance towards job retention within the Public Servant

An Effect of Allowance towards Job Retention

Deci et al. (1999) stated that there are two types of motivation that led to the retention of jobs. The first motivation was said by him is extrinsic motivation, where employees are satisfied with the allowance paid while carrying out his official duties. Deci stated that the presence of extrinsic motivation will pose an impact on intrinsic motivation. He also stated someone with intrinsic motivation will always feel satisfied with the work performed. For example, workers engaged in official business outside Headquarters will always feel good when participating in the activities. He added that employees not only in relation to the new staff but loyalty to his job cause him to get the types of allowances offered.

Golden (2006) found that their organization relies heavily on the basic needs of workers. Golden added that the basic needs of workers have to be met by the manager so that the quality of work improves; furthermore work pressure is also reduced when the organization gave allowance while on official duty. He said that most workers often suffer from financial stress when married because some expenses are allocated more to household consumption. Therefore, workers need to communicate with their employers about their personal needs and a commitment to family. Manager of an organization must also have a great influence on the distribution of allowances is equal; this causes workers to feel safe on their job retention.

Shaffer et al. (2012) stated that the extension of the exercise of official duties would involve either the domestic or overseas that is where an employee is given an assignment. He stated that an employee who is authorized to complete the mission they have to

communicate their information face to face. The physical presence of employees at other locations resulting in the need for personal interaction is vital to strengthen work-related affairs within and outside the office. Shaffer noted that there were many expenses to be borne by employers, particularly the need while traveling to go and return. He said that the plan would need to be taken seriously because it involves great expenses. If the trip is planned and work management more flexible, it also reduces costs where interest in its work leading to job retention.

Perquisites

According to the view by Heyman and Ariely (2004) perquisite is recovered or privileges granted to an employee in the form of non-interest money on the job. He said that the granting of perquisites is an alternative that can affect an organization's ability to attract and retain workers. Heyman and Ariely (2004) also told those employees who benefit will not be taxed. In the United States, he said, as many as 38 percent of workers' compensation benefits successfully carried on negotiations between the employers in cooperation with the trade unions.

According to the view by June (1994), employee benefits can be found in the employment contract. He said that it is important for an employee to refer to the packages offered. Generally, perquisites given to employees not based on performance evaluation and productivity at work but because of his position. Therefore, he added that an employee is entitled to use the facilities as long as the benefits are given or offered to him. Among the types of perquisites offered by the Public Service Department to DOVSAI employees are leave, medical services and sick leave, housing facilities, formal clothing, fares and other facilities.

According to the view by Razak (2016), he stated that there were some facilities to be upgraded in 2017 to honor 1.6 million Civil Servants. Among them are such as paid study facilities with full paid salaries and scholarships. He also added that there was a grant of quarantine leave to civil servants whose children were ill and had to be quarantined through a five-day leave of absence. Furthermore, other facilities such as financing for computer purchases and purchase of smartphones, loans through motorcycle purchases, qualifications to housing loans and extension of service contracts up to the age of 60 years.

Compared to past perquisites, the need for perquisites today is important to maintain job retention because there are facilities such as full-time study leave and quarantine leave for five days without any record. In addition, civil servants are also financed to buy computers and smartphones, loans for motorcycles and housing loan eligibility. Not only that, even extension of service contracts to age 60 is also set. All of these can improve the standard of living of civil servants in the current trend compared to the past perquisites (Razak, 2016).

H4: There is an effect between perquisites towards job retention within the Department of Veterinary Service and Animal Industry.

An Effect of Perquisites towards Job Retention

Harris and Fink (1994) stated that the perquisite is the encouragement by the employer to the employee. He added that employers should decide to offer benefits that can maximize

employee satisfaction and win-win between the parties. Harris and Fink said that the response of workers to the employer services will lead to an attitude of commitment, honesty in performing their duties and remain with their employer.

McGoldrick and Carter (1982) stated that many perquisites oriented to the level of an employee are married. They further stated that the facilities provided will not only delight the workers themselves but also their families will have priority. For example, based on the number of dependent children are not less than or not more than five persons will be exempted from payment of taxes. They also added that due to the high burden of school costs led to lower income tax deductions apply as stated in the employee's salary slip. They added that the benefits of receiving pension and health facilities can be passed on to family members if they meet the terms and conditions, and this would motivate them to retain.

Based on the model by Miceli and Lane (1991), they stated that the perquisite is a benefit to some of the needs of employees. Based on the expected benefit granted, an employee can meet the changing needs of the labor expenditure and control of the use of cost. They stated that an increase in the daily consumption resulted in the opportunity to use all the benefits offered only can ease the burden and hardship of living of workers in their spending. They also added that this is the organization's goals to improve the lives of workers where an employee has personal needs that must be met in his life and retain their job.

Job Retention

Boudreau and Berger (1985) stated that most organizations try to reduce employee turnover and improve job retention. They added that to find replacement workers are more productive will impress human resource management through measures to offset the cost of labour is more expensive, especially through training and development. Therefore, Boudreau and Berger, further confirms that the retention of jobs not only improve the performance of both organizations but ultimately can retain experienced employees while leaving the organization.

According to the view by Osteraker (1999), he stated that the retention of jobs comes from the success of an organization. Osteraker explained that there are three dimensions of study results of social, mental and physical factors associated with the job. For example, the dimensions of such mental work characteristics that allow employees to assess the extent of their efforts and achievements. Next, Osteraker added that the social dimension is related to the good relations between employees and employers while physical dimension consists of giving remuneration system that allows employees to access their financial status.

Van Knippenberg (2000) suggested that an employee's loyalty to the organization will become permanent when the organization introduced a system of collective work that allows multiple parties to achieve a goal together. He stated that the achievement of a group will raise the spirits of all individuals to seek to generate a good income and a reduction in working pressure when associating themselves with the group and task.

Lofquist and Dawis (1969) believed that employees' personal values are always opposed to the kinds of jobs. They stated that the workers commensurate with their work always focuses in terms of knowledge, qualifications, and skills possessed.

Finally, the best remuneration to improve job retention is a salary. Salaries are not just about raising the cost of living but the salary scale can also change over the allowance and perquisites. Paying wages becomes more versatile and valuable to everyday life,

especially household and individual employee expenses. Gardner (2004) stated that paying salaries can improve the performance of employees where employees will do their work more seriously.

Conceptual Framework

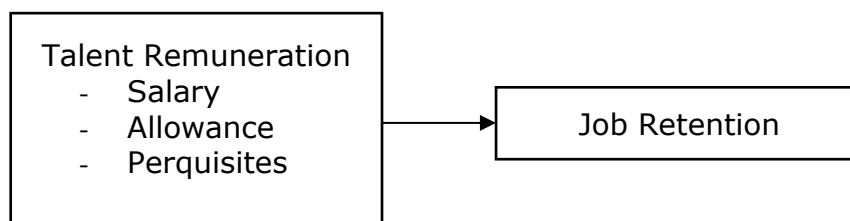


Figure 1: Conceptual Framework of Job Retention for Public Servant

3. Methodology

Generally, the form of data to be obtained is by using a quantitative approach (Uma Sekaran & Bougie, 2010). The most popular data collection method include questionnaires instrument (Zikmund, 2003). In collecting the data, the questionnaire was distributed to respondents where the respondents would respond to the questionnaire physically which will be administered personally at the workplace, mail to the respondents or electronically distributed at the DOVSAI. The response will be measured with a five-point Likert scale rating, where Strongly Disagree= 1, Disagree= 2, Neutral= 3, Agree= 4, and Strongly Agree=5. Each scale will be measuring the result by examining how strongly subject disagree and strongly agree with the statement on a five-point scale (Uma Sekaran & Bougie, 2010).

The target population of the study consists of staff directories from headquarters unit, development of the livestock industry, section administrator and management, section of planning and development of human resources, division of veterinary services, DOVSAI district, small animal clinic, farm department, laboratory, office of the director and also milk collection centre. Based on the records found in the human resources planning and development office, the DOVSAI staff directory assembly is about one hundred and sixty-four staff members. The sampling technique used in this study is a simple random sampling. This method is selected to ensure that each of the staff directories has the equal chance of being selected as a respondent. A total of 118 questionnaires distributed to selected respondents (Krejcie and Morgan, 1970).

Table 1: Sampling

Staff Directory	No. of Staff in Population	Percentage	Sample
Livestock Industry Development Division	28	17%	20
Management Services Division	69	42%	50

Veterinary Services Division	67	40.8%	48
Total	164	100%	118

Stratified random sampling also helps to estimate population parameters, however, there are subgroups of identifiable elements in the population that may be expected to have different parameters on the variables that appeal to researchers (Hair et al., 2010). The population was first divided into an exclusive, relevant and meaningful group within the context of the study.

The forms of data analysis techniques used are as descriptive analysis which includes frequency analysis and assessing normality tests. Other data analysis techniques such as reliability analysis, the coefficient of correlation and multiple regression were used for inferential analysis of the collected data set. Therefore, the Statistical Package for the Social Sciences (SPSS) version 21.0 will be used to handle analytical processes, from designing to collect data, data entry, data analysis, through reporting and visualization of data outcomes. All the information collected by the researcher will be applied in the technique of analyzing the data where the information is assessed in the normality test, descriptive statistics, reliability analysis, coefficient correlation and multiple regression (Sheridan J. Coakes, 2013).

4. Findings

Employees in the Department of Veterinary Service and Animal Industry (DOVSAI) in Sabah, Malaysia are dominated by the female. This statement has been supported by the data from respondents feedback that identifies 59.1 percent of them are female. As the total respondents are 115 employees, the percentage of female employees in the DOVSAI based on the feedback from respondents conveys 68 employees are female. However, the male makes up 40.9 percent of the DOVSAI employees. This number equivalent to 47 employees out of 115 samples feedback from the respondents.

The age groups of employees in the Department of Veterinary Service and Animal Industry (DOVSAI) in Sabah, Malaysia are classified into three different age groups. The majority of the employees are within range of more than 36 years, with the domination of 71.3 percent. The figure of the percentage is equivalent to 82 employees. The second highest domination comes from age range between 26 to 35 years old with 29 employees or similar to 25.2 percent. Following this age group for the next rank is the age group of less than 25 years old with 4 employees or accounted for 3.5 percent from 115 employees collected for sampling.

By looking at the employees' distribution table based on the marital status the majority of the employees are "Married". It is explained by the data with more than half of the respondent are married, 80.9 percent from 115 employees or consisted of 93 employees. The second highest frequency for marital status will be "Single", with 22 employees (19.1 percent).

Education level compromise 71.3 percent of the sample that has been taken from the survey. It means that 82 employee's majority have their Malaysian certificate of education (SPM). The second highest educational level for the employees in the government department is for "Bachelor's degree" with 18 employees or contributing to the total respondents with the percentage amount of 15.7 percent. Thirdly, diploma holders also have the lower contribution as it made up 11.3 percent or equal to 13 employees. Next,

those who have pursued their “Master's degree and Ph.D.” as the top highest educational level are as many as 2 employees (1.7 percent).

105 employees (91.3 percent) out of 115 sample feedback by the respondents at Department of Veterinary Service and Animal Industry (DOVSAI) in Sabah, Malaysia, have more than 5 years working experience giving better services whereas another 10 employees (8.7 percent) have less than 5 years working experience tend to perform duty efficiently. The longer the working experience, higher the welfare of human resource development. Indirectly, the employee term of service will differentiate talent remuneration towards job retention.

The result also reveals that 66 employees (57.4 percent) out of the 115 samples number of respondents showed that the employees are undergoing training less than 5 times within one year. It is realized that only as much as 49 number of employees (42.6 percent) have the eagerness to fulfil in any form of training more than 5 times in spite of the known dividends of training and even when DOVSAI has a clear training policy.

From the result, it can be concluded that the majority of 52 employees (45.2%) have received payrolls between RM2,001 and RM4,000. Meanwhile, 38.3% or 44 workers from a sample of 115 respondents who are only eligible to be paid salaries of less than RM 2,000. The rest, there are 19 workers (16.5%) whose payroll score is more than Rm 4,001 and above. The difference in wage payments made by the Public Service Department to employees at the Department of Veterinary Services and Animal Industry (DOVSAI) is due to the minimum wage setting according to the secular payments. There is a positive association between talent salary and job retention. Hence talent salary is considered as one of the variables in the profile.

The findings show that a majority of 110 employees (95.7percent) out of the number of samples 115 respondents who responded "Yes" that they love the job in the Department of Veterinary Services and the Animal Industry (DOVSAI) because due to the effects of talent remuneration coming along with their job retention; while another 5 respondents, representing 4.3%, were stated that their expression of emotional feeling "No" or not to love the job.

55 out of 115 respondent stated that medical leave not given to them, meanwhile 60 out of 115 respondent said that the medical leave was being granted by the DOVSAI. Apart from that, 42 out of 115 respondent stated that Allowance not provided for them, meanwhile 73 out of 115 respondent said that the Allowance was provided. Next, 34 out of 115 respondent said that Bonuses not given for them, meanwhile 81 out of 115 respondent stated that the Bonuses were being granted by the DOVSAI.

Secondly, 112 out of 115 respondent stated that Advance Scholarship not given to them, meanwhile 3 out of 115 respondent said that the Advance Scholarship was being granted by the DOVSAI. Besides that, 104 out of 115 respondent said that Compassionate Leave not given to them, meanwhile 11 out of 115 respondent said that the Compassionate Leave was provided. For the benefit such as Gratuity hold, 92 respondent said no Gratuity benefits were given to them, while 23 out of 115 respondent said that Gratuity was being provided to them. Lastly, other benefits were not received by the employees said that about 91 out of 115 respondent, while another 24 respondent had received the other benefit.

In conclusion, there are various types of benefits that are offered but not all employees have the opportunity to fulfil all the benefits. Some workers will benefit differently. About 112 number of employees frequently said no Advance Scholarship received is the highest record followed by Compassionate Leave which is 104 number of employees giving

responses for the second highest. For the Bonuses has the highest record number of employees' responses who said "Yes" frequently about 81 respondent and followed by 73 number of employees said "Yes" to the Allowance are the second highest. The benefits received by employees, whose bonuses are the highest percentage of around 70.4%, followed by allowances of 63.5% and medical leave of 52.2%. For the gratuity and other benefits, it is almost similar to the percentage value at the rate of 20.0% and 20.9%. The less benefit granted by the Department of Veterinary Service and Animal Industry (DOVSAI) such as compassionate leave and advance scholarship which are about 9.6% and 2.6%.

Table 2: Reliability

Variables	Cronbach's Alpha	N of Items
Job Retention	0.760	11
Salary	0.710	12
Allowance	0.765	9
Perquisites	0.639	9

The Cronbach's Alpha value is to measure a stability indicator of “goodness” in each item of the group and internal consistency. De Vaus, (2002) suggest that to measure of scale reliability whether the internal consistency is unacceptable, poor, questionable, acceptable, good and excellent, thus Cronbach's Alpha value should be in between $0.5 > \alpha$ to $\alpha \geq 0.9$. Based on table 8.8, it shows allowance (Independent Variable) has the highest reliable with the value of Cronbach's Alpha of 0.765, while followed by the job retention (Dependent Variable) with the value of 0.760 and the salary (Independent Variable) with the value of 0.710. Thus, $0.8 > \alpha \geq 0.7$ is the value of Cronbach's Alpha for three variable then, internal consistency will be acceptable. The least reliable variable is perquisites (Independent Variable) with 0.639 because its internal consistency has been questionable when the Cronbach's alpha value is $0.7 > \alpha \geq 0.6$.

Table 7.1 Two-tailed of Pearson Product- Moment Correlation

		Job Retention	Salary	Allowance	Perquisites
Job Retention	Pearson Correlation	1	.584**	.264**	.321**
	Sig. (2-tailed)		.000	.004	.000
	N	115	115	115	115

** Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation of coefficient between Job Retention (JR) and Salary is 0.584, which means that the relationship between the two variables is moderate. There are a significant positive relationship exist between Job Retention (JR) and Salary ($r = 0.584$, $p < 0.05$). The moderate job retention (JR) scores are associated with medium Salary scores. A sig. (2-tailed) with value 0.000 is less than 0.05 tells that statistically significant correlation exists between the two variables. Therefore, we will accept the alternate hypothesis 2 which is “There is an effect between talent salary towards job retention”.

When comparing salary, allowance and perquisites, among the most highly likely rated talent remuneration (TR) by the employees at a department of veterinary services and animal industry is salary. The perquisites and allowance with values of 0.321 and 0.264 are much-concerned will affecting job retention (JR). The sig. (2-tailed) test in the table represents a statistically significant correlations between job retention (JR), salary, allowance, and perquisites. If the sig. (2-tailed) value is greater than 0.05 there is no statistically significant correlation between the variables, whereas a sig. (2-tailed) the value less than 0.05 tells statistically significant correlation exists between the two variables. From the output above, the result has shown that correlation is significant at the 0.01 level (2-tailed) for both independent variables and dependent variables are less than 0.05.

Table 7.5 Multiple Regression of Model Summary for Salary, Allowance and Perquisites towards Job Retention (JR)

Model Summary		
Model	R	R Square
1	0.590 ^a	.349

Table 7.6 Multiple Regression of ANOVA^a for Salary, Allowance and Perquisites towards Job Retention

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.919	3	3.640	19.796	.000 ^b
	Residual	20.407	111	.184		
	Total	31.326	114			

Table 7.7 Multiple Regression of Coefficients^a for Salary, Allowance and Perquisites towards Job Retention (JR)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
		1	(Constant)	1.613		
	Salary	.504	.081	.547	6.221	.000
	Allowance	-.003	.077	-.004	-.042	.967
	Perquisites	.088	.084	.093	1.043	.299

a. Dependent Variable: Job retention (JR)

The first row on table 7.5 is a model summary for multiple regression that providing the R, R-square, adjusted R-square, and the standard error of the estimate, which can be used to determine how well a regression model fits the data. The R column represents multiple correlation coefficient for (Perquisites, Salary, and Allowance). Therefore, R can be considered to be one measure of the quality of the prediction of the dependent variable (Job Retention). A value of R is 0.590^a, in this table, indicates a moderate positive linear relationship between the variables. If there are a strong negative linear relationship and a

strong positive linear relationship between the variables, the value of will be close between -1 to $+1$. If R equals to zero, then there is no linear association between the dependent variable and the independent variables.

The R-square column represents the coefficient of determination with multiple regression analysis values of 0.349, which is the value of R-square about 34.9% proportion of variance in the dependent variable (Job retention) that can be explained by the independent variables (Perquisites, Salary, Allowance).

Since the number of terms in a model adjusts and added more variables (Perquisites, Salary, Allowance), then R-square = 0.349 will always higher than adjusted R-square = 0.331. Thus, about 34.9% of variation explained by only the independent variables that actually affect the dependent variable. From table 7.5 model summary for multiple regression, the R-square is 0.349 which means that model of the data 1 is fit, unless if the R-square is zero value or decrease, then the adjusted R-square will penalize you whether adding more useless variables or useful variables (Independent Variables) and the model can also cause sub-zero values. The purpose of adjusted R-square is just for adjusting the number of terms in a model.

Based on table 7.6 ANOVA^a for multiple regression, the F- statistics shows that the independent variables statistically significantly predict the dependent variable, $F(3,111) = 19.796$, $p < 0.05$ level of significance. Therefore, the regression model is a good fit for the data.

By looking on the Coefficients^a for multiple regression table 7.7 above, unstandardized coefficients indicate how much the dependent variable (Job Retention) varies with an independent variable (Perquisites, Salary, Allowance) when all other independent variables are held constant. The unstandardized coefficient, β_2 , for allowance is equal to -0.003 , this means that, although employee allowance has been improved, there is still a shortage of job retention (JR) of 0.003. It's also same applies to standardized coefficients, β_2 , for which allowance equal to -0.04 varies from the job retention (JR). Hence, we can conclude that the coefficients are not statistically significant because the corresponding p-value is 0.967 much higher than 0.05 at the t-test value of -0.042 .

The perquisites benefit for the unstandardized coefficient and standardized coefficients are also not statistically significant, β_3 , for which perquisites value equal to 0.088 and 0.093, at the p-value of 0.299 is higher than 0.05 with t-test = 1.043. This is because there is little support from DOVSAI employees on the retention of their jobs due to the increase of perquisites by the Public Service Department. If compared to salary, allowance, and perquisites, the increase in minimum salaries payments of workers greatly affects the improvement in retention of their jobs at DOVSAI. The salary model (Independent Variable) for the unstandardized coefficient and standardized coefficients are statistically significant, β_1 , in which salary value equal to 0.504 and 0.547, at the p-value less than 0.05 (0.000) with t-test = 6.221.

In conclusion, a multiple regression was run to predict job retention (JR) from salary, allowance, and perquisites. These variables statistically significantly predicted job retention, $F(3,111) = 19.796$, $p < 0.05$ level of significance, R-Square = 0.331. All three variables added statistically significantly to the prediction, $p < 0.05$. The salary for β_1 with unstandardized coefficient and standardized coefficients value of 0.504 and 0.547, t-test = 6.221; is statistically significant at the p-value < 0.05 level of significance. Then followed by the allowance for β_2 with unstandardized coefficient and standardized coefficients value of -0.003 and -0.004 , t-test = -0.042 ; is not statistically significant at the p-value $0.967 > 0.05$ level of significance. Meanwhile, there is also perquisites for

β_3 with unstandardized coefficient and standardized coefficients value of 0.088 and 0.093, t -test = 1.043; is not statistically significant at the p -value $0.299 > 0.05$ level of significance. Therefore, we will accept the alternate hypothesis 2 which is “There is an effect between salary towards job retention”. Meanwhile, we will accept null hypothesis 3 which is “There is no effect between allowance towards job retention” and also we accept the null hypothesis 4 which is “There is no effect between perquisites towards job retention”.

5. Conclusion and Discussion

The study was conducted to determine the effect of talent remuneration towards job retention among employees of Department of Veterinary Service and Animal Industry, Sabah. 118 respondents who work at DOVSAI were engaged in the study. However, effective responses were received from one hundred and fifteen (115) respondents, only 3 respondents giving the critical extreme value from these study.

The objectives of the study were to identify the factors that effects talent remuneration towards job retention at DOVSAI, Sabah. The literature shows that job retention factors are critical and should be well addressed by DOVSAI organization in order to meet its employee's personal value on the particular job. The result of talent remuneration effects shows that the allowance and perquisites were rated as most important to the workforce in the DOVSAI followed by salary. It therefore means that these items package needed to be improved in the DOVSAI. Improving these benefits will improve workers job retention and thus ensure meeting the DOVSAI goals and objectives. This because, talent remuneration is the biggest contribution that lead to employee's job retention to do their work more seriously, and while having better remuneration system will reduce the cost of living especially employee household expenses and indirectly, it's will improve the workers working performance.

Other objective of this study is to examine the factors that effects talent remuneration towards job retention at DOVSAI, Sabah. The literature emphasis that job retention comes from the success of an organization who have good relation between employers and employees. Thus, employer discretion to retain experienced employees from leaving the organization is by ensuring workers remuneration system commensurate with their workforce. The result of inspection from each factors shows that the three talent remuneration system rated most important to the workforce are salary at DOVSAI.

Besides, several research questions would be described in this study such as what are the factors that effects talent remuneration towards job retention? The overall study had been answering the continuity between the effects of salary with the job retention in which statistically significant correlation test exists between two variables is moderate. Among the factors that effects salary towards job retention are education level, age, working experience, and staff directory.

The first hypotheses argued that there is an effect between talent remuneration (salary, allowance and perquisites) towards job retention within the Department of Veterinary Service and Animal Industry. The first hypotheses was fully supported for the manner in reward strategy or incentives can motivate employees to contribute to the work commitment. Since many types of benefits offered by DOVSAI, then workers willing to give high quality of services because it will become a compensation parts as when employees tend to base many aspects of their lives around their work. Talent remuneration, on the other hand was a good predictor of job retention. This findings was

contrary to the hypotheses that talent remuneration is a package used by employers to attract DOVSAI worker retains on the particular job and achieved organizational goals. Hypotheses 2 contended that workers with a specialized skills against working position and educational level who had a close personal experience with that general knowledge of new maximum and minimum wage would be more willing to agree about determination of salary grade. The first hypotheses was fully supported for the link between how Public Service Department setting pay gap and influence workers job retention at DOVSAI. Thus, salary is a good predictor of job retention.

The expectation of the study was that there is no effect between allowance towards job retention within the Department of Veterinary Service and Animal Industry. Those employees welfare is not treated equally where employers do not so to paying expenses when workers performing his/her official duties outside the district headquarters. Few numbers of aged employees getting pressure after costing money themselves and eligible to claim allowance reimbursement but their payment might be late a bit. As a result of the opportunity to undergo practical training in 1 year is less than 5 times, then allowances is not good predictor of job retention.

The hypotheses 4 study that there is no effect between perquisites towards job retention within the Department of Veterinary Service and Animal Industry. The findings show that the DOVSAI office does not have their own clinic facility at work, causing all workers need to moving from workplace go to nearby hospitals. As a results, workers only get permission from their employers for medical check-up, but the employer exactly does not know that employees are easy to get longer sick leave as provided by the doctor. In addition, higher the absenteeism rates to work will affect workers job retention. Thus, perquisites is not good predictor to job retention.

6. Recommendations for Future Studies

Considering the major findings from the research, the following recommendations are made for consideration. These recommendations, if implemented effectively, will help employees, employers, Public Service Department, State and Federal Government, researchers themselves, Malaysian Trades Union Congress and DOVSAI organization to improve upon the retention of workers at the DOVSAI organisation.

In the first place, since most of the workers see their allowances benefit to be nothing to do with have training opportunities, employers should put in place structures that will bring about an improvement in the providing free allowances without costing workers themselves. As the allowance is allocated by the government, the employer must comply with the rules in determining the employee's allowance grade based on Service Circular No.36 of 2013. This can be done by diversifying the types of allowances linking with the interest and ability of the employees to undergo training and development, thus workers job retention will be longer at DOVSAI. Also perquisites benefits such as medical clinic facilities should be provided in order to reduce absenteeism problems to the workplace. This can be solved by placing a medical clinic building only reserved for DOVSAI staff. The Government has to enforce laws relating to the Service Circular No.36 of 2013 and the Labour Act of 1955 where the Public Service Department will play an important role in introducing the new trend of Malaysia's remuneration system from time to time. Along with that, support from the Trade Union should protect the rights of DOVSAI employees from being oppressed by employers such as to suppress the actions of employers who violate the Labour Act 1955 and to investigate complaints from DOVSAI employees.

It is also highly recommended that workers should giving a cooperation to participate in the answering of questionnaire form. This is because participatory process can contribute significantly to improve workers Job Retention and quality of service at DOVSAI. This can also lead to improvement in employment security because when there is a researcher who conducted the study, then other researchers who are interested to carried out this topic further publicly, especially for their future research, then the DOVSAI workers problem able to addressed effectively. Apart from that, since this study was conducted at DOVSAI Headquarters, Sabah, which means all employee sample information is obtained from the DOVSAI headquarters should not be widely disclosed. The results of this research may only be used for educational purposes, knowledge and reference.

7. Implications of the Study

Working conditions at DOVSAI will be effective when motivated workers come to work. This is because the talent remuneration system can retain employees to stay in the same department if their needs are appreciated. In addition, office work management also improves and seamlessly when DOVSAI has the equipment and facilities that can be used by employees to reduce the movement from one place to another. For example, if there is a Medical Clinic facility that is only reserved for DOVSAI staff in the building, then the problem of absenteeism in the workplace can be overcome.

This study will implicate the Public Service Department to further update any new trends relating to the Malaysian Remuneration System from time to time. From the research, it also gives them the idea of creating various types of remuneration that can reduce the burden of workers' expenses other than paying them wages. Therefore, the Public Service Department is the master mind to attract and influence DOVSAI employees on what they must do to ensure that job retention continues to prolong and improve the lives of workers. If they fail to determine the best type of talent reward system, DOVSAI will not benefit their efforts on a job.

The State Government and the Federal Government play a role as a great function to enforce the law and take action to investigate and punish employers who violate the Labor Law Act 1955 which is due to abuse the power to discriminate against workers. This will give the government a chance to ensure that the work process in their country goes smoothly without any problems. Although the government is a leader in Malaysia or the state of Sabah but with a good labor control system, then the quality of the workforce on job retention will affect the reputation of the DOVSAI organization around the world.

The Malaysian Trade Union Congress will protect the welfare of workers who help them combat the rights of workers. This Trade Union Congress will hear what problems are encountered or examined from the study, so they will recommend employees to follow certain procedures to protect themselves primarily from being a third party to the discretion between employer and employee. Additionally, the determination of new minimum and maximum wages by employers will also be considered by the Trade Unions Congress to obtain more fair wages to workers. In the meantime, it will also come into force from the support of the Trade Union Congress itself to further enlarge the opportunities of workers in training and development in order to retain the employment of employees at DOVSAI, where employers are urged to provide free allowance to their employees in the official duty of the headquarters outside.

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Multiple Role Conflict and Job Performance: The Mediating Role of Self Efficacy

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Abstract - The focus of this study is to provide empirical evidence of the moderating effect of self efficacy on the relation of multiple role conflict on employee performance. In addition, this study also examines the effect of multiple role conflict and self-efficacy on job performance. One hundred female employees from four commercial/government banks were sampled in this study. Sampling using purposive sampling technique with the criteria have been working for more than one year, married and already have children. Data were collected through questionnaires and processed using Moderated Regression Analysis (MRA). The results showed that multiple role conflicts have a significant negative effect on job performance, self-efficacy has a significant positive effect on job performance. Meanwhile, self-efficacy is not able to weaken or strengthen the influence of multiple role conflicts on job performance, in other words, self-efficacy fails to become a moderating variable in this study.

Keywords: Employee Performance, Multiple Role Conflict, Self Efficacy.

1. Introduction

Human resource management is an important thing to apply for a company since the basic steps such as planning, selection, recruitment, development, maintenance, and use human resources that aim for the progress of individual and company goals. Employee performance is the thing that can determine the success of the company. Performance is the answer or results of employee's success in carrying out the task as a whole during a certain period compared to all the possibilities of criteria or targets that have been jointly agreed upon accordance with Rivai & Basri (2005). In addition, employee performance itself refers to work performance and measured based on criteria or standards agreed within the company (Fadzilah, 2006).

Bandura (1997) stated that self-efficacy is intended as the faith that a person has regarding the capability or incapability to indicate a certain behaviour or series of actions. In addition, self-efficacy concept is related to what extent a person understands their potential in overcoming conditions may be faced in the future. Self-efficacy is required to develop employee performances since having self-efficacy in a person will create more confidence in their capability to complete the tasks on time

Role conflict according to Gibson et al. (2003) is a problem that arises when a person executes a role but there is a clash while carrying out certain roles in a company. Consequently role conflict will affect individual performance. However, with the presence of self-efficacy, role conflicts can be minimized. With the existence of self-

efficacy according to (Muallifah & Astuty, 2016), a person will still take actions or decisions of their own accord, even though initially someone does not know where to go to make a decision. According to Greenhaus and Beutell (1985) in Ansari (2011) regarding the problem of dual role conflict, it is emphasized that the gender who will get a higher experience of multiple role conflicts are women in terms of responsibility to their families and mostly allocate the time to their families compared to men. Since the higher the role conflict an individual feels, it will have a negative effect on their performance.

Based on Central Statistics Agency (BPS) data stated that Indonesia experienced an increase in the number of the labour force, February 2019 it increased rapidly by 2.24 million of people, but when it compared to the previous year in February 2018 it became 136.18 million of people. According to (Ministry of Manpower and Transmigration, 2019) in Indonesia, significant growth in the working age population continues, where the female labour is 30% of 136.18 million people. The result of these data show that currently women are actively involved in the world of work with the aim of supporting family wealth and pursuing personal careers. This condition also shows an increase in the number of dual career women. They are responsible wives and mothers in their families and independent career women in the workplace. This conflict makes it difficult regarding to divide time between family and job demands, particularly women workers on the sector of banking. Judging from the current situation of business competition in the world of banking is quite sharp. In order to develop and survive, management should to prepare satisfactory services to the customer, in a way to understand customer perceptions and applying them accordance with customers want regarding bank services.

Based on the description of background above, this study takes the subject of career women with the object of state owned banks in Semarang, Central Java. This study aims to: 1) Evaluating the effect of multiple role conflicts on employee performance, 2) Evaluating the effect of self-efficacy on employee performance, 3) Evaluating the variable self-efficacy moderates the effect of multiple role conflict on employee performance.

2. Theoretical Framework and Hypotheses

Multiple role conflict

Robbins defined about role conflict is a condition when workers are faced with the expectancy of different roles. The existence of role conflict in the company will have an impact on the employee's performance. As a result, the higher of role conflict that an individual feels will have negative effects on their performance. Role conflicts can direct to clashes and misunderstandings between members in the company. If the individual himself is unable to control the role conflict within them-selves, it will bother the individual's stability of emotional.

2.2 Job performance

Performance leads to the level of success of employees in running the tasks in the company as well the capability to attain progress and the objectives that have been set. Donnelly, Gibson and Ivancevich in Rivai (2005) explain what factors affect performance,

namely: 1) Rewards expectations 2) Spirit 3) Capabilities 4) job perceptions 5) Rewards from internal and external 6) Perceptions of reward levels and job satisfaction.

As explained by Umam (2010), the performance impacts are: 1) Obtaining targets 2) Fidelity 3) Promotion 4) Training and development 5) Good behavior 6) improvement of the organization

2.3 Self-efficacy

Self-efficacy according to Goleman in Luthans (2006) is optimism or a basic construct for EI. To be precise, the process of self-efficacy starts before a person picks options and starts their work. Goleman in Luthans (2006) stated that first, individuals tend to consider, evaluate, and integrate information about perceived abilities. Self-efficacy can affect motivation, behavior selection, endurance, resistance to stress and facilitative thinking patterns (Goleman in Luthans, 2006). According to Bandura in Luthans (2006) the sources of self-efficacy are performance achievement or mastery experience, social persuasion, personal experience and psychology.

The existence of role conflicts will lead to misunderstandings among members of the organization. As a result, role conflict greatly influence on employee performance. When individuals experiencing high role conflict, they tend to decline for their performance. However, with the presence of self-efficacy, role conflicts can be minimized. Individuals who have higher self-efficacy will capable to minimize role conflicts in the company, whether that occurs between individuals or even groups. Employees who have higher self-efficacy will capable to fulfill their duty on time and professional.

2.4 Multiple role conflict and job performance

According to (Fahmi, 2011) stated that there are various kinds of problems in the working environment that can create conflicts, from small, medium to large conflicts. Luthans (2006) explains that conflict can occur in interpersonal, individuals, groups, and organizations. One of examples of role conflict experienced by employees is conflict between family and work. The various roles of humans cause role conflict in life, means the differences in these many roles can create issues in them. Multiple role conflict, according to Greenhaus (1985), is a conflict of differences in roles among work and family, role conflict means where the demands of work and family duty cannot be in harmony with one another. The types of multiple role conflicts according to Lee & Hong (2005), there are two types namely work conflicts affecting the family and family-affecting-work issues. Work-to-family issues occur when duty in the workplace bother with family roles; besides family-to-work issues occur when family roles bother with duty in the workplace. This study refers to work-to-family issues where conflicts that occur among work and family roles that can create stress and bring down performance.

To analyze the above conflicts, Netemeyer, Boles, & McMurrian (1996) stated there are several studies that attempted to specify the valid effects and provide empirical support for these conflicts on job performance, although they are still limited in number. Research from Patel, Govender, Paruk, & Ramgoon (2006) rejects the relationship among multiple role conflicts and job performance. Besides that, research from Ashfaq, Mahmood, & Ahmad (2013) explains that job performance is influenced by multiple role conflicts in

the sector banking. Therefore in this study, based on previous research, the first hypothesis is:

H1: Multiple role conflict has a negative effect on job performance

2.5 Self-efficacy and job performance

Self-efficacy is believed to be a specific domain that is suggested to motivate better performance in several ways, namely 1) self-efficacy affects feelings of competence and confidence in a person to achieve the desired goals, 2) self-efficacy increases one's sense of control to regulate self, environment, and using strategies and experiences to achieve better performance, 3) self-efficacy is related to the perception of oneself that business will result in success, which is able to increase the individual's ability to continue to survive in achieving goals (Carter W. R., 2018). Employees with high self-efficacy tend to show persistence in achieving goals (Bandura, 2006). Self-efficacy acts as a mechanism that encourages a person to mobilize effort, cognitive action, resources and other actions needed to achieve better performance (Potosky, 2002). In other words, self-efficacy refers to the individual's intention in allocating efforts to achieve the targeted performance level. Employees with high self-efficacy will focus on opportunities and challenges rather than obstacles, they generally think in a more optimistic way, improve themselves, set higher goals for themselves, maintain motivation and are less prone to stress and depression (Miraglia, 2017). As a result, employees with high self-efficacy are likely to get higher performance and achieve success.

The more people believe they will be able to effectively manage the work environment and be proactive, the more effective they will form their performance (Bakker, 2012) (Tims, 2014). An employee with self-efficacy has the confidence to operate effectively and overcome the problems or challenges faced, so that they can fulfil the agreed target tasks. Carter (2016) and (De Clercq, 2018) found that self-efficacy has a significant positive effect on employee performance at both the individual and organizational levels because employees with high self-efficacy have self-confidence and motivation to perform well. People with self-efficacy are considered to have effective ways of working with the confidence they use to complete their tasks (Lai, 2012). Some empirical evidence that supports the positive effect of self-efficacy on performance is (Carter, 2016; (De Clercq, 2018) (Lai, 2012) (Rhee, 2017). Based on this description, the second hypothesis is

H2: Self-efficacy has a positive effect on job performance

2.6 Multiple role conflict, self-efficacy and job performance

Bandura (1997) stated that self-efficacy refers to the faith that efforts will create successful results that can increase a person's ability to maintain effort when pursuing goals. Bandura also stated that individuals who have self-efficacy are more tend to indicate intensity and persistence towards their duty and seek to more challenging objectives. In this research, researchers seek to explore whether characteristics personality can make individuals more resilient to the impacts of existing work-family conflicts. Based on research conducted previously by Glaser & Hecht (2013), choosing self-efficacy is due to several reasons. There are three reasons, first, this is the main belief

that someone has about themselves, regarding their perceived capability to be able to face different conditions (Bandura, 1986). Second reason, the theory of self-efficacy assumes that a person with higher self-efficacy tend to assure they can cope with depression and tend to not see conditions as a threat in order to increase job performance stated by Lazarus (1993). Research by Grandey & Cropanzano (1999) stated that someone who has high self-esteem would be less affected by work family problems. Lastly, several previous studies by Greenglass and Burke (2002) have taken self-efficacy as the center of the stress process and there is evidence that it is negatively related to emotional exhaustion that can improve employee performance.

Research from Glaser & Hecht (2013) suggests that people who have lower self-efficacy will have a threat since the issues among work and family increases. An issue is more dangerous when a person lacks confidence in their capability to cope the condition. A person who lacks confidence is tend to be anxious because there are insufficient resources to handle demands and if people can't handle the situation it will bring down their performance. Individuals who have higher self-efficacy will capable to minimize role conflicts in the company. Individuals who have higher self-efficacy will have the capability to fulfill their duties on time and professional. Hence, from the two researches above found the evidence and espouse regarding the relationship among self efficacy as moderation between multiple role conflicts and job performance, as a result the third hypothesis in this study is

H3: Self-efficacy moderates the relations between multiple role conflict and job performance

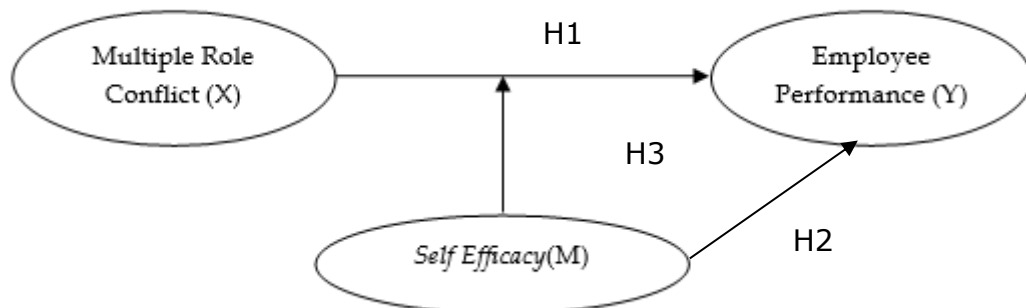


Figure 1: Conceptual Research

3. Research Method

1.7 Population and Sample

The population in this study were all employees of four commercial / government banks in the city of Semarang. While the sampling method used purposive sampling with the criteria given, namely 1) permanent female employee who has worked for more than one year, 2) married and has children. The sampling criteria refer to previous research conducted by Patel, Govender, Paruk, & Ramgoon (2006). Samples taken in this study amounted to 100 female employee.

1.8 Data Collection and Analysis

Data were collected through a questionnaire containing statement items related to the variables studied, namely multiple role conflicts, job performance and self-efficacy. The analysis method used is Moderated Regression Analysis (MRA) with self-efficacy as the moderating variable.

1.9 Measurement

Multiple role conflict is measured using 14 item statements referring to research by Netemeyer, Boles, & McMurrin, (2005) and Frone, Russell, & Cooper (1992). Statement items submitted are related to how employees experience role conflicts, namely roles in work and family. Furthermore, the self-efficacy variable is measured using eight statement items taken from the “new general self-efficacy scale” (NGSE) by Chen, Gully, & Eden (2001). While the job performance variable is measured using 7 statement items from Williams & Anderson (1991). Measurement of variables using a Likert scale of 1-5, from 1: strongly disagree to 5: strongly agree.

4. Data Analysis and Discussion

The results of testing the first hypothesis are shown in Table one. Multiple role conflicts have a significant negative effect on employee performance. The negative and significant effect is indicated by the beta value of -0.286 with a significance level of <0.05. Statement items submitted relate to how employees experience role conflicts, namely roles in work and family. From these results it can be concluded that the first hypothesis is accepted. The results of this study are in line with research conducted by Fisher & Gitelson, (1983), Ashfaq, Mahmood, & Ahmad (2013). Role conflict occurs when employees are faced with expectations for different roles, such as when two roles must be performed simultaneously or when performing one role prevents from performing the other. This can lead to low productivity, achievement and performance (Akgunduz, 2015).

A person who has multiple roles will feel confused because these roles are often conflicting and can ultimately reduce performance (Örtqvist & Wincent, 2006). The impact of role ambiguity on performance is due to lack of information or too much information received by employees so that employees feel confused (Wu, Hu, & Zheng, 2019). Furthermore, this confusion affects an employee's ability to work (Jackson & Schuler, 1985). Conflict triggers employees not to focus on work, and ultimately affects their performance (Warokka, 2015). Bank employees feel a conflict of roles, namely as workers and housewives, this role conflict breaks their concentration at work. Concentration is divided because the employees think about their duties as housewives and at the same time they also think about their duties as workers. From this, it can be seen that bank employees receive a lot of information related to the dualism of their roles which causes them to become confused and lose concentration while working which ultimately makes their performance decrease. Worries about things outside of work such as home conditions have the highest value as an indicator of multiple role conflicts.

Table 1: Regression Analysis Result Step 1 (Source: Processed Data, 2020)

Model		Unstandardized Coefficients		Standardized	Sig.
		B	Std. Error	Coefficients Beta	
1	(Constant)	20.432	1.321		.000
	Multiple Role Conflict	-.117	.036	-.286	.016

a. Dependent Variable: Job Performance

Table 2 shows the testing of the second hypothesis. The second hypothesis which states that self-efficacy has a significant positive effect on employee performance is accepted. This can be seen from the positive beta value of 0.398 with a significance level of <0.05. Employees with high self-efficacy tend not to give up in pursuing their responsibilities (Stajkovic, 2018). Self-efficacy allows employees to survive challenges or obstacles, and they will quickly recover from setbacks and remain involved in achieving their performance targets (Na-Nan, 2019). Self-efficacy plays an important role in employee performance (Gunawan, 2017). Self-efficacy as an employee's feelings or beliefs about his chance to successfully complete a certain task. This is in line with the opinion of Lunenburg (2011) which states that self-efficacy is a person's belief that he can successfully perform certain tasks. Self-efficacy is defined as the competence a person feels about their ability to successfully fulfil tasks at work (Kappagoda, 2018). If people have faith in their abilities, they will develop self-disciplined behaviour to enhance their performance. Self-efficacy will improve employee performance (bin Md Sabron, 2017). This concept explains the employee's success because of his self-confidence. This clearly shows that self-efficacy plays an important role in employee performance

Table 2: Regression Analysis Result Step 2 (Source: Processed Data, 2020)

Model		Unstandardized Coefficients		Standardized	Sig.
		B	Std. Error	Coefficients Beta	
1	(Constant)	13.248	2.110		.000
	Multiple Role Conflict	-.126	.047	-.257	.011
	Self-Efficacy	.301	.073	.398	.000
	R ²	= 0.468			
	Adjusted R ²	= 0.312			
	F	= sig. 0.00			

a. Dependent Variable: Job Performance

Based on table 2 it can also be concluded that the amount of variation in job performance can be explained by the variable multiple role conflict and self-efficacy of 31.2% and the remaining 68.8% explained by other variables outside the model. The F test shows significant results (sig. <0.01) which means that multiple role conflicts and self-efficacy together have an effect on job performance.

Furthermore, the results of testing the 3rd hypothesis are shown in table three. From this table, it can be seen that self-efficacy fails to become a moderating variable for the effect of multiple role conflicts on job performance. These results are indicated by the MRA significance value which is greater than 0.05. So the third research hypothesis, which says self-efficacy moderates the effect of multiple role conflict on job performance, is rejected.

Hence, self-efficacy does not strengthen or weaken the effect of multiple role conflict on job performance. Individuals with low self-efficacy will not strengthen the negative multiple role conflict relationship with their performance, and vice versa, individuals with high self-efficacy will not weaken the negative multiple role conflict relationship with their performance. Likewise, banking employees who have high role conflicts can cause their performance to decline even though they have high self-efficacy in their work. This result is different from the results previous research established by Glaser & Hecht (2013). Glaser and Hecht (2013) stated that person who has low self-confidence would sense more threatened if their role conflict is high. The individual will feel increasingly anxious, confused and lose focus so that the decline in performance will be more manifest.

Table 3: Regression Analysis Result Step 3 (Source: Processed Data, 2020)

Model		Unstandardized Coefficients		Standardized	Sig.
		B	Std. Error	Beta	
1	(Constant)	11.680	2.134		.000
	Multiple Role Conflict	-.699	.269	-.545	.041
	Self-Efficacy	.478	.125	.689	.000
	MRC_SE	-.005	.003	-.311	.089

a. Dependent Variable: Job Performance

5. Conclusion, Implication, Suggestion, and Limitations

This study aims to provide empirical evidence of the negative effect of multiple conflicts on job performance, the positive effect of self-efficacy on job performance and the role of moderating self-efficacy on the effect of multiple conflicts on job performance. Of the three proposed hypotheses, one hypothesis is rejected. The results show that the higher the multiple conflicts experienced by banking employees, the lower the resulting performance. The better the self-efficacy you have, the more performance you have. Furthermore, self-efficacy cannot weaken or strengthen the relationship between multiple role conflicts and job performance.

The implication of this research is that because multiple role conflicts affect performance, companies should pay special attention to working women who have multiple roles. Companies can strengthen stress management with prevention systems, companies can build monitoring of the pressure of these roles, conduct regular stress assessments. Companies can also introduce assistance programs for employees to handle multiple role conflicts with counselling, provide education on how to handle multiple role conflicts and so on. Job descriptions, role orientation, goals, job responsibilities, expectations and authority in the job must be clearly defined to avoid role conflict and ambiguity. Companies must also build strong communication between workers in order to reduce unnecessary information on the job. Creating a supportive organizational climate is also needed to respect and acknowledge the needs of workers, encouraging employees to create a work life balance.

This research has several limitations, namely that it is only conducted in the banking industry, with a minimum sample size of 100 people. Variable usage is limited, so the value of adjusted R² is small. From these limitations, the suggestion that can be given for

future research is that data can be collected not only in one banking industry but can be taken from several industries and even to several regions with a representative sample size. Further research can consider other variables such as self-esteem, commitment and competence to become moderating variables.

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SUB-SESSION 9

DIGITAL ENTREPRENEURSHIP

QR Code as a Mobile Marketing Tool

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Abstract - Quick Response (QR) code is a two-dimensional code that can be accessed through mobile devices. Most of the mobile devices now are already integrated with the QR Code readers. Consumers can just point the camera at the QR Code and a notification pop up will take the users to the menu. Moreover, consumers can download the QR Reader software from various App Stores (iOS, Android, Windows). This paper presents the conceptual paper of QR code as a marketing tool for product labelling, promotion and mobile payment.

Keywords: QR Code, Mobile Device, Mobile Marketing, SMEs

1. Introduction

Quick Response (QR) code was invented by Denso Wave, a subsidiary company of Toyota Motor Corporation in 1994. The concept QR code at that time was to trace car components during manufacturing and distribution. It is made up of black and white squares and dots technology with the ability to contain many information in a 10th of the space and omnidirectional scanning capabilities instead of old barcode scanners used in the eighties (DensoWave). A traditional one-dimensional barcode stores up to 30 numbers, while QR code can store 7089 characters in one symbol (Ji Qianyu, 2014). QR code can efficiently store more data than one-dimensional barcode (Sahu & Gonnade, 2013). QR code possesses a high capacity of storing information and it is capable of storing various types of data, like numeric, alphabetic characters, audio or video content, hiragana, binary, symbols and control codes.

QR code consists of different areas that are reserved for specific purposes such as finder, separator, timing patterns, alignment patterns and functional patterns (Pandya & Galiyawala, 2014). The finder patterns located at three corners of the symbol are intended to assist in easy location of its position, size and inclination (Chen et al. 2012). QR code function is to encode information from left to right and from top to bottom. Once the matrix barcode is read by a camera or apps in smartphone, it gives more details about the business or brands, shows a URL for additional information, provide coupon and others (Pontius, 2020).

Smartphones are becoming a bigger part of daily life for many people across the globe. According to Statista, the current number of smartphone users in the world today is 3.5 billion, and this means 44.87% of the world's population owns a smartphone. This

figure is up considerably from 2016 when there were only 2.5 billion users, 33.58% of that year's global population. According to Global System for Mobile Communications (GSMA) real-time intelligence data, today, there are 5.23 Billion people that have a mobile device in the world. This means that 66.79% of the world's population has a mobile device. Back in 2017, the number of people with mobile devices was only 53% and breached the 5 billion mark. Statista predicts that by 2023 this number of mobile device users will increase to 7.33 billion. Based on GSMA real-time intelligence data, there are now over 10.09 Billion mobile connections worldwide, which surpasses the current world population of 7.83 Billion implied by Union Nation (UN) digital analyst estimates. This data means there are 2.26 billion more mobile connections than people worldwide. (bankmycell).

Mobile marketing can be defined as the communication with the consumers through wireless device to provide them location base, personalized and timely information about the goods and services lunched by the organization (Scharl et al., 2005). It can be defined as any marketing activity that can be performed through mobile technologies (Frost et al. (2019). Andrews et al., (2016) mentioned that there are two categories of mobile marketing which are push and pull marketing. Push mobile marketing refers to the application of traditional marketing techniques directly to the phones of consumers. In contrast, pull marketing encourages people to seek a specific service on their own, and it generates demand (Watson et al., 2013).

With the increasing adoption and use of mobile devices, present literature has examined extensively the factors that influence m-marketing acceptance and use by consumers (Marriott et al., 2017; Newman et al., 2018). Most of those studies are based on frameworks that are derived from the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980), the Theory of Planned Behaviour (TPB) (Ajzen, 1991), the Technology Acceptance Model (TAM) (Davis, 1989) and several TAM extensions, and the innovation characteristics (Rogers, 2003). The above studies either examined consumer attitudes towards m-marketing in general, regardless of mobile tools used, or examined specific m-marketing tools that were popular among users, such as SMS.

The implementation of QR code in retail environment as a marketing communication offers business and convenience information or a more enjoyable shopping experiences to consumers (Goldberg, 2010; Santos, 2011). There are various services offered through the smartphone such as QR Code is called as the mobile marketing tools. QR codes can be in different medias, such as magazines, newspapers, posters, packaging, labels, and receipts, and play a key role in bridging the advertising media with promotional sites. Some studies have also examined consumer use of mobile apps inside the store (Grewal et al., 2018). The use of mobile phone has been found to positively affect purchases in the store (Grewalet al., 2018). However, there is limited research evidence on the effect of m-marketing tools embedded by smartphones on consumer decision-making. Patsiotis et al. (2020) revealed that mobile marketing tools influence consumers' decision-making differently and their effect varies according to the customer type. From the result, the loyalty has a direct influence on mobile marketing effectiveness, as the decision-making process of loyal customers is more affected by mobile marketing tools than the non-loyal customers.

More than that, QR code has become common in consumer advertising. Typically, a smartphone is used as a QR code scanner, displaying the code and converting it to some useful form. QR code has become focus of advertising strategy, since it provides benefits to access a brands product website more quickly than by manually entering a URL. The QR code as a mobile marketing tool is the part of customers to interact with the brand's company (Acuti, Vocino, Mazzoli, & Donvito, 2020).

Since QR code is the mobile marketing tool and mostly apply in retail industry, therefore this study is focused on three elements; product labelling, promotion and mobile payment that can be implemented in QR code. These three elements can be applied by marketers in mobile marketing as smartphone nowadays is very practical and successful that businesses can takes place anywhere.

2. Literature Review

Product Labelling

Packaging is practically a symbol of the product, reaching in some cases, to be as important as its content. The industry, in general, has been working to stamp the QR code on the packaging of the products, from which the consumer can access, instantaneously, gifts, services, and information hosted on the Internet.

Okazaki et al. (2011) mentioned that the QR code are used in commercial tracking, entertainment, marketing and the labelling of the product. These applications are for smartphone users who can receive text messages, add a vCard contact to the device, open a URL or compose an email or text message after reading the code. The researchers also included other applications such as product images and coupons. The main benefit of this technology is the ease of use since it is only necessary to scan the codes with the mobile device so that the consumer has access to the coded data.

Taylor and Wilkening (2008) mentioned that food labelling is a crucial tool for consumer education, and the information on the label can lead to the decision to purchase the products or services. Joao et al. (2019) focused on the use of QR code technology in the packaging of products by agri-food companies on the customer purchase decision. It can be remarked that younger female consumers with higher schooling and income are more concerned with information about traceability and product quality.

Promotion

The study from Ertekin et al. (2014) suggested that consumers can be motivated by providing promotion offers by the firms on scanning QR codes. They also showed interest to have relevant information about the product in the advertisements as well as the customer's reviews.

Situmorang et al. (2019) developed a QR code-based digital flashcard model as a media for promotion and socialization to increase the competitiveness of the creative economy and Small and Medium Enterprises (SMEs) in the city of Cirebon, West Java. With this kind of promotion, public's interest in shopping in traditional markets increase,

therefore, the sales of products from SMEs increase. As mentioned by Santos (2015), the usefulness of QR codes technology in the online marketing strategy as a tool to do a promotion, communication and interaction between the brands company and the customers. The function of QR codes as scanners, has been accepting in daily life as a source of getting information, or as support in various activities tool for offline and online promotion (Tutunea, 2019).

Hossain et al., (2018) mentioned that QR code is widely use by marketers to communicate with their customers to provide products and services that related to information, promotion and selling the product brands and also for e-commerce communication. The researcher also highlighted that marketer or retailer needs to use QR code technologies to enable then to have a best connectivity level with their customers. QR code allows greater adaptability for accessing to and sharing materials, anyplace, anytime, and might be utilized for anything and everything without any charge (Lotfipanah, 2020). Furthermore, the usage of product codes are effective in a marketing field (Mostafa, 2015). From a marketing perspective, QR codes, for example, can be used to promote brands and attract customers in advertising is experiencing exponential growth across the world (Walsh, 2009).

Mobile Payment

Mobile payment stated that it has short commercial history and has rapid development (Dahlberg et al. 2003). Examples of mobile payment service providers in Indonesia are Go-Pay and Ovo. Mobile payment can be classified as remote-based or proximity-based payments. According to Carton et al. (2012), remote-based payment has its own limitation and thus proximity-payment is developed. Proximity-based payment refers to payment transactions made through proximity technologies integrated into the mobile phones, which require a physical proximity between the source and the recipient of the payment (Ceipidor et al. 2012). Proximity-based mobile payment such as QR Code payment is cheap to produced and easy to distributed, therefore it is more advanced compared to another proximity-based payment method (Krombholz et al., 2014).

Shin (2008) was one of the pioneer research investigated on consumer acceptance of mobile payment. By using he Unified Theory of Acceptance and Use of Technology (UTAUT) research model, 296 samples were done on the several countries quantitatively. Result showed that Perceived Usefulness and Perceived Ease of Use had a significant, positive relation with Attitude, while Perceived Security, Trust and Attitude had a significant, positive relations with Intention. Meanwhile, Intention had a significant, positive relation with Usage Behaviour. Moreover, modified Technology Acceptance Model (TAM) as the research model was study on Go-Pay mobile payment adoption in Indonesia quantitatively (Chandra et al. 2018). Result revealed that Perceived Reputation had a positive, significant relation with Perceived Trust. Perceived Usefulness, Perceived Ease of Use. Perceived Mobility had a positive, significant relation with Attitude and Attitude had positive, significant relation with Intention to Use.

QR Code Payment adoption with modified TAM research model was investigated in Spain by Liébana et al. (2015). It can be concluded that Perceived Compatibility had a positive relation with Perceived Usefulness (PU), and PU had a positive relation with Attitude. Personal Innovativeness had a positive relation with Perceived Easy of Use and

Intention. Perceived Easy of Use had positive relation with Perceived Usefulness. Both Attitude and Subjective Norms had a positive relation with Intention to Use. Next, Eyüboğlu et al. (2016) studied on consumers' adoption to shop with QR Code in Turkey, where Perceived Usefulness (PU), Perceived Playfulness and Attitude had a positive, significant relation with Behavioral Intention and PU had a positive, significant relations with Attitude.

Lou et al. (2017) done research of the QR Code Payment in tourism. Relative Advantage, Compatibility, Observability and Trialability had a positive, significant relations with Attitude, and Attitude had a positive, significant relations with Current Usage (CU). CU was also known to had a positive, significant relations with Transaction Satisfaction and Travel Satisfaction. Continuous Usage Intention (CUI) of QR Code Payments in China was studied by Gao et al. (2018). Also, Performance Expectancy (PE), Effort Expectancy (EE) and Social Influence (SI) had a positive, significant relations with CUI. Involvement, in addition, played a positive, significant moderating factor on the impact of PE, CUI and EE, CUI. According to Daniel et al. (2020), performance expectancy, effort expectancy and social influence had a positive, significant relationship with intention to use QR Code Payment. Also, involvement had a significant, positive moderating role on impact of performance expectancy and social influence toward behavioural intention. Jones et al., (2010) mentioned that payment can be made using QR code. Hemant Bamoriya (2014) carried out study in India and Japan and the objective of the study was to know about the QR Codes based marketing in both countries. The findings concluded that there is not only positive relationship between culture and beliefs but also in belief and intentions. The relationship of media and on campaign instructions was notes as significantly moderating.

3. Conclusion

In conclusion, marketers can apply the three elements (product labelling, promotion, mobile payment) of QR code as their mobile marketing tool. These three elements/variables can assist the marketers using digital strategies in communication, marketing campaigns and also purchasing the products and services. However, many consumers are still unaware of the QR code symbol that printed on the products even though this QR code technology has been used extensively. Therefore, future study can be done by studying consumers acceptance on QR code. Future research also may consider other variables that may influence the usage of QR Code among consumers.

4. References

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The Proclivity Factors on Awareness of e-Commerce: A Case of Small Business in Kelantan

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Abstract - E-commerce usage is becoming one of the important things to humans in helping daily businesses activities. Judging this, this paper aims to determine the proclivity factors of small businesses on their awareness of e-commerce. To achieve the research objectives, this study used the Technology Acceptance Model (TAM) by analysing and reviewing the literature related to perceived barriers, competitor's pressures, organizational readiness and relative advantages. The data of 203 small businesses were collected via purposive sampling technique to generate the proclivity of awareness of e-commerce among small businesses, especially in Kelantan. The main finding indicates the organization readiness, competitor pressure and relative have a significant and positive relationship to awareness of e-commerce. At the same time, perceived barriers show a significant and negative relationship to awareness of e-commerce. This nature of the study is not only vitally-important to entrepreneurs but also significant to the policymakers, government and non-governmental institutions to understand the importance of e-commerce awareness, especially toward small business development in Malaysia.

Keywords: Awareness, e-commerce, competitor pressure, organization readiness, perceived barriers, relative advantages, small business, Technology Acceptance Model (TAM)

1. Introduction

Aligned with the Industrial Revolution (IR4.0) agenda worldwide, digitalization is one of the crucial things to ponder. A part of digitalization is online business via e-commerce. This trend towards technological and business digitalization developments also give impact on small and medium-sized enterprises (SMEs), which most of them are registered as small businesses (see SME Annual Report, 2018/19). Undoubtedly, small businesses play an imperative role in creating wealth and potentially made a significant contribution to the sustainable industries in a country (Chukwuma-Nwuba, 2015; Turner & Endres, 2017; Thompson, & MacMillan, 2010).

Embracing these new business trends, numerous businesses are increasingly investing in instruments and solutions that empower their processes, equipment, personnel, and even products to boost efficiency (Nagy et al., 2018). In line with this statement, e-commerce is one of the recognised platforms that may increase their business visibility, strategies

(Alzahrani, 2018), competitive advantages and directly increase their business performance (Syamsuriana et al., 2020).

In Malaysia context, there are many e-commerce platforms that have been recognized such as *Lazada, Mudah, PrestoMall, 11 Street, Shopee, Lelong, Zalora, Carousell*, etc. These platforms could be the best platform for small businesses selling their products or services. But, unfortunately, the awareness of e-commerce usage in small businesses especially in Malaysia is still debating and under research. In fact, there are about 83 percent (26.69 million) of internet users in Malaysia as of January 2020. More interesting, as recorded 82 percent of internet users in Malaysia use e-commerce for buying purposes (Global Digital Reports, 2020). Unfortunately, prior statistics reported by the World Bank Group (2018) depicted only 62 percent of businesses in Malaysia using the internet. Additionally, Malaysia is ranked 33 out of 143 countries according to the Network Readiness Index (NRI) system and scored 5.7 out of 7 in the availability of the new technologies for business use in the World Economic Journal. Even though Malaysia's technology readiness score is higher than Philippines and Indonesia and the availability of general technology has passed the median score, some business sectors still lack accessibility and adoption to technology, especially small businesses (Schwab, 2017). This figure raised the question that emerging digital businesses have been embraced less readily by businesses in Malaysia compared to the government incentives and number of total populations.

Judging these facts, a study needs to be conducted in order to answer this question. Among these, the most influential and widely employed theory for explaining the acceptance of information systems is Technology Acceptance Model (TAM) as developed by Davis (1989). In a number of ways, this paradigm has been extended over time, instead of the simple adoption of workplace computers. Beyond that, TAM also is becoming a model that explains acceptance of technology at individual level since many years ago (e.g., Agarwal and Prasad 1997; Chen et al. 2009; Lee et al. 2011; Park and Chen 2007). Since then, TAM theory is considered a reliable, efficient and parsimonious model for forecasting user acceptance studies. Thus, this research aims to determine the proclivity factors on e-commerce awareness among small businesses by adapting TAM.

2. Literature Review

Technology Acceptance Model (TAM)

Initially, Technology Acceptance Model (TAM) was firstly mentioned by Davis (1989). At that moment, the model was used to indicate the level of user adoption behaviours toward information systems in the workplace (see also Agarwal and Prasad 1997). Since then, several further studies extended and consolidated this model in research on innovation (Chen et al. 2009; Park and Chen 2007), technology (Lee, Hsieh, and Hsu 2011), online marketing (see Gefen, Arahanna and Straub 2003; Hong and Tam 2006; Kim, Lee and Law, 2008; Zhang and Mao 2008) and many more.

In depth, TAM by Davis (1989) described two main factors that determine the adoption of information technology which are perceived ease of use (PEOU) and perceived

usefulness (PU). TAM explained that both these factors would determine the acceptance level of the technology usage. In other words, the users will accept that particular technology due to their ease and usefulness. Moreover, users would develop a positive attitude based on PU and PEOU.

Awareness of e-Commerce

The concept of awareness can be translated as user knowledge about the provided product or service by the businesses Aminuddin (1999). Similar to Kotler et al. (2004), the concept of awareness can be defined as the customer knowledge about the product or service offered as well as the level of information available for them. Prior to that, awareness was related with the user degree of association on a particular product/service or brand by satisfying their problem (Walter, 1998). In depth, Shimp (1997) described awareness not only involving the process of product and services branding, but also including business branding in order to get customers attention via promotion, advertising, with additional marketing tools and the process of highlighting the unique selling proposition of the products or services.

Meanwhile, many definitions have been used over the past decade to define the form of business that is transacted by electronic or digital means (Wall, Jagdev, and Browne 2007). Commonly, e-commerce is basically related to conducting business online (Ofori et al. 2002). To Aminudin (1999), e-commerce is related to the knowledge about the offered product or service, including the interaction of communication systems, data management systems and security (Nanehkaran, 2013). In simple words, Oudan (2010) concluded that e-commerce is a process of selling and buying of product or service by using internet accessibility and computer systems to improve overall business efficiency.

Conceptual and Hypotheses Development

2.3.5 Perceived ease of use (PEOU) and Awareness of e-Commerce

The perceived barrier can be conceptualized as adverse action towards adoption of innovation. To Kshetri (2007), the perspectives of barriers can be three: socio-politics, economics and cognitive. Positive economic feedback from economic barriers arises in the presence of rising returns to scale. Meanwhile, in terms of the country's formal and informal structures, there are socio-political barriers. In addition, they are also more challenging and time-consuming to overcome than obstacles to technology. Besides that, the cognitive barriers that are connected to human (individual) and organisational decision-making. Some researchers claimed that in developed nations, cognitive challenges are more severe than other types of difficulties (UNCTAD, 2000).

Besides, Shouk and Eraqi (2015) divided barriers into two main categories either internal or external. Internal barriers involve the knowledge, existing resources, technology acceptance awareness, change confrontation, time required to make changes, business characteristics, risk-taking disinclination, business planning, business strategy, technological readiness and skilled employees. Meanwhile, the external barriers include the infrastructure availability, technology attributes, security issues, legal concerns, business environment, customer issues, lack of external support and role models (Alrousan, 2015; Salah, 2013; Zaid, 2012). Judging these factors, this study believed the perceived barriers are inversely related to e-commerce awareness in terms of e-commerce

sales, e-commerce benefits, appropriate legal and regulation to apply e-commerce in the business. So, the first hypothesis statements for this study can be as follows:

H1: There is a significant and negative relationship between perceived barriers and e-commerce awareness among small businesses.

The competitor pressure refers to the extent of pressure from competitors within the industry as felt by the firm. Competitor pressure relates to the level of firm pressure inside the market from rivals. Companies will be forced to embrace e-commerce technology more broadly to achieve competitive advantages as their rivals start using e-commerce. As part of digitalization, e-commerce usage is a strategic plan to succeed in the industry (Zhu and Kraemer, 2005).

Previous research by Chang (2006) indicated that Taiwanese CEOs projected that their organisation was in a sector of high dispute force, suggesting that the business had an unexpected challenge from the investigation of recurrence circulation in a similar area. In addition, this study found that aggressiveness had negative linked with the selection of business online. On the other hand, (Lertwongsatien and Wongpinunwatana 2003) examined that SMEs in Thailand are bound to embrace development frameworks under extreme aggressive conditions and this turned out with a positive relationship between focused and selection of web-based business. Accordingly, the second hypothesis formulated for this examination as pursue:

H2: There is a significant and positive relationship between competitive pressure and e-commerce awareness among small businesses.

2.3.6 *Perceived Usefulness (PU) and Awareness of e-Commerce*

The organizational readiness is reflected to the assessment of the key organizational components (Molla and Licker 2005). When management support is available, there is a tendency for e-commerce to succeed because management not only provide the financial resources necessary for e-commerce and for cultivating an organizational climate conducive to its adoption (Teo et al. 2009); but are also responsible for ensuring that all IT infrastructure and resources are properly managed and governed (Othman et al. 2011). For example, a study by Teo and Ranganathan (2004) on Singapore businesses finds that 54.4% of e-commerce adopters have a formal plan and a task force dedicated to deploying e-commerce.

Organizational readiness helps the business to recognize the business determination to achieve the corporate goal of SMEs. In order to achieve their business goal, it is important for every business to make a good commitment. This will lead to better performance in the business with a good commitment. The better the awareness of e-commerce, the greater the advantages it will offer. Thus, the third hypothesis statement for this study as follow:

H3: There is a significant and positive relationship between organization readiness and e-commerce awareness among small business.

Relative advantage is defined as how much the innovation had been done from the original ideas, this had been defined according to Rogers (1995). Based on Rogers'

Diffusion of Innovation, the relative advantage is the factor that influences the adoption. The term of relative advantage also defined as the innovation has been said to be better than the idea that replaced it which had defined it according to Tan and Eze (2008). According to the Grandon and Pearson (2004) defined relative advantage had a positive relationship with e-commerce and in implementing the innovation, relative advantage is the most important item.

The further research by Azam and Quaddus (2009) from Bangladesh defined relative advantage is considered best for innovation and it also an important factor influencing e-commerce acceptance among SMEs in Bangladesh. Lertwongsatien and Wongpinunwatana (2003), defined the higher opportunities may be adopted by firms against e-commerce due to their high-level understanding of e-commerce. So, the fourth hypothesis statement for this study as follows:

H4: There is a significant and positive relationship between relative advantages and e-commerce awareness among small businesses.

3. Methodology

This study employed a quantitative method via analysing the primary data by using a questionnaire as a research instrument. This questionnaire was developed satisfied to the main objective of this study which is to determine the proclivity factors on e-commerce awareness among small businesses by adapting TAM. The questionnaire was divided into three main parts which are 1) Part A is demographic profile; 2) Part B is e-commerce awareness; and 3) Part C is PEOU and PU.

Dependent variable for this study is awareness of e-commerce subjectively anchored to five Likert scales starting 1 (strongly disagree) to 5 (strongly agree). All five items were adapted from several prior studies such as Kasraian (2008). Kotler et al. (2004) and Nanekaran (2013). Meanwhile, the dependent variables are PEOU and PU. To consolidate the existing variables in TAM, PEOU is represented by perceived barriers and competitor pressure. Meanwhile, PU is represented by organizational readiness and relative advantage. Similarly, all variables are measured by using a five-point Likert scale (1 =strongly disagree to 5=strongly agree) with five items in each variable. All items are modified from prior studies such as Alrousan et al. (2020), Salah and Brown (2017) and Zaied (2012). Shouk and Eraqi (2015)

The scope of the study is small businesses located in Kelantan, a state in Peninsular of Malaysia since it is impossible for the study to cover all states in Malaysia due to several research limitations such as cost effectiveness, time consuming and sample generalization. This study used purposive sampling techniques means the sample confined to specific types of people who can provide the seized information, even though they are the only want to have it or some criteria that had been set by the researchers (Sekaran & Bougie, 2016). Consequently, certain criteria were setting up before conducting survey such as: 1) the respondent must be owner, manager or owner-manager; 2) the business location in Kelantan, Malaysia; 3) the business is categorized as small business (employed less than 75 employees); and 4) business has been operating above 3 years.

Initially, about 350 copies of questionnaires were prepared by the researchers. However, after some period, 250 questionnaires are returned for screening procedures. Finally, only 203 samples are deemed valid and useable for this study. Even so, this sample size is considered sufficient enough as Hair et al. (2014) proposed the sample size should be in the range of 150 to 400 to ensure stable maximum likelihood estimation (MLE). Thus, 203 samples were used for further analysis. The results and discussion of the study are discussed in the next following sections.

4. Results and Discussion

In analysing the result for all the data collected, the researchers used the IBM SPSS Statistic software to run the demographic profile of respondents. Similarly, the hypotheses were tested via the analysis of Pearson correlation coefficient results.

Sample Composition

The demographic profile of respondents involved in this study depicted the result of 203 small businesses (including micro businesses) that participated in a survey about the proclivity factors of e-commerce awareness of small business in Kelantan. The summary of results can be referred to Table 1.

Table 1: Profile of respondent

Variable	Item	Frequency (N= 203)	Percentage (100.0%)
<i>Gender</i>	Male	89	43.8
	Female	114	56.2
<i>Age</i>	Below 20	8	3.9
	21 – 30	111	54.7
	31 – 40	50	24.6
	41 – 50	23	11.3
	Above 51	11	5.4
<i>Marital status</i>	Single	114	56.2
	Married	84	41.4
	Divorced	5	2.5
<i>Educational Level</i>	Primary	None	0.0
	Secondary	39	19.2
	Post-secondary	69	34.0
	Tertiary	87	42.9
	Postgraduate	8	3.9

Source: IBM SPSS Statistical output for this study.

As depicted in Table 1, it can be concluded that the over half of the respondents involved in this research is female (56.2%) compared to male (43.8%). Moreover, the majority of them are aged between 21 to 40 years old. Next, in the marital status, most of the sample is bachelor. In details, out of 203 respondents, 56.2 percent of them are still single, while

the remaining 43.9 percent are married and divorced (including single mother/father). Meanwhile, the educational background is from a degree holder. Surprisingly, the majority of them at least had attended secondary education, while 42.9 percent had completed tertiary education.

Hypotheses Testing

The main objective in this research is to determine the proclivity factors of small business awareness in Kelantan about e-commerce. The research also aims to identify the relationship between four independent variables which are perceived barriers, competitor pressure, organizational readiness and relative advantage with dependent variables which is awareness of e-commerce. Hypothesis testing described the summary result of Pearson correlation coefficient between the research objectives. The results of hypotheses testing are shown in Table 2.

Table 2: Result of hypotheses testing

Hypothesis	Result	Interpretation	Conclusion
H1: There is a significant and negative relationship between perceived barriers and e-commerce awareness among small business.	$r = 0.272^{***}$	Weak positive correlation	Supported
H2: There is a significant and positive relationship between competitive pressure and e-commerce awareness among small business.	$r = 0.345^{***}$	Weak positive correlation	Supported
H3: There is a significant and positive relationship between organization readiness and E-commerce awareness among small business.	$r = 0.617^{***}$	Moderate positive correlation	Supported
H4: There is a significant and positive relationship between relative advantages and e-commerce awareness among small business.	$r = 0.765^{***}$	High positive correlation	Supported

Notes: 1) This study used Pearson Correlation Coefficient. 2) *******Significant level at 0.0001. Source: Developed by researchers for this research.

According to table 2, it can be seen that all four independent variables namely perceived barriers, competitor pressure, organizational readiness and relative advantage are correlated significantly with the dependent variable which is awareness of e-commerce. Overall, all the formulated hypotheses are supported since the p-value for the entire objectives are significant at 0.0001 level. In detail, in H1 the correlation coefficient between perceived barriers and awareness of e-commerce is 0.272 which displays the

weak of correlation between them. But, the relationship between these two variables is negatively significant. Similarly, for H2, the result indicates the positive value of correlation coefficient 0.345 indicated that their relationship is weak, however, significantly positively related to each other. It shows that competitive pressure is less affected by respondents' awareness of e-commerce. Moreover, H3 shows the correlation coefficient for organizational readiness and awareness of e-commerce is 0.617 brings the mean of moderate correlation between organizational readiness and awareness of e-commerce. Meanwhile, H4, the correlation coefficient for relative advantage and awareness of e-commerce is 0.765 which depicts the high strength of correlation between relative advantage and awareness of e-commerce.

According to Table 2, it can be seen that all four factors of perceived barriers, competitor pressure, organizational readiness and relative advantage are correlated significantly with the awareness of e-commerce among small businesses in Kelantan, Malaysia. Consequently, these findings were consolidating the Davis's (1986) work on Technology Acceptance Model (TAM) studies. Consistently with TAM, this study proposes that the acceptability of an information system is determined by two main factors which are perceived usefulness (PU) including organization readiness and relative advantage, and another factor is perceived ease of use (PEOU) involving the perceived barriers and competitor pressure. This study also aligned with many previous studies. For instance, Kshetri (2007) mentioned that economic and socio-political factors tend to focus on the dynamics of the community, while, the cognitive dimension reveals organizational and individual behaviours. The results also supported by the previous study by Zhu and Kraemer (2005), highlighted that the competitor pressure indicates the degree of weight from competitors inside the business. Moreover, Kuan and Chau (2001), and Premkumar and Roberts (1999) also verified that the selection of new innovations will turn into a key need to contend in the commercial center. Meanwhile, the organizational readiness is the assessment of the key organizational components (Molla & Licker, 2005). Therefore, an organization with the necessary ICT expertise and an affordable IT infrastructure that is accessible, high-speed, reliable, and has a better tendency to implement e-commerce compared to those without (Lin et al., 2010; Kimaro, 2006). Likewise, ICT is one of the vital tools in implementing e-commerce in their business. Furthermore, supported this study, the research conducted by Chong and Pervan (2007) enlighten that e-commerce and the competitive advantage used by small and medium-sized companies had a strong relationship with the adoption of e-commerce by SMEs. To Jon et al. (2001) the relative profit is the only element that greatly affects e-commerce adoption. Research has shown that this study's hypothesis is comparable to the previous study on relative advantage and e-commerce.

5. Conclusion

This research is about the inclination factors of e-commerce awareness among small businesses in Kelantan. This research has been conducted to determine the relationship of the e-commerce awareness and factors of PEOU and PU which perceive barriers, organization readiness, competitive pressure and relative advantage. The data of 203 businesses had been collected via questionnaire as the research instrument. The sampling techniques that have been chosen is the purposive sampling due to appropriateness with the study criteria. Finally, 203 small businesses in Kelantan is considered as usable

primary data for further analysis. The findings indicated that the organizational readiness, competitor pressure and relative advantage had a significant and positive relationship to e-commerce awareness, while perceived barriers were found to have a significant and negative relationship to awareness of e-commerce. Besides consolidating existing Technology Acceptance Model (TAM), this study also highlighted several significant not only to the small business but also to the policy makers, government agencies as well as non-government agencies to understand the importance of e-commerce awareness especially toward small business development in Malaysia.

This study suggested several recommendations for forthcoming researchers. First, this study recommends adding more factors either internal or external that may influence e-commerce awareness instead of only focusing on perceived barriers, organization readiness, competitive pressure and relative advantage. Second, the sample size of this research is only 203 respondents which could not generalise all the total small businesses in Malaysia. Thus, the future study can collect more samples of the study to be used in the entire Malaysia. Last but not least, this study is also limited to small businesses in Kelantan meanwhile for better future study, they can expand the scope based on regions in Malaysia such as the northern region, the central region, the southern region and east coast.

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SUB-SESSION 10

**ISLAMIC BANKING AND
FINANCE**

ISLAMIC FINANCIAL PLANNING: ASSESSING THE ISLAMIC CREDIT CARD USERS' COMPLIANCE ON PAYING ZAKAT

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Abstract: Islamic financial planning is becoming progressively important in a world where generally income levels are rising, longevity of people is rising and the financial sector is becoming more complex. At the same time, Zakat's payment is compulsory for all Muslims. The eligible payers are required to commit for a fixed portion of one's wealth for distributing to the eight asnaf of Zakat. Even the collection of Zakat are increased annually, but the payers of Zakat that eligible to pay are still low. Hence, credit cards can be considered as an alternative for the users for the Zakat's payment. Actually, there are numerous study have been done on customer preferences of Islamic banking in credit card, but there are less study have been conducted on payment of Zakat via credit cards. Therefore, this study aims to examine the factors such service quality, customer knowledge, Shari'ah compliance that can influence the customer compliance of credit cards on paying Zakat. The questionnaires were distributed by employing the convenient sampling technique and Statistical Package for Social Scientist (SPSS) is used to analysis the data that will be gathered. The results of all the hypotheses have significant relationship on customer compliance in paying Zakat by using Islamic credit card.

Key words: Islamic bank, Influence, Credit cards, Zakat

Introduction

Islamic financial planning is one of the important parts of Islamic finance because it plays a big role in providing Shari'ah-compliant in all activities such as creating, increasing, purifying, and protecting wealth from the Islamic perspective (Nur, 2017). The expansion in technological growths in information technology has contributed to the progression of payment transaction. The evolution of payment transaction transformed the way traditionally when, customers can conduct their activities manually. Electronic payment has become growth for organization to deliver their products and services. At the same time, the customers' compliance has been a popular topic in various fields and disciplines (Jahanshahi et al., 2011).

It is unquestionable that customers' compliance is essential in all styles of businesses as the most effective approach to improve and maintain customer base via attaining high customer compliance (Chee, 2014). Chee (2014) also mentioned the effective way of customer compliance in his study where by achieving the customer compliance, the users of credit cards can increase the performance and retain the customers on paying *Zakat* via

credit cards. According to Ismail et al. (2013) and Hussin, Kassim, & Jamal (2013), they stated that, the ownership of Islamic credit cards was still very low compared to the conventional credit cards despite its offering special features to customers. Thus, it is very crucial to analyse the customers' compliance on credit cards in order to enhance the paying of *Zakat* in Malaysia.

Problem Statement

Zakat institutions are primarily non-profit organizations set up to manage the *Zakat* system, especially in terms of collection and distribution (Lateff et al., 2014). Apparently, the number of *Zakat* collections made by each state rises by each year (Lateff et al., 2014). For example, in 2013, Pusat *Zakat* Negeri Sembilan (PZNS) raised RM13.3 million, an increase of 21.8 per cent compared to the *Zakat* collection in 2012. This is parallel with the increasing in the number of *Zakat* payers by every year (PZNS, 2014).

Based on Bakar & Rashid (2010), even the amount of *Zakat* collections are increased annually, but the number of *Zakat* payers that eligible to pay *Zakat* are still low. Besides that, according to the statistic report, there are 19,237,161 Muslims in Malaysia that represents 61.3 % of the total population (Statistic, 2018). It shows that, the amount of *Zakat* collection is not consistent with the number of Muslims in Malaysia as a majority even though there is an increment of collection. Nevertheless, Yaakub et al., (2017) also mentioned that the situation happened is still questionable.

The *Zakat* collection figures reported at 2014 had reached 2.46 billion compared to 2013, which is just RM2.24 billion. Such statistics indicate that the collection of *Zakat* has risen by more than RM2 million or 8.41 percent (PPZ, 2013). In comparison, in 2014 gross tax revenue was RM134 billion (Zainal et a., 2016). Nonetheless, they have a significant difference as compared to the tax collection and the *Zakat* collection. While these collections are different, the overall collection of taxes may be a benchmark for *Zakat* collection since the Muslim population is larger than other religion (Zainal et a., 2016). Hence, the government has executed various incentives to cope with this issue, such as offering various payment facilities like payment via credit card to ensure the eligible of *Zakat* payers are attract to pay *Zakat* (Saad, 2010). Hence, based on that ground, this study attempts to minimize the gap in the study of Islamic credit cards users' compliance on *Zakat* payment.

Research Objective

The objective of this study is to examine the relationship between the factors (service quality, customer knowledge, *Shari'ah* compliance) towards the customer compliance on paying among Islamic credit card users'.

Literature Review

The customer compliance is very important in contribute the success because the high compliance will indicate the high performance of the banks (Hamzah et al., 2015). On top of that, in order to preserve the efficiency of the *Zakat*, the compliance of the *Zakat* payment must be increased to enable the Muslim efficiently pay the *Zakat* (Lateff & Palil,

2011). According to Salleh et al., (2019) and Shariff (2012), providing the best quality services to the customers is the important thing for the business survival.

Prakash and Mohanty (2013) believed, the high level of customer compliance depend on the quality services that have been delivered and at the same time would contribute the higher performance of the organisations. Furthermore, the lack of information and knowledge about the credit card has a significant effect on the customers' interest to purchase the credit card because they have less information regarding of the services and products that lead them to feel unsatisfactory (Adrutdin, Ali, Jaafar, Hassan, & Rahim, 2016).

Thus, the credit card issuer should use the customer knowledge to understand the needs and behavior of their customers and develop and offer customer-centric products and services (Tseng & Wu, 2014). Based on Rahmawaty (2016), *Shari'ah* compliance also is proposed to enhance the understanding of customers' compliance. This proposition is also agreed by Muhammad et al., (2019), Dali (2014) and Dali and Yousafzai (2012), which mentioned that in the context of Islamic banking, religiosity plays a major role in affecting customers' choice of credit card for *Zakat* payment.

Therefore, understanding and meeting customer requirements have now become the basis of need activities (Ahmed et al., 2017). So that, Khattak & Rahman (2010) and Nurdin (2010) said, when the customer satisfied, the tendency to attract and retains the users to use credit cards in paying *Zakat* are very big.

Hyphothesis

The hypotheses are as follows:

H1 : There is a significant effect of service quality on customer compliance.

H2 : There is a significant effect of customer knowledge on customer compliance.

H3 : There is a significant effect of Shari'ah compliance on customer compliance.

Methodology

This study primarily focused on the *Zakat* institutions in Malaysia. This study will be conducted by quantitative method. The target population focused on the customers that paying *Zakat* credit cards in Malaysia. Respondents were selected by convenience sample due to the restriction of Malaysian banking law and legislation (IFSA, 2013) where the customers list of banks are very private and confidential and cannot be exposed to the public.

According to Krejcie & Morgan (1970), the size population that unknown or cannot be defined should be 384. So, the sampling size for this study is 384 respondents. Statistical Package for Social Science (SPSS) Version 22.0 is used to analyse the data that gathered.

Data Collection Method

For the primary data, this study used a survey approach and distribute the questionnaires to the respondents by employing the convenient sampling technique. The respondents

were asked to answer the questionnaires based on a Likert-type scale, that ranged from 1= 'strongly disagree', 2= 'disagree', 3= 'neutral', 4= 'agree', and 5= 'strongly agree'(Adis & Jublee, 2010).

FINDINGS

Reliability Analysis

Cronbach's Alpha statistic is used to analyse the reliability of the data. The value can be measured between 0 and 1 by using Cronbach's Alpha. The value that closer to 1 indicate the value become more reliable. According to Ulfat (2013), the value that showed between 0.738 and 0.813 can be considered good while the value below 0.60 cut off point, has no reliability in the coefficients. In this research, all the dimensions will be tested for the reliability. The overall reliability (α) of the scale was 0.787 and reliability of each dimensions were greater than 0.7, which showed that the questionnaire was fit for analysis. Reliability of each dimensions are presented in the Table 1.

Table 1

Dimension	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items	Analysis
Service Quality	0.872	0.882	5	Reliable
Customer Knowledge	0.811	0.813	5	Reliable
<i>Shari'ah</i> Compliance	0.832	0.832	5	Reliable
Customer Compliance	0.822	0.888	5	Reliable
Overall	0.721	0.781	20	Reliable

Hypothesis Testing

The column "Sig." holds the [significance levels](#) for the variables. As a rule of thumb, the coefficient is statistically significant if its p-value is *smaller than 0.05*. So that, as mentioned in Table 2, all the p-value of variables show below than 0.05. Hence, there are significance correlation between service quality, customer knowledge and *Shari'ah* compliance on customer compliance.

Table 2
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.163	.262		.622	.554
	serv_quality	.446	.097	.529	4.611	.002
	cust_know	.257	.114	.278	2.262	.040
	sha_compl	.400	.081	.453	4.957	.002

a. Dependent Variable: cust_compl

Conclusion and Recommendations

The results showed there are significance correlation between service quality, customer knowledge and *Shari'ah* compliance on customer compliance. The growth of technology make the credit card is one of the method to help the *Zakat* payers to solve the problems that they faced like distance, time constraint and parking issue. Although the amount of *Zakat* collection and the number of payers are low compared to the offline system, but there has been a consistent improvement of *Zakat* payers by each year. Hence, credit card can be considered as the best alternative that will help to enhance the collection of *Zakat* in Malaysia since the information technology provides many advantages to the users.

Besides that, this study will contribute the benefit to the banks in order to improve the service quality, customer knowledge and the *Shari'ah* compliance of credit card thus improve the customer compliance on the credit cards and attract the people especially for the Muslims to use credit cards for paying *Zakat*. Therefore, the bank manager should know the needs and wants that demands by the customers.

Finally, since there are lack of researches in this field, this paper is hoped to contribute to the body of knowledge particularly in terms of *Zakat* and credit cards. Hopefully, this paper also will provides input for any organizations especially banks in implementing the maximum usage of credit cards to make ease the *Zakat* payers and at the same time increase the collection of *Zakat* amount.

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Credit Card Debt Management – A Review in Credit Card Practice

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Abstract - This systematic literature review highlights debt management among credit card users. The existence of extensive financial facilities serving consumer's shortage and needs. However, the impact of indebtedness has caused problems in managing it. Therefore, the author reviews previous studies that focus on debt management among credit card users. Meanwhile, the study implemented the methods of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) by using two significant databases, Scopus and Web of Science. As a result, the authors systematically analysed 16 articles. After going through the theme analysis process, the authors identified two main research themes, namely debt behaviour and credit card management. In total, under these key themes, the study was able to publish ten sub-themes and some new suggestions and directions to future researchers.

Keywords: Credit cards; debt management; debt behaviour; credit card management

1. Introduction

The usage of credit cards becoming an essential medium of payment and credit facility among today's consumers. Malaysia, for example, has an average of 446 million transactions as of December 2018 (Bank Negara Malaysia, 2019). The increasing of usage portrayed through statistics from Bank Negara Malaysia, displaying the total credit card usage worth of RM149.9 billion in October 2018 from RM 143 billion in November 2017 (CEIC, 2019). Thus it increases the problems particularly in debt management because statistics show that the current increase in household debt of Malaysians has reached 82.2 per cent of Gross Domestic Product (GDP) (Bank Negara Malaysia, 2019). In general, the discussion of debt management mostly focused on the financial literacy factors owned by consumers. Among the statistics from the Credit Counselling and Management Agency (AKPK) shows that 43% of AKPK clients lack knowledge about personal financial management (Bank Negara Malaysia, 2018). New studies also support it, based on a survey, the tendency to spend among Malaysian society is increasingly irrational due to the same argument (Azma et al., 2019). Besides, the lack of exposure to financial knowledge also has a significant impact on personal management among generation Y (Ansar et al., 2019).

On the other hand, other studies discuss the impact of debt on consumers in terms of health (Clayton et al., 2015), mental (Dackehag et al., 2019) and personal financial survival (Daud et al., 2019). Correspondently some studies focus on factors in debt management (Rahman et al., 2020; Azma et al., 2019; Agarwal et al., 2020). However, there is still a lack of study of debt management practices among credit card users. Thus,

conducting a systematic review of past studies is essential, and according to Robinson & Lowe (2015), the traditional reviews are usually not comprehensive, biased and rarely take into account differences and quality of studies. The systematic literature review is one way to study existing literature more systematically by providing numerous advantages than the conventional style literature review. This process enhances a clear article retrieving process, a more prominent area of research and non-bias objectives (Mohamed Shaffril et al., 2019). This study attempts to contribute to existing knowledge by expanding through a systematic literature review on debt management practices among credit card users.

2. Methodology

This section discusses the methods used to obtain articles related to debt management among credit card users. For this purpose, the technique known as PRISMA through resources (Scopus and Web of Science) is used to conduct systematic surveys, eligibility criteria and exclusions, survey measures (identification, screening, eligibility) as well as data retrieval and analysis.

Formulation of the research question

The construction of research questions for this study is based on PICO. PICO is a technique that can help authors to construct appropriate research questions. PICO is based on three main concepts, namely population or problems, interest and context. Based on this concept, the author can formulate three main aspects of this study, namely, credit card users (Population), practices or technique (Interest) and debt management (Context). As a result of this concept, research questions are built – What is the credit card user's practice in the personal debt management?

Design

A systematic review was design based on relevant criteria from PRISMA (Preferred Reporting Items for Systematic reviews and Meta-Analyses). PRISMA is commonly used in management-related research fields (Shaffril et al., 2018). PRISMA statement provides three advantages namely: 1) can clearly define research questions so that a systematic review can be conducted, 2) it can identify the criteria of inclusion and exclusion and, 3) it examines the scientific literature database within a specified time (Sierra-Correa & Cantera Kintz, 2015; Wu et al. 2018). These frameworks guide the review to arrange all evidence that suitable as per eligibility criteria to address specific research questions to minimise bias.

3. Systematic Searching Strategies

3.1 Identification

The identification is the process to discover the keywords to be used in the search process. The search for articles related to debt management among credit card users has been conducted based on previous studies, thesaurus and keyword equations. It aims to increase the number of options on the database for searching relevant articles. The

identification process depends on the online thesaurus and the keywords used by previous studies. Existing keyword enrichment was successfully done by searching the word strings based on Boolean operator, phrase searching, and truncation on the Scopus and Web of Science database (Table 1). Because, both are capable of being a leading database for systematic literature review due to several advantages such as advanced, comprehensive search function (index of over 5000 publishers), control over article quality and multidisciplinary, including financial management and related studies (Gusenbauer & Haddaway, 2019).

Table 1. The Search String.

Database	Search String
Scopus	TITLE-ABS-KEY (("debt* manage*" OR "indebt*" OR "loan manag*" OR "pengurusan kredit*" OR "pengurusan hutang" OR "debt control*" OR "debt regulate*") AND ("method*" OR "practice*" OR "starteg*" OR "plan*" OR "technique*" OR "routine*" OR "arrange*") AND ("credit* card*" OR "unsecure* financ*" OR "credit* card* user*" OR "Islam* credit* card*" OR "kad kredit" OR "kad kredit syariah" OR "shariah complian* credit card*"))
Web of Science	TS= (("debt* manage*" OR "indebt*" OR "loan manag*" OR "pengurusan kredit*" OR "pengurusan hutang" OR "debt control*" OR "debt regulate*") AND ("method*" OR "practice*" OR "starteg*" OR "plan*" OR "technique*" OR "routine*" OR "arrange*") AND ("credit* card*" OR "unsecure* financ*" OR "credit* card* user*" OR "Islam* credit* card*" OR "kad kredit" OR "kad kredit syariah" OR "shariah complian* credit card*"))

3.2 Inclusion and Exclusion Criteria

The process of screening implemented by the author (refer table 2) through performing inclusion the specific criteria which are (1) articles published from 2009 to September 2020, (2) peer-reviewed research, (3) experimental studies, (4) English language and Malay publications, and (5) the main research focus was debt management practices among credit cards users. Whereby the exclusion criteria were (1) editorials, opinions pieces, non-research papers, conference abstract, chapter in books, books, (2) review papers, (3) non-English/Malay papers, and (4) research were focusing on government/organisation debt management.

Table 2. The inclusion and exclusion criteria.

Criterion	Inclusion	Exclusion
Timeline	Between 2009 and Sept 2020	< 2009
Document type	Journal (research articles/proceeding)	Books & Journal (review articles)
Language	English & <i>Bahasa Malaysia</i>	Non-English

3.3 Eligibility

The process of evaluating the eligibility of an article is through manually entering and removing articles that are appropriate to the purpose of the study. The articles obtained are thoroughly researched and set aside articles that do not meet the required criteria. A

total of ten duplicate articles were excluded from the Scopus database and the Web of Science

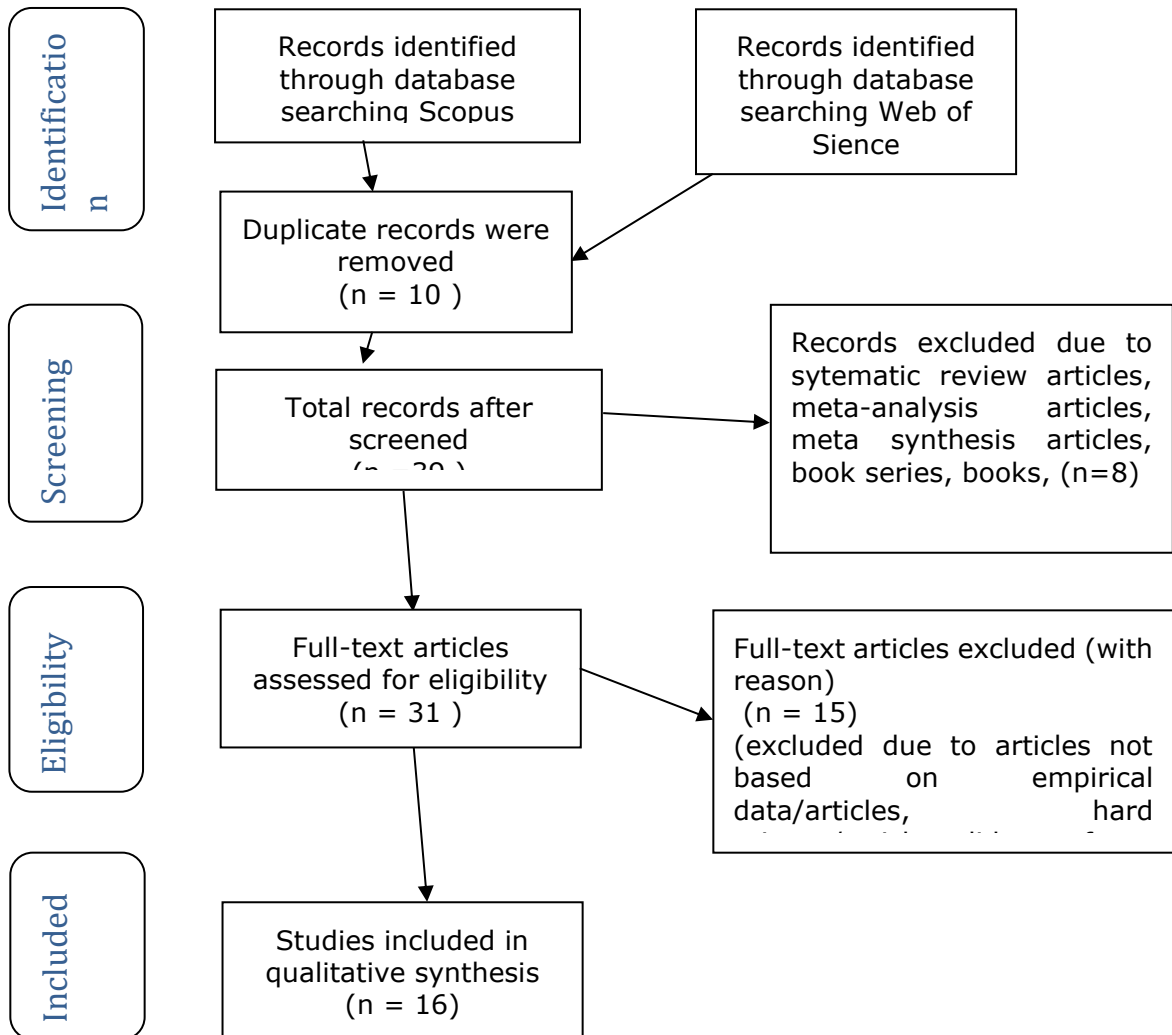


Table 3: The main themes and the sub-themes.

Authors	Country	Study Design	Debt Behaviour							CC Debt Management		
			CF	IV	CV	MT	EM	FK	CA	RP	PF	NP
Cloutier & Roy, (2020)	Canada	Quanti	/					/		/		
Abrantes-Braga et al. (2020)	Brazil	Quanti		/						/		
Rahman et al., (2020)	Malaysia	Quanti				/	/	/		/		
Xavier et al., (2020)	Brazil	Quanti				/		/	/			
Zainudin et al., (2019)	Malaysia	Quanti	/			/		/	/		/	/
Jennings, Quinn et al. (2019)	USA	Quanti						/				
Matos et al. (2019)	Brazil	Quanti	/			/		/	/			
Adzis et al. (2017)	Malaysia	Quanti						/				
Celsi et al. (2017)	USA	Quali	/					/				
Ahmad et al. (2017)	USA	Quanti						/				
Kettle et al. (2016)	USA	Quanti										/
French & McKillop (2016)	UK	Quanti						/				
Harrison et al. (2015)	UK,US& NW	Quanti						/				
Maswati et al. (2015)	Malaysia	Quanti						/	/		/	/
Awanis & Chi Cui, (2014)	Malaysia, Singapore & UK	Quali					/	/			/	/
Wang & Xiao, (2009)	Hong Kong	Mixed		/	/			/				
			4	2	1	4	2	14	4	3	3	4
			Debt Behaviour					CC Debt Management				
FK = Financial Knowledge			CF = Confidence					PF = Paid in Full (convenience)				
MT = Materialistic			CA = Credit/Financial Attitude					NP = Not Pay in Full (revolver)				
RP = Risk Perception			IV = Impulsive									
EM = Emotion.			CV = Compulsive									

4. Findings

In this section, the discussion circles around two major themes which are debt behaviour and money management along with emerging 12 sub-themes, including 13 quantitative studies, two qualitative studies and one mixed-method study (refer Table 3). The paper was written in an international context are from Canada, USA, UK, Brazil, New Zealand, Singapore and Malaysia. The country of origin of each paper is relevant, and the expert opinion of the articles are depicted in empirical data. These two themes emerged despite the wide range of countries represented in the review.

1.10 Debt Behavior

Debt behaviour is pivotal debt management practices among credit card users (French et al. 2020). In particular, the behaviour discusses ten sub-themes. In this case, a total of 15 previous studies were found emphasised on debt behaviour. Expressly, it should be noted that personal financial knowledge was the standard value credit card users have, which is comprised of 14 studies under this theme, followed by confidence (4 studies), materialistic (4 studies), and credit or financial attitude (4 studies). Next is risk perception (3 studies), impulsive (2 studies), emotion (2 studies), and compulsive (1 study).

Financial literacy is the most crucial determinant in improving a person capacity to understand ones financial problems (Rahman et al., 2020). As if that the lack of knowledge in credit cards has an impact in misuse and abusing credit card (Wang & Xiao, 2009; Awanis & Chi Cui, 2014; Zainudin et al., 2019) and one's financial health (Ahmad et al., 2017). Furthermore, the person that do not possess skills in managing money tends to have higher indebtedness and difficult to value their money than those who are financially literate (Adzis et al., 2017; Xavier et al., 2020). Knowledge and financial education plays a vital role for an individual to make a wise decision in unique financial situation (Maswati et al. 2015; Jennings et al., 2019) and possessing real fact about debt or financial also will lower the levels of anxiety (Harrison et al., 2015). This reinforces the basic definition that financial literacy is the combination of awareness, knowledge, attitudes, and behaviours needed to make sound financial decisions to achieve financial well-being (OECD-INFE, 2011).

However, Cloutier & Roy (2020) in an opinion that subjective knowledge can be considered as an indicator of self-confidence and more effective than relying solely on cognitive factor. As Celsi et al., (2017) in a position that, although financial education and information improve financial literacy, additional cognitive and emotional skills such as self-efficacy are necessary to uphold financial management. Thus, this second sub-theme, confidence is part of a broader concept of financial literacy which includes the ability and self-confidence to control event exercise one's knowledge that affects his/her life (Zainudin et al., 2019; Matos et al., 2019). Furthermore, a study conducted by Zainudin et al., (2019) found that Gen Y in Malaysia who lack self-efficacy in practising and using credit card tend to misuse it. Thus the authors suggest that the authority to enforce tighter evaluation criteria in accessing credit card applicant and produce creative awareness associate with debt. In the end, knowledge can reflect the degree of control and internalising information about debt and which can promote a degree of confidence in managing debt (Harrison et al., 2015).

Materialism is the third sub-themes in behavioural that also has a significant relationship to the tendency towards indebtedness among individuals (Rahman et al. 2020). Materialism is always associated with someone who pretends to be able to have what they want without having the real financial ability. Zainudin et al., (2019) study on Generation Y in Malaysia strongly supports the previous literacy ideas related to materialism that Generation Y is very much tied to the "perfect" life that is the reference of this group on social media. The Y group is more materialistic than the other generation (Baby Boomer and Generation X) through its luxurious lifestyle and social norms. This study shows that all the luxuries gained are by borrowing using a credit card. Materialism related and indirect effect to economic, psychological and emotional factors on the level of indebtedness among individual whether those in low or high income (Matos et al., 2019). The former tend to spend more, and later have a high desire to spend as a manifestation of materialism (Xavier et al., 2020).

Ultimately, financial knowledge plays a very significant role in debt management, but it still not sufficient to ensure good debt management practice materialised because it must be together with belief and attitude. In the end, it becomes a better predictor of its repetition (Xavier et al., 2020). As a fourth theme, attitude is a learned propensity towards practising or judgment of an individual to engaging in debt and respond favourably to debt behaviour (Matos et al., 2019). A study conducted regarding the attitude of credit card usage and credit card management amongst college students shows that it is a vital role in influencing the credit card practices and financial decision (Maswati et al., 2015). Similarly study conducted by Zainudin et al., (2019) has shown that the credit attitude is the most critical factors that were influencing the credit card misuse amongst the Gen Y in Malaysia. Their study proposes that Gen Y are so vulnerable to misuse the credit card if awareness associated with credit cards have not been taken care of by the dedicated authority-especially Bank Negara Malaysia.

Another theme that is risk perception, which implies that how a person views risk during decision making and this act will overcome uncertainty (Rahman et al. 2020). The study conducted by Cloutier & Roy (2020) found that risky use of credit card may increase undergraduate students credit card debt; therefore, it will complicated payment management and exposed more risks of over-indebtedness. The consequence of highly risks indebtedness behaviour among the consumers are more likely not ready to receive financial shocks (Abrantes-Braga & Veludo-de-Oliveira, 2020).

The next sub-theme is impulsive buying. It happens when a consumer experiences a sudden urge, determined and robust desire to buy something immediately and according to Abrantes-Braga & Veludo-de-Oliveira, (2020), this will cause deteriorating of consumer perceive financial preparedness for emergencies. Such a buying pattern is a direct experience, simultaneously with a feeling of excitement and urgency (Wang & Xiao, 2009). Impulsive purchase is encouraged by the ease of access by consumers available in credit cards. This is showed by the study of Zainudin et al. (2019) as many as 55% of the 501 respondents from Generation Y in Malaysia have misused credit cards through impulsive purchases. While compulsive buying is a repetitive purchase because in the eyes of the consumer, it is essential, but often goes beyond personal financial ability (Wang & Xiao, 2009). Wang & Xiao (2009) concluded that in their study, compulsive buying might be associated with credit card indebtedness among college students. Hence compulsive buyers may realise their complicated in spending and displeasure having credit cards but cannot leave the credit card without using it and keep accruing debt. But even so, compulsive buying alone does not cause the Generation Y group to be overly indebted because Zainudin

et al., (2019) says this group will eventually evaluate their expenses which are repetitive and can manage their finances.

The emotional practice is related to the ability of the individual when expressing his emotions while making any decision related to personal finance (Rahman et al., 2020). In this regard, the study of 320 individuals in Kuala Lumpur found that the reasons tendency of these individuals involved in debt is related to the emotional factors. Similarly, a survey by Awanis & Chi Cui, (2014), on consumer vulnerability in Malaysia, Singapore and the United Kingdom on credit card abuse and debt. The findings found that there is an emotional sensitivity and consumer tolerance to temptations while using credit cards. Studies show some acute effects that consumers are not aware of the psychological impact on credit card spending, and consumers have also indirectly become accustomed to using credit cards. Thus, it is clear that emotional factors have a direct effect on personal debt management in the context of credit cards.

1.11 Credit Card Debt Management

The theme of credit card debt management focuses on how credit card users manage the usage and payment of credit card. From the review, there are two categories, paid in full (convenience users) and not paid in full (revolver). The convenience users are the pattern of repayment by the credit card users in full payment of all credit card expenses within the stipulated period and because of the ease of use and their safety features (Zainudin et al., 2019). According to Maswati et al. (2015), the study on the postgraduate group found that those who have a deep understanding of finances are included in the category of making full payment on credit card debt.

While the revolver category is the minimum payment pattern, it according to the amount set by the credit card issuer; hence they choose to purchase things even they are unable to settle the bill in full (Zainudin et al., 2019). While Awanis & Chi Cui, (2014) proposed that concept of susceptibility to the credit card misuse and indebtedness (SCCMI) among young credit card users by applies confirmatory factor analysis to assess validity and reliability. Their findings show that the concept of SCCMI scale is valid and reliable as well as the prediction power of SCCMI on consumer tendency to become revolving credit card debtor. On the other hand, a study shows that the category of revolver includes the low-income, young, low-educated and highly indebted play significant roles in determining credit card practices and financial decision (Maswati et al. 2015).

In general, consumers that experienced financial problems, they might not be able to pay credit card debt for each month in full. Nevertheless, Kettle et al., (2016) throughout study field on how the consumers' motivation to repay their debts, found that the partial payment or revolving repayment in credit card debts is correspondingly motivating, and it is not necessary to settle up in full payment to achieve the motivational benefits.

5. Discussion

This systematic review aimed to know what is credit card users practices in managing credit card debt. According to Maswati et al., (2015), credit card spending and borrowing among

users are susceptible to misuse due to the nature of the credit card. This situation happens when using credit cards, and users tend to borrow such an amount to multiple accounts; moreover, credit cards are known as complicated to use and understand (Majamaa et al., 2019). While credit cards facilitate credit to users with numerous benefit and convenience, but they may have adverse effects as well. The users are open to inability to manage to spend due to quickly and convenience of charging purchases, thus at the end of each month, resulting in high outstanding balances that can prolong the repayment period and increase the amount of interest (Zainudin et al., 2019).

Thus, as the above conditions of credit cards users encountered, the two themes that emerge from the review were appear to answer the objective for this review first, debt behaviour. The understanding behavioural factors may improve the hardness situation borne by credit card users thru identifying the ample reasons for the individual that involved in indebtedness, as a result, may assist to the development of activities to prevent indebtedness and help defaulters (Rahman et al., 2020).

Second, credit card debt management. There are two practices apply by credit card users which is they tend to settle all full expenditures at the end of the month; hence do not have any arrears. This convenience users use credit card purposely for the convenience of making payments. On the contrary, credit revolver does not reconcile credit card debt on due date but accrue outstanding debt balance monthly. Apart from making apparent differentiation between convenience and credit revolver, it can apply better risk management strategies upon credit card users more precisely (Loke et al., 2013).

The findings of themes and systematic review process of the current study allow the authors to derive several recommendations that perhaps will support for future studies. First, future scholars should focus on behavioural finance and personal financial management such as credit cards. Second, the finding could be a more useful source of information for the regulatory authority to empower people to enhance their financial planning through programs and mass media.

6. Conclusion

The recent literature on credit card debt management exposes a basic understanding of how credit card users practising debt management. Furthermore, two main themes that represent the credit card user's practice in personal debt management were identified based on the systematic review performed by current research. First, the debt behaviour which is considered as among the reason that causes indebtedness. While credit card debt management, it's referred to the functions as a transaction medium and a credit tool. It's crucial for card credit users to well organising between behaviour and the debt management strategies to ensure theirs in healthy financial management.

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Degree of Financial and Operating Leverages and Financial Performance of Listed Oil and Gas Companies in Nigeria

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Abstract - This study investigated the impact of the degree of financial and operating leverages on the financial performance, using panel data sourced from the annual reports and financial statements of six listed oil and gas companies in Nigeria from 2009 to 2018. Descriptive statistics such as mean, median, minimum value, maximum value, standard deviation, skewness and kurtosis are used in data presentation, while fixed effect model with robust heteroskedasticity and autocorrelation consistent standard errors, is applied in examining the impact of the independent variables as degree of financial leverage, degree of operating leverage and age on the dependent variable proxy by return on asset. Author found that degree of financial leverage is not significantly associated with return on asset, while degree of operating leverage is significantly positively associated with return on asset. Findings also reveal that the control variable represented by age which is measured as the number of years a company was incorporated has negative and significant impact on the financial performance. The author concludes that the combination of low level of financial leverage with high degree of operating leverage will impact greatly on earnings and consequently, improve financial performance. Author recommends that firms in the oil and gas sector should maintain low level of debt in their capital structure and take measures to increase their revenue base, as doing so will enhance earnings before interest and taxes and ultimately financial performance. In this regard, aggressive marketing such as advertisement and sales promotion can be utilised to improve revenue.

Keywords: degree of financial leverage, degree of operating leverage, fixed effect model, oil and gas companies, return on assets.

1. Introduction

The concept of leverage could be derived from the idea of lever in physics, which is associated with the achievement of a final outcome that is more than proportional to the force employed (Medeiros, Lustosa & Dantas, 2006). In the economic and financial environment of firms, two types of leverage stand out i.e. the operating (related to the assets' structure) and the financial (related to the capital structure) leverage (Medeiros et al. 2006). Operating leverage has a first-order effect for corporate policies and performance, and can be positively related to profitability (Chen, Harford & Kamara, 2018). When sales are growing, fixed and quasi-fixed costs do not grow at the same rate as sales, such that higher operating leverage leads to higher profitability. Of course, in a contraction, these fixed costs have the opposite effect. Hence, operating leverage is positively related to profitability when sales are growing (Chen et al., 2018).

Watson and Head (2010) assert that degree of operating leverage (DOL) provides a vivid explanation of the extent to which an organization relies on fixed costs in its quest for maximizing its operating profit. Watson and Head (2010) further noted that an increase in profits is as a result of controlling the fixed cost components of the firm such that the total revenue covers a higher margin than the fixed cost component. Hence, when DOL continuous to increase, there is the likelihood of a corresponding increase in the fixed

operating cost of the company which has the propensity of decreasing the margin of the operating profit of the organisation in the long run (Gatsi, Gadzo & Akoto, 2013). In effect if the variable cost component is predominant among the operating cost of the organisation then there is also the chance that the operating leverage of the company will decline and a comparable effect can be envisaged on the net profit for a company with a high degree of financial leverage (Gatsi et al., 2013).

Operating and financial leverages together cause wide fluctuations in earnings per share (EPS) for a given change in sales (Pandey, 2015). If a company employs a high level of operating and financial leverage, even a small change in the level of sales will have a dramatic effect on EPS. A company with cyclical sales will have a fluctuating EPS; but the swings in EPS will be more pronounced if the company also uses high amount of operating and financial leverage. The degrees of operating and financial leverages can be combined to see the effect of total leverage on EPS associated with a given change in sales (Pandey, 2015).

There are very few empirical studies globally and particularly in Nigeria explaining the association between the degree of financial and operating leverages and financial performance. We did not find any evidence in literature of empirical study in Nigeria linking the degree of financial and operating leverages to financial performance. This study intends to fill this gap by investigating the impact of the degree of financial and operating leverages on the financial performance of listed oil and gas companies in Nigeria during the period 2009- 2018. The choice of oil and gas sector was not only because of the limited number of empirical studies in the sector, but because of the significant role the sector played on the Nigerian economy. In this regard, Augustine, Wilson-Oshilim and Ifurueze (2020) observed that the oil and gas sector as the mainstay of Nigerian economy plays an important role in shaping the economic and political destiny of the country, and by the year 2000, the sector contributed about 83 per cent revenue to federal government and accounted for 98 per cent of federal government's export earnings in the year 2000. Additionally, the National Bureau of Statistics (2017) documented that the oil and gas sector in Nigeria accounted for approximately 70 per cent of government's revenue and more than 90 per cent of its exports earnings.

2. Literature Review

This section presents the conceptual clarifications, review of empirical studies and theoretical framework regarding degree of financial and operating leverages and financial performance. The next subsection presents the conceptual clarifications.

Conceptual Clarifications

Financial leverage is the extent to which debt are used in the firm's capital structure. Therefore, degree of financial leverage (DFL) increases with increase in the usage of debt in the capital structure. Degree of financial leverage according to Pandey (2015) is defined as the percentage change in earnings per share (EPS) due to a given change in earnings before interest and taxes (EBIT). Degree of financial leverage has been considered as a practical measure of the degree of financial risk. Hence, the higher the DFL the more risky is the business since it is likely to be over-relying on debt financing (Muriithi, Muturi & Waweru, 2016).

Operating leverage is the elasticity of profits in relation to sales (Brealey, Myers & Allen, 2010). Garrison and Noreen (2003) described operating leverage as the degree or level of response of earnings to changes on sales revenues. It expresses the possibility of a more than proportional increase on operating earnings in relation to a rise in sales. Degree of operating leverage (DOL) is defined as the percentage change in EBIT relative to a given percentage in sales (Pandey, 2015). The classical definition of the DOL which describes it as a multiplier effect resulting from the use of fixed operating costs (Medeiros et al. 2006). Zubairi (2013) described DOL as the degree to which a company's operating costs are fixed, and a higher proportion of fixed costs imply a higher operating leverage and vice versa. The degree of operating leverage is measured as the ratio of contribution margin to EBIT (Zubairi, 2013).

Financial performance is regarded as a post business operation activity used in evaluating how economically well or profitable the business has done over a given period (Augustine et al., 2020). Hult et al., (2008) observed that organisational researchers adopt either accounting-based measures of profitability such as return on asset (ROA), return on sales (ROS) and return on equity (ROE) or stock market performance measures such as Tobin's Q and market return to evaluate financial performance. This study concentrated on ROA because preliminary robustness check proved ROA to be more robust than ROE and Tobin's Q. Return on assets has been considered by (Muiru, Kisaka & Kalui, 2018) as the most widely used accounting measure of financial performance and an indication of the management's ability to convert assets into net earnings. Akong'a (2014) maintains that ROA measure how efficient a firm is using its assets to generate earnings before contractual obligation is paid.

Review of Empirical Studies

Chen et al. (2018) using annual compusat industrial data from 1963 to 2016, and excluding firms in the financial and utility sectors, found that operating leverage is both significantly positively associated with profitability and, at the same time, significantly negatively associated with financial leverage. In other words, the authors documented that higher operating leverage have higher profitability and lower financial leverage, resulting in a negative association between profitability and financial leverage. Using panel data evidence from commercial banks in Kenya, Kelvin (2016) and Muriithi et al. (2016) all unravelled significant negative relationship between DFL and financial performance proxy by ROE.

Gatsi et al. (2013) conducted a study to evaluate the link between degree of financial and operating leverage and profitability of 18 older insurance firms in Ghana using panel data technique. Results show that DFL is negatively related to profitability, while DOL is positively associated with profitability measured by return on equity (ROE). Dimisyqiyani, Suhadak and Kertahadi (n.d.) explored the effect of financial leverage on frim value and market risk of 13 companies listed on the consumer goods sector of Indonesian stock exchange from 2010- 2012. Results indicate that DFL has positive effect on EPS, ROE and market value.

Nimalathan and Pratheepkanth (2012) examined the association between systematic risk management and profitability of ten companies listed on the Colombo stock exchange (CSE), Sri Lanka from 2007 to 2011, using correlation and regression analysis. The authors utilised DFL and DOL as proxies for systematic risk while profitability was measured using net profit, return on capital employed (ROCE) and ROE. Results reveal that DFL and DOL have positive relationship with all the measures of profitability. Saleem, Rahman and

Sultana (2011) carried out a study to investigate the impact of financial and operating leverage on the profitability of the oil and gas sector of SAARC countries during a 10-year period ranging from 2001 to 2010. Authors documented significant relationship between DFL, DOL and ROA. Bhatti, Majeed and Khan (2010) investigated the impact of leverage on the stock return and risk using listed companies on the Karachi Stock Exchange from eight different industries from 2005-2009. The authors uncovered that generally high degree of leverage is connected to high level of systematic risk and ultimately, high volatility in stock prices.

Medeiros et al. (2006) evaluated the impact of DOL on stock returns of firms listed on the Sao Paulo stock exchange using quarterly data over the period January 2001 to September 2004. Results provide evidence in support of positive and significant relationship between DOL and stock returns. Mseddi and Abid (2004) analysed the impact of risk on value of 403 non-financial United States (US) companies using panel data covering the period 1995 to 1999. Authors found that both DFL and DOL have positive impact on the firms' value. Lord (1996) reported that DOL, the ratio of net profits to firm value, and the variability of unit output are all positively related to total risk, unsystematic risk and systematic risk, while DFL is correlated to total and unsystematic risk but not associated with systematic risk.

From the forgoing, it can be observed that empirical studies on the association between degree of financial and operating leverages and financial performance are rather scanty, and no author utilised data from Nigerian firms. The author on the other hand, develops and tested the following null hypotheses:

H₀₁: Degree of financial leverage has no significant impact on the financial performance.

H₀₂: Degree of operating leverage has no significant impact on the financial performance.

H₀₃: Age has no significant impact on the financial performance.

Theoretical Framework

The trade-off theory developed by Myers (1984) could be traced to the debate over the Modigliani and Miller (1958) irrelevance propositions, which state that given a perfect capital market situation, the choice between debt and equity is irrelevant (Abubakar, 2017). Modigliani and Miller (1963) argued that, when corporate tax is introduced to their original Modigliani and Miller (1958) irrelevance proposition, firms should be 100 per cent debt financed because of the tax shield benefit of debt (Attar, 2014). However, Myers (1984) maintained that introducing bankruptcy costs into this model implies that the optimal capital structure becomes a trade-off between the tax advantage of debt and the costs of bankruptcy. Similarly, the trade-off theory of leverage is that in which firms' trade-off the tax shield benefits of debt financing against the bankruptcy cost of debt (Abubakar, 2017).

The theory also postulate that a firm will borrow up to the point where the marginal value of tax shields on additional debt is balanced by increasing the present value of possible bankruptcy costs (Myers, 2001). From the point of view of the trade-off theory, higher profitability lowers the expected costs of financial distress; hence, more profitable firms will take advantage of higher leverage because of the tax shields benefits of debt. This will cause leverage to have positive impact on financial performance (Abubakar, 2017).

3. Methodology

Ex-post factor research design is used because the study relied solely on the secondary source of data, which is historical in nature and the researcher has no manipulative power.

The study covers six (6) listed firms in the oil and gas sector of Nigeria as at 31st December 2009 with history of continuous listing status as at 31st December 2018. Eight (8) listed oil and gas firms fulfilled these requirements but two companies: Oando Plc. and 11 Plc. were excluded from the study because the former has no complete annual reports and financial statements online, while the latter has no figure for revenue in its 2017 annual report, resulting to missing data. Thus, the six (6) listed oil and gas firms that constitute the working population of this study include: Conoil Plc; Eterna Plc; Forte Oil Plc; Japaul Oil and Maritime Services Plc; MRS oil Plc and Total Nigeria Plc.

Data were sourced mainly from the annual reports and financial statements of the companies that make up the study for a 10-year period from 2009- 2018. The variables of the study are defined according to the procedures adopted by Gatsi et al. (2013), Gibson (2009), Nimalathan and Pratheepkanth (2012) and Pandey (2015). However, age has been widely reported in literature as one of the factors influencing financial performance and measured using the number of years a firm have been in existence (Mohammed, 2010). Hence, age is taken as a control variable in this study. Table 1 presents the variables and their measurements.

Table 1: Measurement of Variables

Variable Name	Measurement
Degree of financial leverage (DFL) [independent variable]	$\frac{\text{earnings before interest \& tax (EBIT)}}{\text{profit before tax (PBT)}}$
Degree of operating leverage (DOL) [independent variable]	$\frac{\text{percentage change in EBIT}}{\text{percentage change in revenue}}$
Age [control variable]	Natural logarithm of the number of years a firm since incorporation
Return on asset (ROA) [dependent variable]	$\frac{\text{earnings before interest \& tax (EBIT)}}{\text{total asset}}$

Source: Gatsi et al. (2013), Gibson (2009), Nimalathan and Pratheepkanth (2012), Pandey (2015).

The empirical model used in this study is specified as follows:

$$FP_{it} = \alpha_0 + \alpha_1 DFL_{it} + \alpha_2 DOL_{it} + \alpha_3 AGE_{it} + C_i + \mu \quad (1)$$

Where: FP_{it} = Financial performance (ROA) for firm i in year t, α_0 = the intercept, α_1 = Coefficient of degree of financial leverage; DFL_{it} = Degree of financial leverage for firm i in year t; α_2 = Coefficient of degree of operating leverage; DOL_{it} = Degree of operating leverage for firm i in year t; α_3 = Coefficient of age; AGE_{it} = Age for company i in year t; C_i = unit-specific error component and μ = remaining error component.

Data analysis is done using descriptive statistics and panel data techniques. Mean, median, maximum value; minimum value; standard deviation, coefficient of variation; skewness and kurtosis are the descriptive tools employed in the description of the variables of study, while Pooled Ordinary Least Squares (POLS) Model, Fixed Effects Model (FEM) and Random Effects Model (REM) are the panel estimators used in the investigation of the impact of the independent variables on the dependent variable.

4. Results and Discussion

1.12 Descriptive Statistics

Table 2 presents the descriptive results of the variables used in this study. The mean of the degree of financial leverage (DFL) is 1.59, while the minimum and maximum values are respectively -0.30 and 10.61.

Table 2: Summary Statistics

Variable	Mean	Median	Minimum	Maximum
DFL	1.59	1.37	-0.30	10.61
DOL	-368.96	0.05	-22234.0	304.33
AGE	40	44	15	62
l_AGE	3.61	3.78	2.71	4.13
ROA	0.06	0.07	-0.50	0.21
Variable	Std. Dev.	C.V.	Skewness	kurtosis
DFL	1.52	0.95	3.80	19.46
DOL	2870.99	7.78	-7.55	54.99
AGE	13.89	0.35	-0.35	-1.21
l_AGE	0.41	0.11	-0.71	-0.92
ROA	0.11	2.06	-2.85	10.58

Source: Author's Computation using GRETLL

The figure for the mean value of the DFL implies that for a given change in EBIT, profit before tax (PBT) will vary by 1.59 times. An increase in the level of financial leverage i.e. debt usage in the capital structure will result in increase in the DFL, so also the EBIT and vice versa. The huge difference between the minimum and maximum values for DFL is an indication of high degree of variability in the usage of debt among the listed oil and gas firms employed in the study. Similarly, the mean value of the degree of operating leverage (DOL) of -368.96 suggests that for a given change in revenue, EBIT will change by 368.96 times. The negative sign is an indication of declining revenue and EBIT overtime.

The descriptive analysis of age indicate that on the average, companies listed in the oil and gas sector of Nigeria were incorporated for the past 40 years, while the median value suggests that at least 50 per cent of companies used in this study were incorporated 44 years ago. The implication is that the companies might have built long term relationship with financial institutions over time; thus, resulting to easy access to financial leverage. The difference between the minimum and maximum values is 47 years, implying that some firms incorporated 47 years before other firms existed. This means that some companies due to their age will have easy access to debt than companies that were relatively younger in age.

The descriptive results of the dependent variable i.e. return on asset (ROA) reveal a mean value of 0.06 against the minimum and maximum values of -0.50 and 0.21 respectively. The mean value of ROA connotes that for every ₦1 worth of asset utilised about ₦0.06 is generated as returns (earnings) for the firm. The negative minimum value for ROA is an indication that some firms reported loss before interest and taxes during the study period 2009- 2018; providing evidence of inefficiency in the utilisation of the firm's asset.

The standard deviations of DFL and AGE are lower than their associated means, and the coefficient of variations of the two variables are less than unity. This implies that there is low degree of variability in the DFL and AGE among the firms used in the study.

Conversely, DOL and ROA are highly variable as revealed by their coefficients of variations which are greater than unity. Table 2 shows that DFL is positively skewed whereas DOL, AGE and ROA are negatively skewed. However, AGE is approximately normal because the value of its skewness is close to zero. In addition, DFL, DOL and ROA appear leptokurtic while AGE is relatively mesokurtic.

1.13 Collinearity Test

Collinearity test is conducted to determine if the independent variables have high correlation that could lead multicollinearity problem. Correlation matrix and variance inflation factor (VIF) are commonly used in detecting collinearity problem. In this study, VIF is used because correlation matrix is only a rule of thumb and needs to be validated and corroborated using VIF. The result of the VIF is presented as Table 3.

Table 3: Variance Inflation Factor

Variable	Variance Inflation Factor	Tolerance
DFL	1.011	0.9891
DOL	1.053	0.9497
L_AGE	1.042	0.9597

Source: Author's Computation using GRETL

In Table 3, each of the independent variables has a VIF less than 10 and tolerance statistics above 0.1. Thus, these two important properties associated with the independent variables according to Rajkumar and Hanitha (2015) implies absence of collinearity among the explanatory variables.

1.14 Regression Analysis

Return on asset (ROA) as a dependent variable is regressed on the degree of financial leverage (DFL) and degree of operating leverage (DOL) as independent variables and age (L_AGE) as control variable using three panel estimators as pooled-ordinary least squares (POLS), fixed effects model (FEM) and random effects model (REM). Table 4 provides results of the regression of the variables under consideration.

Table 4: Regression Results

Variables	Dependent variable: ROA		
	Pooled OLS	Fixed Effects	Random Effects (GLS)
CONSTANT	-0.15 (-1.18)	0.81 (1.51)	-0.09 (-0.49)
DFL	0.01 (1.19)	0.01 (1.43)	0.01 (1.33)
DOL	0.00 (0.83)	0.01 (2.05)**	0.00 (1.31)
L_AGE	0.05 (1.50)	-0.21(-1.44)	0.04 (0.70)
R ²	0.09	0.31	0.09
F	1.74 (0.17)	2.93(0.00)***	1.74 (0.17)
STD ERROR	0.11	0.10	0.11
DW	1.71	2.23	1.71

Significant at 5% (), 1% (***)**
Note: The values in parentheses for variables are t ratios and those against F-statistic are P-values.

Source: Author's Computation using GRETL

The regression results in Table 4 indicate that the F-statistics for POLS and REM are not statistically significant, while the F-statistics of FEM is statistically significant at 1 per cent level of significance. Hence, POLS and REM are not suitable for analysis. On this basis, FEM is the most ideal model for this study. To ascertain that the regression results of the chosen model i.e. FEM is not spurious, two post estimation test i.e. autocorrelation and heteroskedasticity tests are conducted.

One of the basic assumptions of the regression model is that the omitted variable i.e. the error term should be not correlated with any of the independent variables i.e. there should be absence of autocorrelation. Autocorrelation in this study is detected using Durbin-Watson (D-W) statistics. The D-W statistics for our preferred model i.e. FEM is 2.23 as seen in Table 4 and the figure may suggest the presence of negative autocorrelation as documented by Swain (2008). Swain (2008) observed that if there is negative correlation, D-W will be greater than 2 and could approach its maximum value of 4.

Additionally, test for heteroskedasticity is run to unravel if the variances of the cross sectional units (i.e. the six listed oil and gas firms used in this study) are equal. Distribution free Wald test for heteroskedasticity is used and the results presented as Table 5. The null hypothesis is that there is homoskedasticity i.e. the units have a common error variance.

Table 5: Results of the Test for Heteroscedasticity
 (Source: Author's Computation (2020) using GRETL)

Model	Chi-Square	P-value
FEM	2370.76	0

Source: Author's Computation using GRETL

The results of the heteroskedasticity test in Table 5 for the FEM shows that the chi-square value of 2371 is significant at a 1 per cent level, given the p-value of 0 is not up to 0.01. Hence, the study rejects the null hypothesis of homoskedasticity and concludes that heteroskedasticity is present in the chosen model. The results of the D-W statistics and the Distribution free Wald test for heteroskedasticity proved that our model is suffering from the problems of autocorrelation and heteroskedasticity. To address these problems, robust heteroskedasticity and autocorrelation consistent (HAC) standard errors is applied. Table 6 provides summary of the regression results of the FEM using robust (HAC) standard errors.

Table 6: Regression Results using Robust (HAC) Standard Errors
 (Source: Author's Computation (2020) using GRETL)

Dependent variable: Return on Assets (ROA)	
CONSTANT	0.81 (1.76)*
DFL	0.01 (1.54)
DOL	0.01 (6.28)***
L_AGE	-0.21 (-1.72)*
R²	0.31
F	2.93 (0.00)***
D-W	2.23

Significant at 10% (*), 5% (), 1% (***)**

The values in parentheses for constant and variables are t ratios and the one against F-statistic is p- value.

Source: Author's Computation using GRETL

The regression results in Table 6 provide some evidence that autocorrelation and heteroskedasticity can make a regression result spurious if not addressed. The results show important differences from the results presented in Table 4 before the application of the robust (HAC) standard errors. The noticeable differences are in the values of the t-ratios as the coefficients of the constant and the variable (AGE) which were not significant became significant at 10% level, whereas DOL which was significant at 5% level became significant at 1% level of significance.

The regression results of the FEM in Table 6 indicate that the degree of financial leverage (DFL) has no significant impact on the ROA as an indicator of financial performance. This position stemmed from the non-significant t-ratio of 1.54 against the coefficient of DFL of 0.01. Results also reveal that the degree of operating leverage (DOL) has positive and significant impact on the ROA, as confirmed by the t-ratio of 6.28 which is significant at 1% level of significance. In addition, the regression results in Table 6 also indicate that AGE as a control variable has a negative but significant impact on the financial performance proxy by the ROA. The t-ratio of the variable AGE after a logarithmic transformation is negative and significant at 5% level of significance.

1.15 Discussion of Findings

The author found that degree of financial leverage (DFL) is not statistically related to financial performance measured by ROA. In other words, a unit change in the DFL will not cause any change in the financial performance. DFL will only impact positively on financial performance if EBIT is increasing and economic conditions are good and favourable. This finding is not surprising given that the study period was characterised by poor economic conditions such as global economic downturn, high inflation rate, economic recession and the COVID-19 pandemic experienced towards the end of the study period. With falling EBIT, more debt in the capital structure will result in decline in earnings available for shareholders. The finding confirms that the firms could not trade-off tax shields benefit of debt with fixed cost attached to debt. This finding is contrary to the trade-off theory which predicts positive association between leverage and performance. However, Chen et al. (2018) criticised the trade-off theory by asserting that a well-known empirical failure of the model is that highly profitable firms do not have as much leverage as predicted, and in fact, in using linear regression, the relation between leverage and profitability is negative. This finding contradicts the results of Gatsi *et al.* (2013) and Nimalathasan and Pratheepkanth (2012) who reported positive and significant relationship between DFL and ROE and in disagreement with the results of Kelvin (2016) and Muriithi *et al.* (2016) whom found negative relationship between DFL and ROE.

Findings also indicate that degree of operating leverage (DOL) has positive and significant effect on the ROA. The coefficient of DOL is 0.01 which implies that a 1% increase in the DOL is positively associated with a 0.01% increase in the financial performance surrogated by ROA. The implication is that increasing revenue will increase EBIT and consequently return on asset. This finding suggests that improvement in revenue is a reflection of efficient utilisation of the firm's asset. Additionally, the finding provides support to the assertion and empirical results of Chen et al. (2018) that when sales are growing; fixed and quasi-fixed costs do not grow at the same rate as sales, such that higher operating leverage results to higher profitability. This finding is also consistent with the findings of Gatsi et al. (2013)

and Mseddi and Abid (2004), as the authors also found positive association between DOL and financial performance.

The author also found that age measured by the number of years of a firm since incorporation is negatively associated with financial performance proxy by ROA. The coefficient of age is -0.21 which connotes that a 1% increase in the number of years a firm was incorporated will result in about 0.21% decline in the financial performance. The implication of this finding is that the more the experience of a firm, the lower the financial performance measured by ROA. The result is contrary to a priori expectation because firms which are older in age are expected to have acquired accumulated wealth of managerial experience, have easy access to loans, suppliers and new technology necessary to impact positively on the financial performance. However, large number of obsolete asset, organisational culture, bureaucracy among others inherent in older firms may result in sub-optimal use of resources which may also impact negatively on their financial performance.

5. Conclusion and Recommendation

The author analysed the impact of the degree of financial and operating leverages on the financial performance of six listed oil and gas companies in Nigeria from 2009- 2018 using fixed effects model. Results reveal that degree of financial leverage has no significant impact on the financial performance whereas degree of operating leverage impacts positively on the financial performance represented by ROA. Author also found age to have significant and negative impact on the ROA.

The author concludes that combination of low level of financial leverage with high degree of operating leverage will impact greatly on earnings and consequently, improve financial performance. Author recommends that firms in the oil and gas sector should maintain low level of debt in their capital structure and take measures to increase their revenue base, as doing so will enhance EBIT and ultimately financial performance. In this regard, aggressive marketing such as advertisement and sales promotion can be utilised to improve revenue.

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Minimum wage and firm specific factors: The case of Indonesia

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Abstract: This study aims to examine how the minimum wages raise in Indonesia affecting firm-specific factors such as sales growth, return on assets, return on equity, net profit margin and gross profit margin. This study also elaborates how Thailand and Vietnam determined its minimum wage. The samples used in this study were 135 companies. The research data used is for 12 years, namely data from 2008 to 2019, with a total of 1620 observations. Companies in the trade, service and investment industry were the most research samples of 33 companies or 396 observations or 24 per cent and at least in the agriculture and mining industry, there were 9 companies or 108 observations or 7 per cent. A descriptive statistic is employed. The study results show that Indonesia's economic growth in 2009 fell from 6.01 per cent to 4.63 per cent, while at that time the minimum wage was increased by 10 per cent, so the number of companies that received positive sales growth only reached 53 per cent or 72 companies. In 2008 and 2009, Indonesia experienced an economic crisis and a financial crisis so that overall companies that experienced positive sales growth experienced a decline. In 2011 to 2013, when economic growth continued to decline, the minimum wage continued to increase, which had an impact on company sales. Companies that received positive sales fell from 87 per cent in 2011 to 80.7 per cent in 2013. In 2014 to 2016, when economic growth continued to decline while the minimum wage remained increased above 10 per cent, the number of companies that received positive sales growth experienced a decrease from 76.3 per cent to 68.5 per cent. In 2017 and 2018, where the minimum wage was set to be below 10 per cent, or to be precise 8.25 and 8.71, the number of companies that received positive sales growth relatively increased. However, in 2019 the number of companies that received positive sales growth was only 56.3 per cent and decreased from the previous year. From this condition, it can be seen that when economic conditions decline and the minimum wage increases, the increase in the minimum wage does not spur employees to be more productive, because of the number of companies that get positive sales growth decreases.

Keywords minimum wage, firm specific factors, Indonesia

1. Introduction

According to the International Labour Organisation (ILO), a living wage is a wage that allows workers to live with dignity. A living wage must be enough to enable workers to meet basic needs such as food, shelter, clothing, healthcare, savings and minimal recreation for workers and their families. A living wage is based on the calculation of (1) food consumption with enough calories for a family of four based on local dietary habits, and (2) non-food costs, including rent, utilities, children's education, and savings. (www.asia.floorwage.org).

The minimum wage is aimed at raising the standard of living, lowering poverty, narrowing the wage disparity and increasing labor productivity in which it is believed that an equitable pay will generate a good quality of life thus stimulating higher productivity and loyalty in which lowering employee turnover rate. In the other hand, labor productivity may induce a rise in wage as the firm may generate higher profits. However, a previous study on Thailand minimum wage has documented that the minimum wage does not reduce overall wage inequality because of a high non-compliance rate and weak law enforcement, particularly in the informal sector (Leckcivilize, 2015). Further Leckcivilize (2015) found that the

minimum wage seems merely to be effective for the large businesses in which a small and medium firm is unaffected.

For the last few decades, there has been a debate in regards to the effect of increasing minimum wage. Employers consider an increase in the minimum wage leads to higher labor costs, higher product prices, economic growth downturn, and decreased employment. In contrast, the employees consider an increase in the minimum wage brings more earnings, higher consumption, higher demands for goods and services which is in the end leads to a higher economic growth and higher employment opportunities.

2. Literature Review

The literature on minimum wage effects shows a variety of approaches in which some studies the effect on a various group of workers (Brown, 1999; Card & Crueger, 1995; Machin & Manning, 1997; Neumark & Wascher, 2008). The previous studies from the US, UK and Canada documents a significant reduction of wage disparity. However, comparison studies in developing countries show mixed results due to differences in the minimum wage, labor market characteristics and institutions, regulation compliance and law enforcement (Lemos, 2009). At the beginning of minimum wage enactment, law enforcement is relatively weak. Studies from developing countries such as Southeast Asia found mixed evidence, some found a small negative employment effect after a spike in the minimum wage (Rama 2001; Alatas and Cameron 2008; Del Carpio, Nguyen, and Wang 2011), some found a positive effect if spatial clustering is taken into account (Magruder, 2013), and some found no effect in employment (Sekalleriou & Fang, 2014). Though Sekalleriou and Fang (2014) found no effect on employment, yet it reduce wage disparity in Vietnam after the Renovation Reform.

Brassard (2004) investigated the impact of the minimum wage on poverty alleviation in Vietnam and found significant gender differences within regions for daily agricultural wages and significantly lower wages in North Vietnam. Further, the northern wages of industrial are below the legal minimum wage in both state and private sector in particular for the textile industry. Moreover, there is a significant difference in the minimum wage between gender and regions. The poverty in Vietnam is concentrated in the rural areas particularly amongst ethnic minorities' areas and remote areas which are common in most developing countries. Further, Hansen, Rand and Torm (2016) examined the impact of minimum wage changes on wage inequality in Vietnam and found that though the overall effect has been a significant decrease in wage inequality, however, the minimum wages can only reduce wage inequality in the formal sectors but not in the informal sectors.

In Cambodia, the minimum wage policy maker is the Ministry of Manpower and Vocational training in consultation with the Labor Advisory Committee through Prakas (Ministerial Order) The Employment Advisory Committee is a tripartite body consisting of 14 government representatives, 7 trade unions and 7 employers representatives. The board is required to discuss minimum wage rates each year. In accordance with the provisions of the 1997 Labor Code, workers' salaries must be at least the same as the minimum wage, ensuring every worker has a decent standard of living that is compatible with human dignity. Minimum wage levels should be set without distinction by profession or occupation. However, the minimum wage may vary by region, depending on economic conditions and the cost of living. The key factors in determining the minimum wage include the inflation rate, the cost of living, productivity, competition, the status of the labor market and the profitability of a particular industry.

In Indonesia, the minimum wage policy is based on the 2004 Presidential Decree on Wage Councils (representatives of local governments, employers' associations and trade unions) regulating advisory National, Provincial and District Wage Councils. The minimum wage rate is determined annually in accordance with the central government wage policy. The new wage formula set by the government is the provincial minimum wage for the next year = current year's provincial minimum wage + (current year's provincial minimum wage (inflation + economic growth)). The factors that are considered in determining the amount of the minimum wage include: the living needs of workers and their families; cost of living; level of economic development and per capita income; inflation rate; labor market conditions; and company capabilities, development and sustainability.

In Malaysia, minimum wage policies are decided under the National Wage Consultative Council Act 2011 (Law 732). There is a tripartite body called the National Wage Consultative Council which is formed to recommend minimum wage rates to the Government and after it is approved by the Government, the Minister of Human Resources makes a Minimum Wage Order. The criteria for determining the minimum wage are divided into two; basic criteria and adjustments. The basic criteria include Poverty Line Income (PLI) and Median Wages while the adjustment criteria include changes in the Consumer Price Index (CPI), Productivity Growth (P) and Real Unemployment Rate (EU).

In the Philippines, minimum wage levels are set at the local level by the Regional Tripartite Wages and Productivity Council. The regional minimum wages to be set by the Regional Councils must be as economically as possible to maintain the minimum standard of living required for the health, efficiency and general welfare of employees in the context of national economic and social development. In determining the minimum wage, the Regional Management considers, among other things, relevant factors, the needs of workers and their families, the cost of living and changes or increases thereof, the prevailing wage level, distribution of income and wealth along the interests of economic and social development, the effect on field creation, employment, the capacity of employers to pay, adjustment of wages to the consumer price index and the need to encourage industry to invest in rural areas and improve living standards.

In Vietnam, according to Article 90, Labour Code 2012 in Vietnam, wage is defined as a monetary amount which is paid to the employee by the employer to perform the work as agreed by the two parties. Wage includes remuneration which is based on the work or position, as well as wage allowances and other additional payments. An employee's wage must not be lower than the minimum wage provided by the Government (Labour Code, 2012). The minimum wage in Vietnam is determined by tripartite negotiation of the National Wage Council. According to Vietnamese law, wage consists of: (1) basic remuneration which is based on the work or position, (2) wage allowances, and (3) other additional payments. Basic remuneration is paid for the contribution given by the worker in accord with the quality and quantity under the standard working conditions applied. Wage allowances is given as compensation for working conditions, work complexity, living conditions and retention which is not covered by the basic remuneration given. This allowance is considered as an additional for basic remuneration and it is determined by the work complexity. This allowance is stated in the contract as it is agreed by both party. Meanwhile the additional payments in wages is determine in accord with the work performance or title of the worker in the employment contract, and this is excluded from bonuses such as mid-shift meal payment and supportive payments in case that employees'

close relatives die or get married, supportive payment for employees' birthdays, supportive payments for disability resulting from an occupational accident or disease, and other allowances not related to work performance or title of the employees in the employment contract. This regulation in fact makes it difficult for companies to enforce and determine what constitutes an additional payment. Further, Fair Labor Association defines net wage as compensation is equal to basic contracted wage + cash benefits + in-kind benefits – mandatory taxes and legal deductions and taxes. Further, the minimum wage in Vietnam differs by region and sector as to comply with the differences in the natural and social conditions, and living standard. The sectoral minimum wage in Vietnam is set according to the sectoral collective bargaining and should be higher than the regional minimum wage set by the government. Yet, in fact, some of the industries are no avail to adhere to this regulation, for example, the salary of many textile workers is highly dependent on minimum wage (Nguyen, 2018).

In Laos, the minimum wage is determined through tripartite social discussions between employers' associations, workers' organizations and government representatives. Laos has not implemented a minimum wage increase since 2018. At that time, the Lao government raised the minimum wage for all businesses and factories from 900,000 kip (US \$ 101) to 1.1 million kip (US \$ 124) a month.

In Myanmar, the minimum wage is set by the Confederation of Myanmar Trade Unions. The daily minimum wage in Myanmar is revised every two years and discussions on new tariffs will begin in May 2020.

In Thailand, which has the highest minimum wage and occupied the fourth rank of GDP nominal per capita amongst ASEAN countries (Source: <https://nwpc.dole.gov.ph/wp-content/uploads/2020/02/2020-comparative-wages-in-selected-countries.pdf>), three party panel is included to determine the minimum wage which comprises of representatives from government, employees and employers. The formula to determine the minimum wage consists of the average of monthly wage, bonus and in kind benefits such as food, clothing, housing and other in kind benefits in which the overtime pay is excluded from minimum wage formula as it is not consistent with a living wage analysis. The wage committee negotiated an appropriate minimum wage in accordance with economic growth and inflation. The Thailand minimum wage is based on three principles, that is, (1) the minimum wage is a major measure of labor protection; (2) the minimum wage is determined by the tripartite panel and; (3) the fixation of the minimum wage is decentralized to the provincial level. The current wage rate, the consumer price index, inflation rate, standard of living, cost of production, prices of goods and services, employer's capacity to pay, labor productivity, GDP, and the socio-economic situation should be taken into account before determining the forthcoming minimum wage. The dual labor market (formal and informal) and stringent implementation of the minimum wage policy in Thailand makes their labor market unique if compared to other neighbouring countries. However, due to the close geographical location with some other developing countries, the influx migration of employment is relatively high in Thailand in which most of them are low skilled workers and 40 per cent of them are women.

3. Research Method

This study uses primary data and secondary data. Primary data collection was obtained using interview and FGD techniques with related governments, company owners, company management and labor associations. Secondary data is obtained through documentation of both the company's financial statements and reports related to the company to obtain data

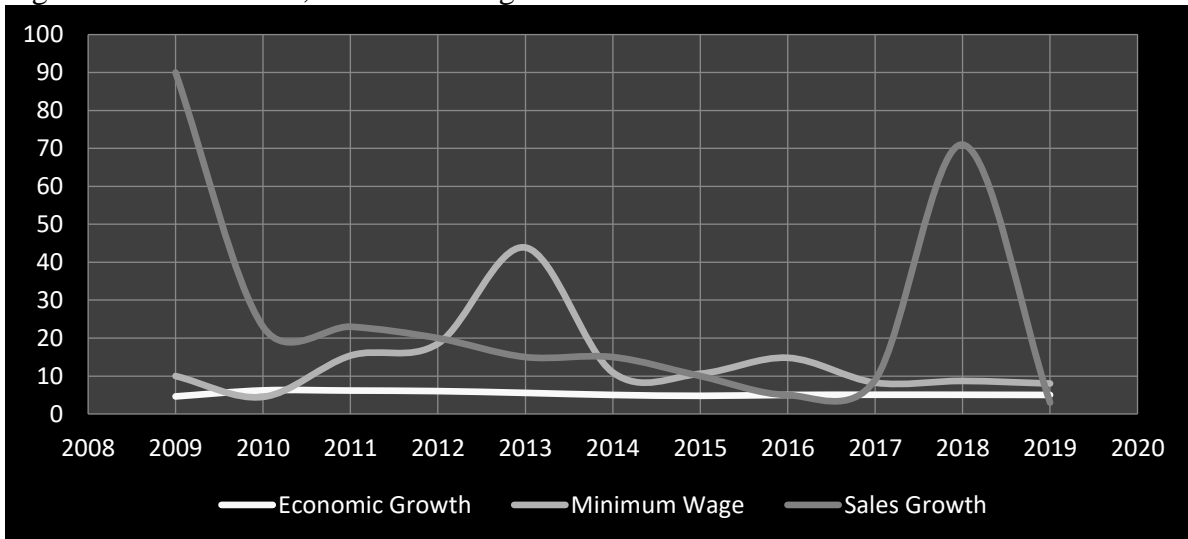
on the company's financial performance. Data analysis was carried out on 135 manufacturing companies from 2008 to 2019 by analyzing (1) sales growth with UMR and economic growth, (2) gross profit margin growth with UMR and economic growth, (3) wage growth with UMR and economic growth, (4) growth in net profit with the UMR and economic growth, (5) growth in profit (Return on Assets) with the UMR and economic growth. FGDs were held on September 14 with business owners and academics.

4. Findings

(1) Sales Growth, Economic Growth dan Minimum Wage Rate

In 2010, when the UMR fell and economic growth increased, sales increased. However, in 2011 to 2013 when the UMR increased and economic growth decreased slightly, sales growth declined. In 2014, the UMR fell and economic growth also fell slightly, sales grew close to 20 percent. In 2015 the UMR increased but sales growth fell, then from 2016 to 2019 when the UMR continued to decline, sales growth increased even reaching the level of 23 percent, but in 2019 sales growth fell. It can be concluded that an increase in the UMR which is not followed by economic growth does not encourage sales growth.

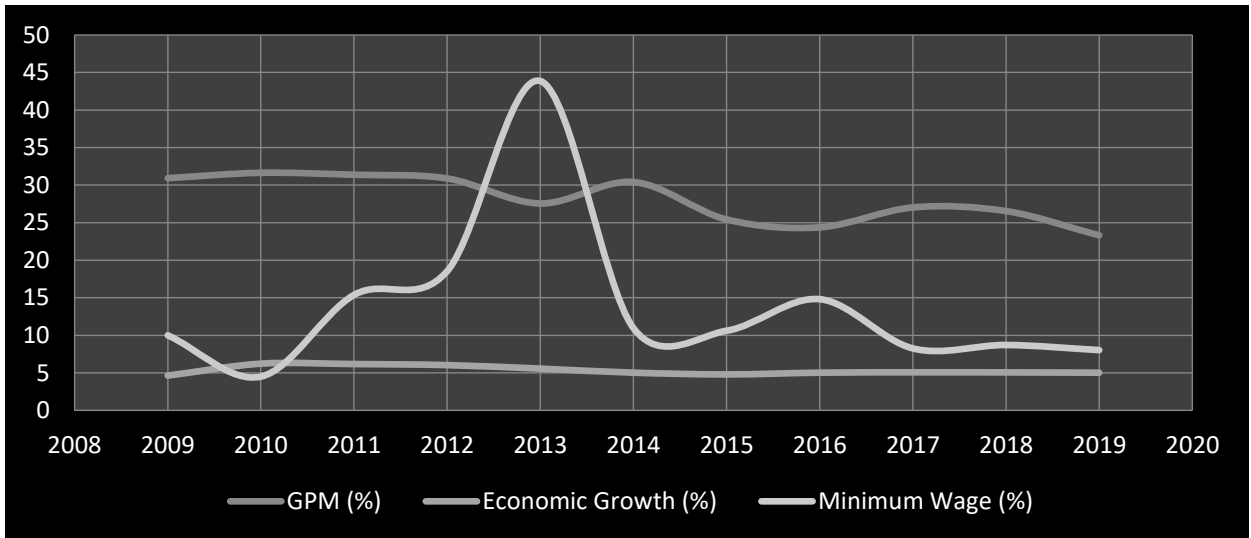
Figure 1. Sales Growth, Minimum Wage & Economic Growth



(2) Gross Profit Margin, Minimum Wage dan Economic Growth

In the chart below, economic growth continues to fall, as well as the gross profit margin which shows a downward trend as well. However, the minimum wage initially tended to increase, but in the last three years it has not been sloping. In 2010, when economic growth increased and the minimum wage showed a decrease, companies were able to increase their gross profit margin. In 2013, when economic growth fell, while the minimum wage increased drastically to 43 percent, the company's gross profit fell below 30 percent. In 2014, when economic growth continued to decline and the minimum wage also fell drastically, the company was able to increase gross profit, as well as what happened in 2016, the UMP went up again, the company graph showed a decline. In 2017, the UMP fell again, so the company's GPM increased. In 2019, when the increase in UMR tended to be stable at 8 percent, the company's GPM showed a decreasing trend.

Figure 2. Gross Profit Margin, Minimum Wage & Economic Growth

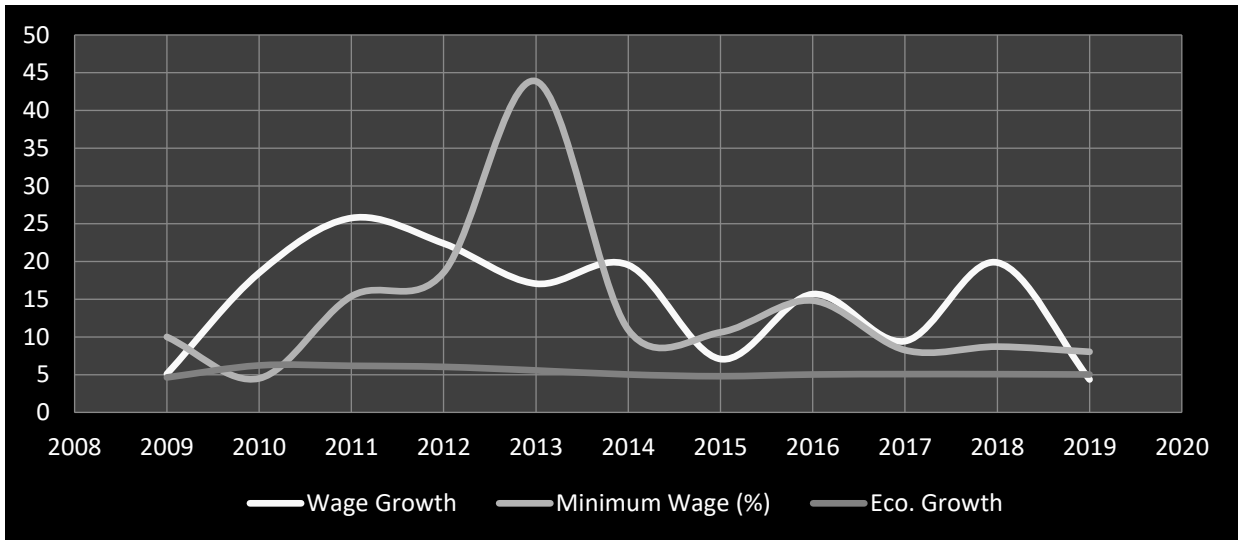


The graph above illustrates the development of the gross profit margin, minimum wages and economic growth. The company's gross profit margin ranges from 30 percent to 25 percent, but it has a tendency to decline from 2009 to 2019. When the UMR rose sharply in 2013, the gross profit of the company seemed to have decreased significantly, as well as when the minimum wage increased from year to year. 2014 - 2016, there is a tendency for the company's gross profit to decline. It can be concluded that the increase in the minimum wage also affects the GPM, because the increase in the UMR will cause a large increase in labor wages while the increase in sales is not supportive.

(3) Wage Growth, Minimum Wage and Economic Growth

The figure below illustrates the growth in wages, minimum wage rates and economic growth over the last 11 years. In 2010 the economic growth reached 6.22 percent, with this high economic growth, in 2011, the minimum wage increased to 15.38 percent. The increase in your minimum wage is followed by an increase in your salary reaching a level of 25.75 percent. From 2009 to 2012, the rate of increase in wages was always higher than that of the minimum wage. From 2011 to 2013, when economic growth continued to decline, the minimum wage continued to rise and the increase in minimum wages reached its highest peak in 2013, where the minimum wage rose to 43.87 percent. The high minimum wage increase was not followed by a high increase in labor wages, labor wages tended to decrease from the increase in labor wages the previous year, but it can also be seen that in 2014, the increase in labor wages was higher than the increase in minimum wages. From 2014 to 2017, economic growth continued to decline, as did the UMR level also fell. In this period, although the increase in labor wages was still higher than the increase in the UMR, the increase in labor wages was relatively similar to the increase in the minimum wage. In 2018, economic growth continued to decline but the UMR was also relatively stable at 8 percent, and labor wages rose higher than the UMR increase. It can be concluded that the relationship between the UMR and the level of company labor wages, that the increase in the UMR will be followed by a higher increase in company labor wages, this will be followed by an increase in the wages of other administrative workers outside of labor.

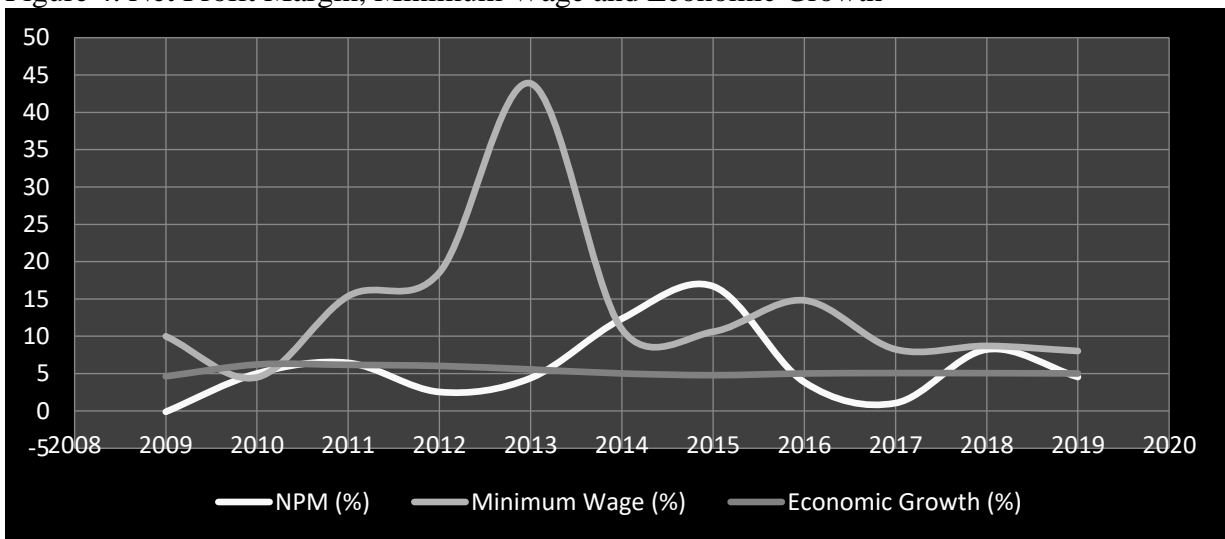
Figure 3. Wage Growth, Minimum Wage and Economic Growth



(4) Net Profit Growth, Minimum Wage, and Economic Growth

The chart below explains the development of net profit margin, minimum wage and economic growth. The highest net profit margin growth occurred in 2015, reaching 16.7 percent. In 2015, the net profit margin obtained by the company was higher than the increase in the UMP in 2015. The low net profit margin was obtained in 2012 and 2017, the net profit margin in both years was lower than economic growth. Overall, the increase in the company's net profit margin is lower than the increase in the minimum wage, it can be explained that a higher increase in labor wages can cause operating expenses to increase so that the company's net profit margin is also low.

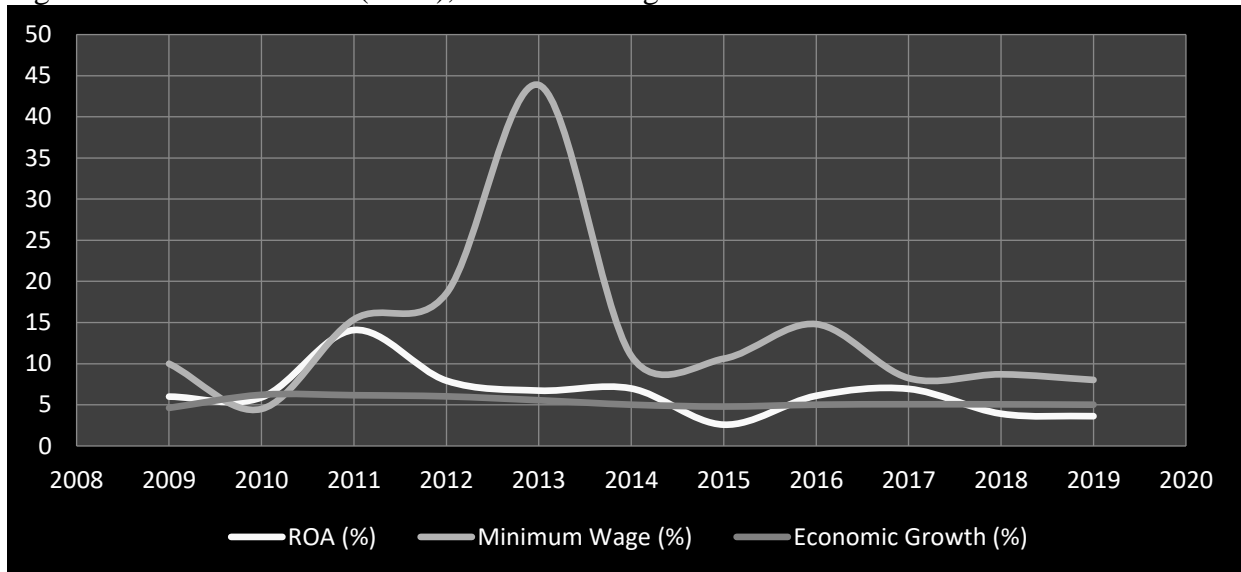
Figure 4. Net Profit Margin, Minimum Wage and Economic Growth



(5) Growth Profit (Return On Assets), Minimum Wage and Economic Growth

The chart below depicts the development of return on assets, minimum wages and economic growth. In the early period (2009 - 2011) the company's ROA level was higher than the UMR, this was because the sales growth rate in that period was relatively higher than the UMR level. However, in the next period, the ROA obtained by the company was lower than the UMR. This is because the increase in the minimum wage causes the company's net profit to fall, so that net profit is a small denominator with relatively stable total assets, so ROA will decrease.

Figure 5. Return on Assets (ROA), Minimum Wage and Economic Growth



5. Conclusion

It can be concluded that (1) an increase in the minimum wage which is not followed by economic growth will not encourage sales growth; (2) an increase in the minimum wage also affects the gross profit margin, because the increase in the minimum wage will cause a large increase in labor wages, while on the other hand, the increase in the minimum wage will not increase sales; (3) an increase in the minimum wage will be followed by an increase in the wages of corporate workers that are higher, both for operational workers and for administrative workers; (4) Overall, the increase in the company's net profit margin is lower than the increase in the minimum wage, because the increase in labor wages is higher than the seller so that it can cause an increase in operating expenses which results in a low net profit margin of the company. This is because the increase in the minimum wage causes the company's net profit to decrease.

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SUB-SESSION 11

INFORMATION MANAGEMENT

Decision Support System Framework for Personalized Adaptive Learning based on Behavioral Modelling

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Abstract - Learning style (LS) is a method of how students receive and process information. It describe how they collect, sift through, organize and interpret the information. Each student has a different LS, thus teachers are now prioritizing identifying the LS of students. An appropriate learning method can engage and sustain students' interest and further enhance their academic achievement. The conventional method using questionnaires to identify LS is ineffective where students may have differences in understanding and interpretation while it is hard to convey feelings and emotions on paper. To overcome the limitations of questionnaires, this study proposed an automated approach to identify LS based on student's behavior. A Decision Support System (DSS) is experimented on user behavior demonstrating their unique LS. The framework of the LS detection is based on student behavioral modeling and employs the parameters of student behavior under the visual-auditory-kinesthetic (VAK) model. The proposed framework considers three main phases: identifying the behavior of each learning style, determine the learning style of the behavior, and predicting the learning style. The framework is implemented on an application which was developed with three modules: the interface, process, and decision modules, which serve as a DSS tool to automatically predict the LS of students as the users. This paper presents the framework of VAK and the architectural model of DSS to automatically identify student's LS as a tool to assist teachers in providing correct guidance to students based on their unique LS. The experimental results will be presented in future publication.

Keywords: Adaptive learning, behavioral modeling, decision support system, learning style detection, visual-auditory-kinesthetic (VAK) model.

1. Introduction

Decision Support System (DSS) is able to assist decision makings for which predetermined solutions are unknown by using certain models and data analysis. It is very crucial to get the right models for accurate results. In addition, the pattern mapping of system usage behavior also affects the final decision (Deborah, Sathiyaseelan, Audithan, & Vijayakumar, 2015; El Guabassi, Bousalem, Al Achhab, & EL Mohajir,

2019; Khademolqorani & Hamadani, 2013; Nihad, Mohamed, & El Mokhtar, 2020). Thus, analyzing consumer behavior is important to help decision-makers select alternatives and more accurately predict future decisions. Examples of techniques used in behavioral modeling are the decision tree, neural network, fuzzy set, the bayesian network, and rule-based techniques (Ahmad, Tasir, Kasim, & Sahat, 2013; El Mokhtar & Abdelhamid, 2019; Graf, Kinshuk, & Liu, 2009; Graf, Kinshuk, & Liu, 2008; Maylawati, Priatna, Sugilar, & Ramdhani, 2020). The Rule-based technique (RBT) is one of the techniques to form knowledge rules from user behavior without involving user set data. The effectiveness in improving decision quality has also been proven in individual preferences detection as shown in a previous research (Jonassen & Grabowski, 1993; Rathore & Arjaria, 2020). In learning style detection, RBT is a commonly used and appears to be more practical when the focus is more on the content of the activities. The calculation of learning styles is also based on the simple rules and does not involve the design of the system.

Behavioral patterns can be applied in the decision-making process to determine learning styles. This is because learning styles are a way that people focus and act to process and acquire new information, knowledge, or experiences. According to a previous studies (Dunn & Dunn, 1978; Good & Lavigne, 2017; Manning, Baruth, & Lee, 2017; Slavin, 2019), each student has his or her own needs and traits including different learning styles. This difference causes the students to have different ways of acquiring knowledge. In this context, students have different ways of learning based on the learning theory, learning styles, and their psychological state. Indirectly, the relationship between learning styles in the learning environment facilitates the learning process and enhances academic achievement (El Mokhtar & Abdelhamid, 2019; Graf et al., 2008; Jonassen & Grabowski, 1993; Rathore & Arjaria, 2020).

Large class sizes, high workloads, and time constraints are the challenges in the traditional classroom setting that provides difficulties for teachers to provide different guidance or teaching style to students with different LS. An appropriate learning techniques to students' learning styles can motivate the students and improve academic achievement (Estriegana, Medina-Merodio, & Barchino, 2019; Graf et al., 2008; Zainuddin, 2018). Therefore, this paper introduces an automatic learning style detection system to solve the issue. The student can use this system independently at any time according to his or her needs to help the teacher identify his or her learning style. In specific, this study focused on an automated approach that identifies the student learning styles based on student behavior in the learning process. The main objective of this study is to propose a framework for learning style detection based on the learners' behavioral pattern. The architectural system for the detection of Visual, Audio, and Kinesthetic (VAK) learning styles was based on learner behavioral patterns and Rule- based techniques.

The paper is structured into five sections. A related study of the main concept, such as the learning style models, behavioral modeling, and Rule-based techniques, are presented in Section 2. The proposed framework is discussed in detail in Section 3, while Section 4 demonstrates the proposed architecture. The conclusion is presented in Section 5.

2. Related Works

This section presents the previous studies related to the basic theory of learning styles. The scope of discussion also includes the basic process, automatic detection, and the importance of detecting student learning styles.

2.1 Learning Style

Studies in cognitive and psychological sciences indicate that individuals have different capabilities that determine the way and the tendencies they receive and process information (Graf et al., 2008; Khandaghi & Farasat, 2011; Maylawati et al., 2020; Surjono, 2014). In the learning environment, this tendency is known as learning style, which is the way an individual concentrate on, processes, and retains new information and difficult information (Chetty et al., 2019; Dunn & Dunn, 1978; Yassin & Almasri, 2015). Learning style is also said to be the strategy that an individual use in dealing with the environment and learning materials. This strategy is designed to elicit the individual's respective learning style (Azzi, Jeghal, Radouane, Yahyaouy, & Tairi, 2020; Liyanage, KS, & Hirakawa, 2016; Surjono, 2014).

The interaction between the learning style with the structure of the teaching material and the type of content affects learning achievement. Teaching methods that match a student's learning style have led to better academic achievement (Dincol, Temel, Oskay, Erdoğan, & Yılmaz., 2011; Övez & Uyangör, 2016; Riding & Rayner, 2013). According to a study (Graf et al., 2009), learning styles indicate the way people begin to concentrate, process, and remember any difficult or new information. Commonly, most students have a unique learning style, it is important for teachers to recognize and understand the differences in student learning styles (Felder & Silverman, 1988; Jonassen & Grabowski, 1993; Khandaghi & Farasat, 2011; Rathore & Arjaria, 2020). There are more than 71 types of learning style models that have been identified from previous studies (Khan, Weippl, & Tjoa, 2009; Kolb, 2014; Liyanage et al., 2016; Surjono, 2014). Among them include the Kolb, Dun and Dun, Felder Silverman, and Visual, Auditory, and Kinesthetic (VAK) learning styles. This study focuses on the VAK learning style.

2.2 Visual, Auditory and Kinesthetic (VAK) Learning Style Model

The VAK learning style model was introduced in a previous studies included three types of learning styles that are often used by students in the learning process, which are the learning style based on visual, auditory, and kinesthetic senses (Benmarrakchi, El Kafi, Elhore, & Haie, 2017; Ibrahim & Hussein, 2016; Mohd, Ismail, Jalil, & Noor, 2019). Visual style often involves visual-verbal and visual-nonverbal. Visual-verbal students are more interested in information presented in visual and written form. Meanwhile, visual-nonverbal students are more likely to be interested in information presented in the form of pictures or design formats (Chen, 2019).

Additionally, students that prefer the auditory learning style will focus more on information from oral learning sessions (Leasa & Corebima, 2017). In the learning session, the learning process will be more effective when students focus on hearing the presentation and engage in group discussions. This student learns better when interacting with others in the form of listening or speaking activities (Ibrahim &

Hussein, 2016). Students with a kinesthetic learning style love physical activity that uses body, hands and sense of touch. These students are more interested in challenging learning sessions and thrive in activities that require them to experiment with something new such as in laboratories that allow them to touch and manipulate material (Ibrahim & Hussein, 2016; Leasa & Corebima, 2017).

23 Learning Style Detection

There are two approaches that can be used to identify learning styles: collaborative and automated (Hasibuan & Nugroho, 2016; Hmedna, El Mezouary, Baz, & Mammass, 2016; Klačnja-Milićević, Ivanović, Vesin, & Budimac, 2018; Pham & Florea, 2013). Collaborative approaches are based on a questionnaire, while the automated approach is based on behavioral patterns during online learning. Collaborative approaches are said to be inaccurate because users are not sincere when answering the questionnaire. Emotions such as anger, sadness, disappointment, and joy could alter the results of questionnaires into different values and will influence the validity of the respondents' decision (Ahmad et al., 2013; Fasihuddin, Skinner, & Athauda, 2015; Jonassen & Grabowski, 1993).

Unlike the collaborative approach, automatic approaches are considered better in terms of data accuracy, as they are based on actual student behavior (Ateia & Hamtini, 2016; Jonassen & Grabowski, 1993). However, the automatic approach has its own disadvantages. For instance, it takes a lot of time to acquire the behavioral pattern of students participating in online learning. In addition, the habitual behavioral patterns obtained from the data are sometimes not strong enough (Ahmad et al., 2013; El-Bishouty et al., 2019). Nevertheless, previous works recommend using an automated approach to study learning styles because it is believed to be able to identify the learning styles more accurately (Ateia & Hamtini, 2016; Estacio & Raga Jr, 2017; Khan, Graf, Weippl, & Tjoa, 2010).

24 Behavioural Modelling

Many studies have been done on behavioural modelling in various applications and domains. The user behaviours considered in online application are the time spent completing an activity, the number of occurrences of the activity, and the number of completed activities. Even the number or page frequencies visited and the mouse clicks through the interface are collected as the user behavioural pattern (Togou, Lorenzo, Lorenzo, Cornetta, & Muntean, 2018; Zou et al., 2017). Other studies that have evaluated user behaviour assessed the click or purchase behaviour, consumer rate item value, criticism, value setting to item attributes, and user-specific requirements to generate recommendations based on user needs. The finding supported the user to make better and more accurate selections (Amato, Moscato, Picariello, & Piccialli, 2019; Jugovac & Jannach, 2017). Behavioural modelling has also been applied to predict customer purchasing (Jaini, Quoquab, Mohammad, & Hussin, 2019) and future trends (Gangurde, Kumar, & Gore, 2017). Past customer behaviour was taken and analysed to predict future customer behaviour. The study suggested a pattern search to predict changes in customer behaviour. This assisted mobile phone service providers to predict the type of service or brand that a customer will likely select (Banerjee, El-Bendary, Hassanien, & Tolba, 2013). In addition, many researchers have focused on modelling behaviour in education to automatically identify learning styles based on student

behaviour (Bernard, Chang, Popescu, & Graf, 2016; Moharm, 2019; Mohd et al., 2019; Truong, 2016).

Most of these studies applied decision tree, neural network, fuzzy set, bayesian network, and rule-based techniques to develop the behavioral models (Azzi et al., 2020; Bernard, Chang, Popescu, & Graf, 2017; Feldman, Monteserin, & Amandi, 2015; Premalatha, Dharani, & Geetha, 2016; Sheeba & Krishnan, 2019). The Rule-based is considered as a suitable technique because the ability to form knowledge rules from the corresponding number of indicators based on user behavior without involving set user data (Kolekar, Pai, & MM, 2019). Other studies have applied rules in constructing the decision, are found that this technique gives better results and precision in detecting learning styles in comparison to the data-driven approach (Estacio & Raga Jr, 2017; Sheeba & Krishnan, 2019).

3. Learning Style Detection Framework

This section describes in detail the proposed framework for learning style detection based on user behavioral patterns. The discussion begins with the main phases of the framework. The proposed framework helps decision-makers, the teachers to collect and analyze important information in the process of detecting the learning style. The learning style detection system framework is then proposed (see Figure 1). Three main phases are involved in the proposed framework. The first phase is the identification of the behavior for each learning style, the second phase is the learning style determination of the behavior, and the last phase is the prediction of the learning style.

3.1 Identifying User Behaviour for Every Learning Style

Three processes were conducted to identify the relevant behaviors for each learning style. The first process was the selection of the characteristics and behavioral patterns of the relationship. The second process classified the behavioral events. The third process determined the behavioral parameters for each dimension of learning style. Four parameters of behavioral patterns that were commonly used were identified (Bousbia, Labat, Rebai, & Balla, 2009; Normadhi et al., 2019). In this study, four parameters were used to determine the student learning styles, namely the time used, the number of visits, the visit frequency, and the depth of the visit as presented in Table 1. The parameter of the time-consuming behavioral pattern was the time used (T) to use the learning object of each learning style element. The number of visits (V) is defined as the number of visits to the learning object of each learning style element. The parameters for frequencies (F) are the visit frequencies of the learning object of each learning style element. The last parameter is the depth (D) of the visit for the learning object path used in each learning style element.

Table 1: Parameters of behavioral patterns

Parameter	Description
Time used (T)	The time used for each learning object
Number of visit (V)	Number of visits for each learning object
Visit frequency (F)	The frequency of visits for each learning object
Depth of visit or path (D)	Depth of visits for each learning object

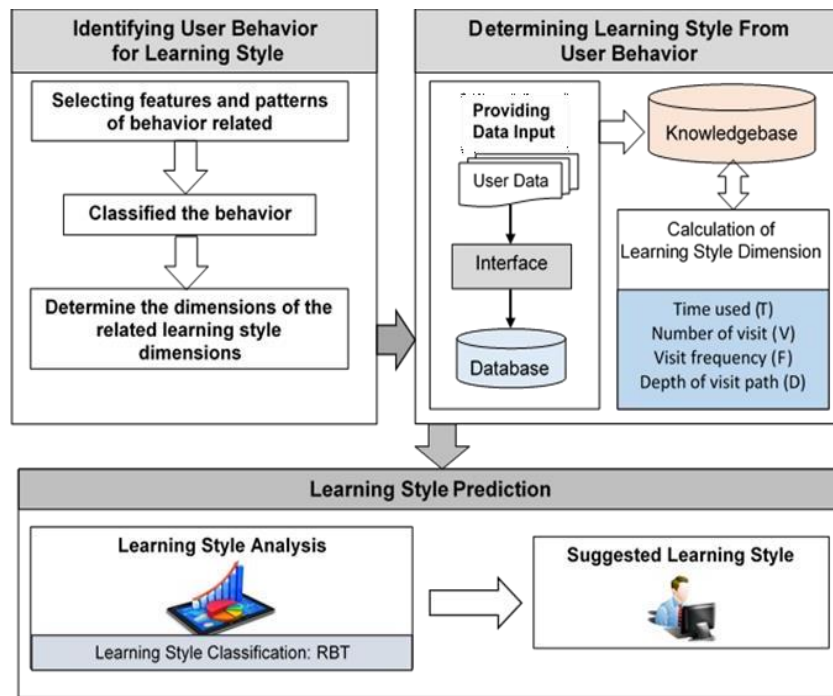


Figure 1: Framework for VAK Learning Style Detection

32 Determining Learning Style from User Behaviour

There are two processes in this phase. The first process is providing the data input and calculation methods. Input data was collected from the extracted and formulated information corresponding to each learning style. Then, the behavioral pattern parameters for learning styles were calculated. The formulae for calculating the ratio of each parameter for the selected patterns of behavior are listed below:

- The ratio of time used (T) was calculated using Eq. 1:

$$RT_{LS_e} = \frac{\sum T_{LS_e}}{\sum T} \quad (1)$$

Where RT_{LS_e} is the time ratio used for each learning object, $\sum T_{LS_e}$ is the total amount of time each learning object is used, and $\sum T$ is the total time the learning object is used.

- The ratio number of visit (V) was calculated using Eq. 2:

$$RV_{LS_e} = \frac{\sum V_{LS_e}}{\sum V} \quad (2)$$

Where RV_{LS_e} is the ratio of the number of visits to each learning object, $\sum V_{LS_e}$ is the amount of time each learning object is used, and $\sum V$ is the total number of learning objects used.

- The ratio of visit frequency (F) was calculated using Eq. 3,

$$RF_{LS_e} = \frac{\sum F_{LS_e}}{\sum F} \quad (3)$$

Where RF_{LS_e} is the frequency ratio of learning objects used, $\sum V_{LS_e}$ is the number of learning object frequencies used, and $\sum F$ is the total number of learning object frequencies used.

- The depth of visit path (D) was calculated using Eq. 4:

$$RD_{LS_e} = \frac{\sum D_{LS_e}}{\sum D} \quad (4)$$

Where RD_{LS_e} is the depth of the visit path for each learning object ratio, $\sum D_{LS_e}$ is the number of depth of visit path for each learning object, and $\sum D$ is the total number of depths of the visit path for each learning object.

33 Predict Learning Style

This phase is divided into two processes, namely the analysis of learning styles and learning style suggestions. The first process of learning style analysis was calculated based on the average ratio of the learning style element which is adapted from past study (Xiao & Rahman, 2017). Then, in this study that ratio was presented as Eq. 1, which shows the average calculation of the ratio of each element of the learning style ($Ratio_{e_GP}$), and it can be calculated using Eq. 5:

$$NP_{e_GP} = \frac{\sum P_{e_GP}}{\sum P} \quad (5)$$

Where NP_{e_GP} is the average ratio of learning style elements, $\sum P_{e_GP}$ is the total behavior parameter ratio, and $\sum P$ is the total number of behavioral pattern parameters.

The second process is the learning style suggestion. The suggested learning styles were determined using a rule-based technique (Kolekar et al., 2019; Liyanage et al., 2016; Okoye, Tawil, Naeem, Bashroush, & Lamine, 2014). The development of rules was based on an average of the learning style elements. The suggested learning styles were used by the decision-makers to determine the VAK learning styles. The rule production of the LS element determination was based on the average ratio (N) of the LS element, which was

constructed from previous studies: $0 \leq N < 0.3$ means that the element of LS is weak, $0.3 \leq N < 0.7$ means that the element of LS is moderate, and 0.7

$\leq N \leq 1.0$ means that the element of LS is strong (Gaikwad & Potey, 2013; Zhang, Huang, Lv, Liu, & Zhou, 2018). The third step is the LS recommendation, which was produced based on the ranking of the average ratios.

4. Learning Style Application Architecture

This section elaborates the design of the learning style system based on the proposed framework. The Visual, Auditory, and Kinesthetic (VAK) learning style was the chosen domain for the proposed learning style framework in this study. The architecture of the VAK learning style application (VAKLeS) is illustrated in Figure 2, which contains three modules: the interface module, process module, and decision module.

The interface module is a module that manages the interaction between the decision-makers, students, and the VAKLeS application. This module is important for determining the usability of a system. There are two types of user interfaces that are designed to control the flow of information: the interface style learning modules and decision support module interfaces. The learning style user interface connects learning style tracking functions based on student behavior using a Rule-based technique. Meanwhile, the decision support interface is a function that supports decision-makers during the analysis of learning styles. The database serves as storage for keeping student information and student behavioral information. The detection process begins once a student logs in to the system. The user information obtained is the visit time, the number of visits, visit frequency, and depth of the path used for each learning object. These were recorded and stored in the database. The process module suggests the learning styles according to the student behavior from the time spent, the number of visits, visit frequency, and depth of the path visit to each learning object. The data obtained from the activities were stored in a learning style knowledge database. Meanwhile, the decision module composed the learning style data and learning style analysis.

Generally, the flow for determining the learning styles based on student behavior was divided into three steps. The first step is the collection of a record of user behavioral parameter information from the learning object usage activity. Each activity represents the VAK learning style object. All the information collected was then stored in a database. The second step is the welding of the learning style dimensions. This step contains two processes, namely the calculation of learning style behavior parameters and decision-making process using the RBT, which is the input for the decision obtained from the previous step. The third step is the decision-making process of the learning styles using the production rules. The rules are based on the average of the learning style element ratio. The results obtained determine the choice of learning style of the student based on the suggestion of the learning style according to the position in the average ratio order.

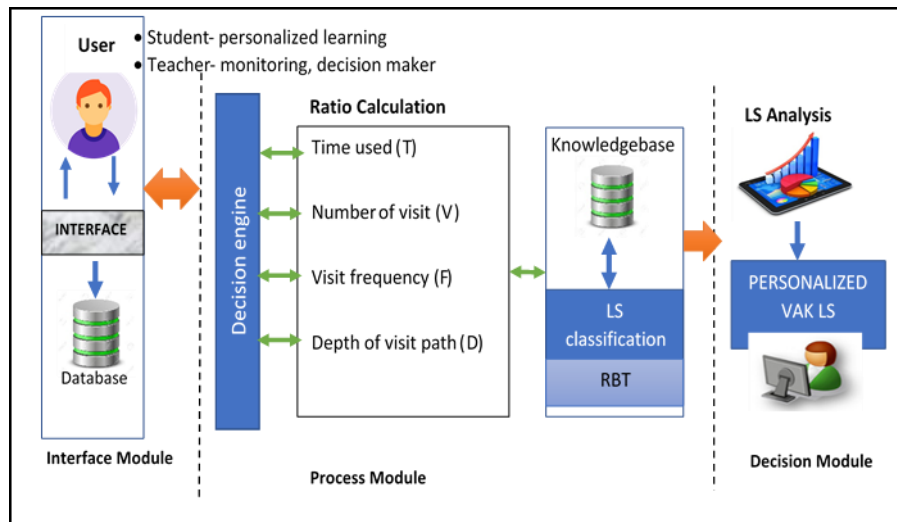


Figure 2: Architecture of VAKLeS

5. Conclusion

This study comprehensively explained the phases involved in a framework for the Visual, Auditory, and Kinesthetic learning style detection based on student behavior. The proposed framework contained three main phases: (1) identification of the behavior for each learning style, (2) the learning style determination of the behavior, and (3) the prediction of the learning style. Four parameters of behavioral patterns have been identified and used in the determination of student learning styles: (i) the time spent, (ii) the number of visits, (iii) the visit frequency, and (iv) the depth of the visit for each learning style object. In addition, the architecture of the VAK learning style (VAKLeS) Decision-Support System is presented with detailed illustration. The development of the architecture was based on three modules of the Decision Support System: the interface, process, and decision modules. The flow of architecture was demonstrated by applying a learning style detection domain focusing on the VAK learning style models. In future, the framework and DSS will be evaluated to measure the effectiveness of the overall system in multiple domains. This study recommends a generic framework for learning style detection be developed for other applications by applying different methods and models according to the relevant domain.

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7. References

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SUB-SESSION 12

TOURISM AND HOSPITALITY

A STUDY ON THE ACCEPTANCE OF BETEL LEAF SOAP AMONG STAFF OF THE DEPARTMENT OF TOURISM AND HOSPITALITY OF POLYTECHNIC MERLIMAU

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ABSTRAK: Leaf ‘sireh’ or Piper betel is a native herb of the Piperaceae family is cultivated mostly in South and Southeast Asia, from Pakistan to Papua New Guinea. The betel leaf contains natural active ingredients that are very useful in traditional and modern medicine. The results of a laboratory studies found that the leaves contain natural antiseptics that can kill germs, bacteria and fungi with the benefit of hemostasis that can accelerate blood circulation and stop bleeding. There are many of betel plant that creeper on the ground or creeper at the fence in idle because many people do not know the importance or benefit that has in betel leaf. For those who work in the industrial sector, especially in the areas of hospitality and food service, they are expected to perform well when dealing with customers who want a clean and fresh body. People who work in the kitchen often suffer from injuries due to sharp knives or equipment that can cause bacterial infections on the skin. Looking at its potential and needs, a study has been conducted to produce a betel leaf soap (BLS). BLS also contains natural ingredients such as plant essential oils and aloe vera. Instead, synthetic, large market soaps are made from petroleum based lathering agents, synthetic fragrances and harmful preservatives. This study was conducted to examine the level of respondents' acceptance of BLS. Questionnaire instruments using the likert scale are used to investigate the level of acceptance to our product were randomly distributed to 30 respondents in Tourism & Hospitality department staffs in Politeknik Merlimau Melaka. Data were analyzed descriptively using SPSS version 25. The analysis showed that BLS was accepted at a good level by the respondents with a mean value of 4.34. In conclusion, this Betel Leaf Soap was received optimally by the respondents.

Key Words: Betel Leaf, soap, likert scale

1. Introduction

Personal hygiene might be represented as the guideline of keeping up cleanliness and grooming the outer body. We have known about the significance of cleanliness for many years. Keeping up personal cleanliness is vital for some reasons like personal, social, well being, mental or basically as a lifestyle. Keeping a decent standard of cleanliness prevents the spread of diseases. Awareness must be created among the people so that they realize the importance of personal hygiene.

The main benefit of soap is for the protection of our body skin. Germs, bacteria and viruses that are around us threaten our health at all times. For that we need extra protection so that we are protected from various diseases caused by germs and bacteria.

Instead, synthetic, large market soaps are made from petroleum based lathering agents, synthetic fragrances and harmful preservatives. Not surprisingly, many customers say that their skin feels better after using organic soap, and sometimes it helps to improve skin conditions such as eczema and acne, rather than causing further irritation. But not only is organic soap the better for a skin. It is better for the environment because it produces less environmental impact, and because the materials are easily damaged and cause fewer problems after they go down the drain. It is also best for animals because their ingredients are already recognized as safe, so no animal testing is required. And ultimately organic soap is better for the economy, as it is often made by small manufacturers, so the money customer spend on it stays in the community.

Several aspects have been assessed and several problem statements have been studied to produce betel leaf soap (BLS). For example, For those who work in the industrial sector, especially in the areas of hospitality and food service, they are expected to perform well when dealing with customers who want a clean and fresh body. Therefore, this product is very useful as it utilizes an organic source that can reduce body odor and refresh the skin, as it contains extract of betel leaf and aloe vera. According to Siti Nadirah Hafidzin, (2015) betel leaf can eliminate or neutralize body odor and unpleasant odor.

BLS is also designed to help accelerate wound healing and also prevent bacterial infections in the skin especially fungus. For this reason, this product contains antiseptic, anti-fungus, and high antioxidants found in the betel leaves. According to M Anem Agro Technology (2017) the leaves have Hydroxyl-chavicol content which helps to speed up blood clotting and helps to shrink and recover the body's tissue from injury. is better for our skin because contains natural ingredients such as aloe vera, and plant essential oils.

The origin of personal hygiene dates back to pre-historic times. Soap like materials found in clay during excavations at ancient sites indicate that the manufacture of soaps has been known since 2800 BC. The engraving on the clay says that the fat is boiled with ash, which is a way of making soap, but there is no reference to the use of "Washing Soap" itself. Such material is later used as a hair shaving aid. About 4000 years ago, when soaps were not known, the Hittites, now better known as Turks, used to heal hands with ashes.

Meanwhile, the Romans used goat fat mixed with firewood to produce soap called 'sapo'. They use 'sapo' to cleanse themselves and treat wounds. Europeans in Europe also know 'sapo'. Not for bathing, but for oiling hair to shiny (John A. Hunts, 2006)

2. Research background

The betel leaves are nutritive and possess an insecticidal and antitumor activity (Gundala and Aneja 2014), antioxidant activity (Jaiswal et al. 2014), neuroprotective activity (Chan and Wong 2014), antidiabetic and antihelmintic activity (Shah et al. 2016), antimicrobial activity (Nouri and Nafchi 2014) and many more. The leaves also contain a variety of biologically active components like hydroxychavicol, chavicol, piperbetol, chavibetol, piperol A, methylpiperbetol, and piperol. The key component of the leaf is a volatile oil known as betle oil (Kumari and Rao 2015, Widawati and Riandi 2015).

Betel leaves contain tannins, sugar and diastases and an essential oil. The essential oil is a light yellow liquid of aromatic odor and sharp burning in taste. It contains a phenol called chavicol which has powerful antiseptic properties. The alkaloid arakene in it has properties resembling cocaine in some respects. An analysis of the betel leaf shows it to consist of moisture 85.4 per cent, protein 3.1 per cent, fat 0.8 per cent, minerals 2.3 per cent, fiber 2.3 per cent and carbohydrates 6.1 per cent per 100 grams. Its minerals and vitamin contents are calcium, carotene, thiamine, riboflavin, niacin and vitamin C. Its calorific value is 44 (Rupa Sengupta, 2017)

Nair and Chanda (2008), were studied the Aqueous and methanol extract of the leaves of *Terminalia catappa* L., *Manilkara zapota* L. and *Piper betel* L., for antibacterial activity against 10 Gram positive, 12 Gram negative bacteria and one fungal strain, *Candida tropicalis*. Piperacillin and gentamicin were used as standards for antibacterial assay, while fluconazole was used as standard for antifungal assay. The three plants showed different degree of activity against the microorganisms investigated. The methanolic extract was considerably more effective than aqueous extract in inhibiting the investigated microbial strains. The most active antimicrobial plant was Piper betel.

Phytochemical investigation on leaves revealed the presence of alkaloids, carbohydrate, amino acids, tannins and steroidal components [8]. The specific strong pungent aromatic flavour in leaves is due to phenol and terpene like bodies [9]. The leaf contains water (85-90%), proteins (3-3.5%), carbohydrates (0.5-6.1%), minerals (2.3-3.3%), fat (0.4-1%), fibre (2.3%), essential oil (0.08-0.2%), tannin (0.1-1.3%) and alkaloid (arakene). It also contains different vitamins like vitamin-C (0.005-0.01%), nicotinic acid (0.63-0.89mg/100gms), vitamin-A (1.9-2.9mg/100gms), thiamine (10-70µg/100gms), riboflavin (1.9-30µg/100gms). Beside these it contains minerals such as calcium (0.2-0.5%), iron (0.005-0.007), iodine (3.4µg/100gms), phosphorus (0.05-0.6%), potassium (1.1- 4.6%). The fresh new leaves contain much more amount of essential oil diastase enzyme and sugar as compare to old leaves. Betel leaf also contain 'Chavicol' that is four times potent as antiseptic agent as compare to carbolic acid. It is a colorless liquid 409 Md. Farid Hossain et al.: Uses Impact of Betel Leaf (Piper

Looking at its potential and needs, a study has been conducted to produce a betel leaf soap (BLS). BLS also contains natural ingredients such as aloe vera and plant essential

oils. The aloe vera plant contains about 96% water. The rest is made up of minerals such as magnesium, zinc, copper, chromium and the antioxidant selenium, vitamins including the antioxidants C, E and beta carotene, 20 of the amino acids required by the body including 7 of the 8 that cannot be manufactured by the body, sugars, enzymes and fatty acids. Aloe Vera acts as a moisturizer and is great for the face prior to the application to prevents skin drying. Aloe Vera helps with sunburn through its powerful healing activity at the epithelial level of the skin, a layer of cells that cover the body. It acts as a protective layer on the skin and helps replenish its moisture. Because of its nutritional qualities and antioxidant properties, the skin heals quicker. (Jewett, June, 2018)

Plant essential oil is a concentrated extracted plant fragrance that often used as an alternative medicine. Essential oils are most commonly used in the practice of aromatherapy. They are either inhaled, or diluted then rubbed on the skin. Essential oils are not meant to be swallowed. The chemicals in essential oils can interact with your body in a number of ways. When applied to your skin, some plant chemicals are absorbed. (Helen, May, 2017)

Essential oils help restore the skin to its natural glory when applied topically with provide hydration, help clear bumps or blemishes and also help significant skin problems like aging, eczema, psoriasis, and acne. (Kiwi Rowan, 2018)

3. METHODOLOGY

3.1 Standard recipe of betel leaf soap (BLS)

The ingredients used to produce this BLS are 28 ml of betel leaf juice extract (extracted from 10 pcs of betel leave), 20 ml of aloe vera juice extract (extracted from 50gm of aloe vera leaf), 2 ml of essential oil, and 35 gm of base soap block.

The ingredients were weighed according to the standard recipe. Then, blend the betel leaves and aloe vera leaves until becomes a liquid. After that, heat 35 grams of base soap block on the boiled container (using a double boiled method) until it becomes a liquids. Put 2 ml essential oil in the mixture, and mix well the ingredients. Pour the soap liquid into the mold container. Lastly lets the soap for 4 hours at room temperature to make it set. The process of preparing the Betel Leaves Soap (BLS) cube is as in Figure 1.

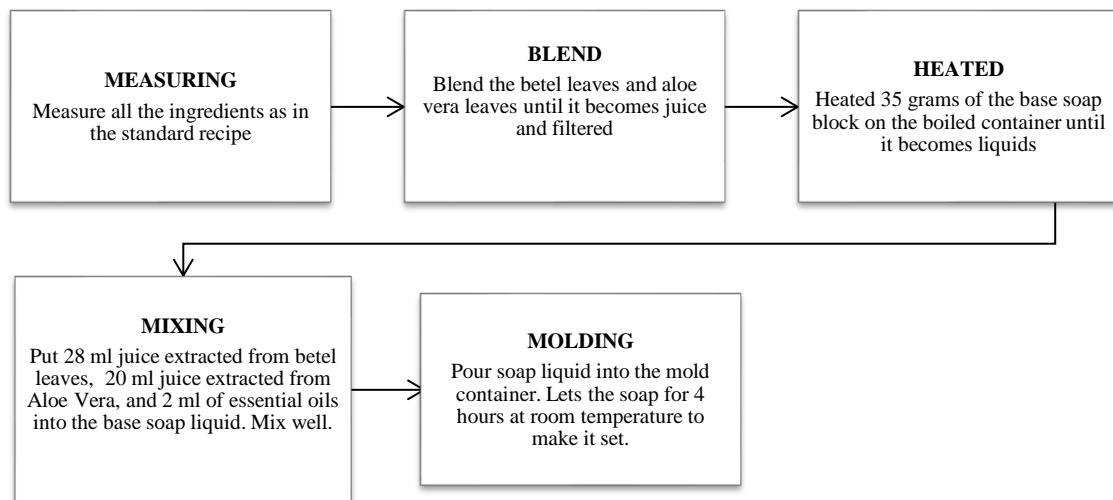


Figure 1: Betel Leaves Soap (BLS) preparation method

3.2 Sampling

3.2.1 Purpose of Respondent

This study was conducted to examine the level of respondents' acceptance of BLS. It is also to introduce them that BLS is a refreshing soap that can use by staffs in Polytechnic Merlimau Melaka. Questionnaire instruments using the likert scale are used to investigate the level of acceptance to our product were randomly distributed to 30 respondents in Tourism & Hospitality department staffs in Politeknik Merlimau Melaka. Data were analyzed descriptively using SPSS version 25.

3.2.2 Questionnaire

The likert scale are used to investigate the level of acceptance to Betel Leaves Soap (BLS).

This data analysis study using the product in the questionnaire that will be used as a means of collecting data for the research. This data analysis is testing the reliability of product submit in addition to rectify any shortcomings that arose during the research is conducting. The results of this research are analyzing using IBM SPSS Statistic version 25. SPSS is the abbreviation of Statistical Package for Social Sciences and it is using by researchers to perform statistical analysis. SPSS software is used to perform quantitative analysis and is use as a complete statistical package that is based on a point and click interface. This data is undertaken to identify how far the overall appropriateness of the use of instruments to survey respondents, especially the use of terms and sentences structures proposed in the instruments. Data analysis allows researchers to easily determine the appropriateness of the language use in the item of the questionnaire that is provided.

4. ACCEPTENCE LEVEL TOWARDS BETEL LEAVES SOAP (BLS)

Analysis in Table 4 showed that the respondents highly accepted the BLS with overall mean value 4.34. Mean score for smooth is 4.11. The respondent agrees the texture of BLS is smooth. Mean score for the aromatic smell, long-lasting scent and strong smell are 4.87, 4.45 and 5.00. The respondent like the smell of Betel soap because have a nice smell such as an aromatic smell. Mean score for attractive colour is 4.03. Next, mean score for easy to bring for travelling is 3.62. Lastly, the overall mean is 4.34. The interpretation is high. Respondents strongly agree that the juice has good colour, texture, smell and flavour with mean value 4.03, 4.23, 4.00 and 4.43 respectively. Table 4 indicates the mean score for each attribute evaluated

Table 4: Acceptance level of respondents towards Betel Leaves Soap (BLS)

	Mean	Interpretation
Smooth	4.11	High
Aromatic smell	4.87	Very High
Long lasting scent	4.45	High
Strong smell	5.00	Very high
Attractive colour	4.03	High
Easy to bring for travelling	3.62	High
Overall mean	4.34	High

4.1.1 Texture

The mean value for texture is 4.1. The interpretation is high. It is because the respondent liked the textures of this soap. The soap has a smooth textures as the filtering process is done during the process of making the soap. Therefore, this betel soap has a very smooth texture.

4.1.2 Smell

The mean value for the aromatic smell, long-lasting scent, and strong smell are 4.87, 4.45 and 5.00 interpretation are very high, high, and very high. All this because the respondent likes the smell of this product. This soap has an aromatic smell that can help anyone who smell this soap become calmer after smelling soap. This betel soap also has a long-lasting scent which made the respondents will favor this soap because many people are looking for this kind of soap. This soap also has a strong smell. The respondents liked this soap because it had a strong odor. After all, just using body soap would be refreshing and fragrant all the time.

4.1.3 Color

The mean value for an attractive color is 4.03 interpretation is high. The respondent likes the color of betel soap. This is because this soap has a color that will appeal to these respondents. After all, the color of the soap is dark green. Then, the color of this soap is the natural color of the betel leaf without any food coloring. The color of this soap also does not leave any trace of green on the body. This is what makes this soap come more attractive.

4.1.4 Usage

The mean value for easy to bring for traveling is 3.62 interpretation is high. The respondents live this soap because of its small size and easy to carry. Most soaps in the market sell a relatively large size of soap, so with such a small size of this betel soap will make it easier to keep in the bag.

5. CONCLUSION

For conclusion this product which is Betel Soap are accepted by the respondents. The mean score that obtained is at high and very high level. The majority of the respondents accepted this Betel Leaves Soap (BLS). Almost the respondents choose to agree and strongly agree with the questionnaire for the texture, smell, color, usage, and price of the betel soap. Based on findings, the interpretation result for the aspects of texture, smell, color, and the usage is high. This new product will help these staffs do their daily work more efficiently and freshly throughout the day. Lastly, this new product comes naturally with the original of the betel leaves and do not have any food coloring in this product.

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An Emergent of Islamic Tourism and Hotel: A Readiness, Opportunity and Obstacle To Be Solved; An analysis of Hoteliers' Perspective

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Abstract - Islam as a lifestyle is, no doubt becomes an obligatory religious requirement of all Muslims. The influence of Islamic principles extends to not only the Muslims country's administration, social and political, but it also indirectly affects recreation and travel policy. Religion, thus influences the operation of tourism policy-making as well as destination setting and development. Enormous literature was found in discussing the opportunity and needs in developing Islamic hotel, particularly in Islamic countries like Malaysia. However, very few were found on what response it would be from the industry players as well as the government stand and its readiness in term of legislative work towards such implementation. Hence, this study aims to explore the view of hotel industry players on the setting up of Islamic hotel and to relay the real situations of how the hoteliers see the prospect of this industry. To make it more reliable, an analysis towards the legislative effort by the government authorities towards this setting was made as these two groups are the anchors in realising the establishment of Islamic hotel brands. This study embarks into a doctrinal and qualitative research which involve an exploratory of some related regulations and policies as well as a semi-structured and interview in-depth with hotel industry players. Three reputable hotels were chosen to share their view, respectively. The findings of this research positively showed hoteliers readiness towards this current highlighted idea and predicted a future bright of this industry. However, a little doubt arises as to the limited effort of government in upholding Islamic tourism industry generally and Islamic hotel mainly. It is hoped that this paper may serve as an eye-opener to tourism stakeholders principally on a government side for a much more effort to be done in realising the vision of being a world leader in Halal hub industry.

Keywords: Hoteliers, Islamic tourism, Islamic hotel, Malaysia, Syariah Compliant hotel, Obstacles, Opportunity.

1. Introduction

Development and improvement of Halal business in Malaysia turns into an intriguing issue to be viewed and to have further investigation on how people foresee the prospect of this new industry. Halal industry is a fast emerging sector and has attracted many parties from various areas that include the manufacturer, local and foreign investor, retailer, academician and many others.

From tourism industry outlook, the tourists from Muslim countries have living on the way of Muslims under the practical frame of religious principles strictly. With this

reason, whatever actions done in their daily lives whether it will be the subject of the consumption, attire, or daily conducts all must be approved by the religion or famously called as “Halal”. Therefore, the food with a symbol of Halal is the food trusted by Muslim that it can be consumed safely. In addition to the food, the preparation of some operating place of Halal food should be at par with the requirement of Muslim tourists (Jurattanasan & Jaroenwisan, 2014). Having looking to this opportunity and importance of this, Malaysia should have the operating place of Halal facility covering foods, accommodation, travelling and etc. This idea includes all level of hotels and other sort of available accommodation. Besides of bringing some foreign currencies into the country, it causes confidence to the tourists particularly Muslims tourists and hence aided in the tourism promotion for our country.

Tourism in essence helps in boosting up the national growth. Malaysian government started launching a series of initiatives to support this wave of visitors and turn Malaysia into a global destination. A series of Visit Malaysia Year has been announced. Interestingly, in 2019, an eVisa system was introduced that allows tourists to apply for a Malaysia visa entirely through online in just minutes, saving them long queues at the embassy or consulate and it is a platform that enables foreign nationals to apply for an electronic visa to enter Malaysia at the comfort of their convenience. (Jabatan Imigresen Malaysia, n.d.) This is definitely seen as an initiative and an attempt to become one of the top tourist destinations around the world.

This finding is supported by the statistical data released by Tourism Malaysia which undoubtedly announced that tourism industry contribution was amounting to RM86.1. billions for the year 2019 (Tourism Malaysia, 2020). With this open-hearted expansion, more creativities and initiatives of the government is definitely essential. Malaysia local population itself is constantly increasing from day to day and by now Malaysia 2020 live population is estimated at the figure of 32,489,663 (Worldpopulationreview.com, 2020). By this figure, 63.7 % are Muslims. Therefore, the progress of halal industry need to be closely monitored as halal industry is seen to be a fast emerging sector and has attracted various parties concern particularly in Malaysia as a country which was worldly acknowledged as the pioneer and leader in Halal world (A. Musa et al., 2019).

Due to this, tourism and hospitality industry is striving themselves to be at par with the other halal sectors and enthusiastically producing Islamic tourism merchandises. Thus, Islamic Based Hotels which alternately be termed as “Syariah Compliant Hotel” or “Muslim-Friendly Hotel” (MFH) are among the products which need to be given attention to accommodate this current global demand. Among the ten Organization of Islamic Cooperation (OIC) countries, Malaysia was awarded as the best top halal friendly holiday destination based on facilities and services offered to Muslim tourists for 9 years in rank except y in 2019, in which Malaysia shared this top rank position with Indonesia (Mastercard & CrescentRating, 2019). In addition, many scholars opined that, in order to grasp the halal market, hotels and residence operators, play an important role in attracting Muslim customers. However, prior to this implementation, a deeper understanding of the needs, behaviors and preferences of the Muslim customer is needed (M. Battour & Ismail, 2016).

Besides the various parties’ involvement, the industry still requires a strong authoritative body to govern the affairs of halal industry. The Trade Description Act 2011 which creates the by-laws of Trade Description (Certification and Marking of Halal) Order 2011 has vested the power to issue halal certification to the government appointed body

mainly Jabatan Kemajuan Islam Malaysia (JAKIM) and to all Islamic authority bodies of each state, formally known as Majlis Agama Islam Negeri. It is also within this power that JAKIM needs to monitor the preservation of compliance of Halal Certification requirements by the certified products or services. To carry out this duty, JAKIM is vested with a wide power covering the legislative, executive and judiciary role. However, by virtue of the provision in the Constitution and the law on the setting up of a government agency, there are still few unresolved issues regarding the status and power of JAKIM in executing the existing assigned duty.

2. The Wide-ranging Opportunity of Islamic Tourism and Islamic Hotel

Few literatures were found to give various definition on the notion of Islamic Tourism. Among others, Organization of the Islamic Countries (OIC) denoted Islamic tourism as Muslim tourists travelling to destinations in which Islam is the dominant faith of the population, with religious purposes forming the majority of their intention. As it is evident from the name, Islamic tourism is mainly targeting people with Islamic beliefs in particular, though it could also have a universal appeal even for the non-Muslims due to a multitude of reasons like fair pricing, peace and security, family-friendly environment and hygiene etc. (The Statistical & (SESRIC), 2017). In contrast, Henderson (2009) defines this concept in a broader manner; in that Islamic tourism is defined as travelling activities partaken by Muslim tourists that conform to Islamic teachings, although their travelling purposes might have little to do with religious believes or practices.

After the tragic event of Sept 11, 2000, tourists from the Middle East were reluctant to go for holiday in UK and US. They started to shift to another Muslim Countries such as Malaysia. Past literatures showed that most of the Middle East countries were endeavouring to develop Islamic hotels. The introductions for Shariah Compliant hotel in European cities have been led by Almula Hospitality. UAE and Balkan for instance highlighted Islamic hospitality in its tourism industry. Balkan for example already ranked the fourth in Halal Journal's Top Halal Destination around the world (Nor Shahrul Nizam & Norzaidi, 2012).

Based on data from travel consultants Crescentrating Halal Friendly Travel (Singapore) and Dinar Standard (United States), global Muslim tourist spending in 2011 reached 126 billion dollars and is expected to increase rapidly in 2020 at 192 billion dollars.(Adirestuty, 2019)

Generally, Halal tourism stressed on the importance of awareness and observance of Syariah rules in its implementation as agreed by Battour et al., (2010). However, others viewed that the availability of halal food is the prime factor determining the choice of destination for Muslim tourists (Bon & Hussain, 2010). In the interim, a further research done by Battour et al., (2018) suggested the need to consider non-Muslims' perception and experiences in halal services, including halal tourism, as halal services were not exclusively for Muslim customers but it also extends to Non-Muslims needs. This understanding is also important in order to address the prejudice or sentiments that are still existing among some non-Muslims against Islam (Muhamad et al., 2019a).

Islamic tourism or Halal tourism is recently acknowledged as among the worthwhile profitable product. It come with a wide range of potential for businesses and travel related entities (Ahmed & AKBABA, 2018). According to Mastercard & Crescent rating (2017),

it is also one of the world's highest spending tourist markets. It came to fulfil the demands of Muslim tourists who want to get an exclusive holiday package which adhered to Islamic values and principles (Battour & Ismail, 2016; Elasrag, 2016; A. Musa, 2020). In 2019 halal tourism covered 13 % of the value of the global tourism industry. The global spending by Muslim tourists is expected to reach the total of 192 billion dollars in 2020. That is a rise of 126 billion dollars compared to 2017. Halal tourism is seen as a new and refreshing angle within the industry of tourism, designed to meet the needs and beliefs of an Islamic culture (*Tourism | Halal.Plus*, 2019). Lately, several Muslim-minority economies, such as Japan and New Zealand, have started to promote their own brand of halal tourism (Muhamad et al., 2019b)

The latest statistic of 2019 revealed, 130 countries were become destinations of halal tourism. Of which 46 were Muslim countries destinations and 82 non-Muslim destinations (Mastercard & Crescentrating, 2019). In 2019, Malaysia, Indonesia, United Arab Emirates, Turkey, Saudi Arabia, Qatar, Morocco, Oman, Bahrain and Iran respectively were top 10 destinations of Halal tourism from Muslim Countries whereas Singapore Thailand, United Kingdom, South Africa, Hong Kong, Japan, Taiwan, France, Spain and United States respectively were from non-Muslim Countries (Mastercard & Crescentrating, 2019). From Muslim countries, Malaysia and Indonesia in 2019 are now sharing the same rank as the best destination of Halal tourism whereas from non-Muslim countries Singapore is positioning itself as the best destination for Muslim holidays.

Continuous Development of Islamic Hotel in Malaysia

Islamic hotel which usually being referred as Halal hotel or Syariah-compliant hotel (SCH) would generally be defined by means of a hotel that providing you with services following the Islamic law and principles. The SCH is an all-incorporating idea that goes beyond the serving of halal food and drink but includes all aspects a hotel's operation procedures that would be managed based on Syariah and Islamic law as claimed by Zulkifli et al., (2011).

A hotel declared itself as "Islamic" claims a market position that requires compliance with Islamic law. Similarly, "Halal-friendly" invokes compliance with the requirements of Islamic law. As Islamic law is clearly codified, these claims lead into a minimum dedicated prayer space and halal food would be available and that no pork or alcohol derivatives (Alserhan et al., 2018)

Malaysia travel industry through stages of discussion with various tourism stakeholders has taken a magnificent initiative by building up an Islamic Tourism Center (ITC) on February 2009 to improve the turn of events and development of Islamic travel market. Thus, ITC has assumed liability to build up a system to create and to ensure Islamic tourism industry runs effectively. (Kamarudin & Ismail, 2012).

In comparison with Indonesian government which has made efforts to develop sharia hotels by issuing Ministerial Regulations on Tourism and Creative Economy on Sharia Hotel Business Guidelines No. 2, 2014. Guidelines for implementing sharia hotel business as stipulated in the ministerial regulation carry a major contribution to development sharia hotels in Indonesia. (Adirestuty, 2019)

According to *Hotels - Malaysia | Statista Market Forecast*, (n.d.), hotels segment in Malaysia is projected to reach US\$622 million in 2020, and the revenue is expected to

show the annual growth rate (CAGR 2020-2025) of 18.9%, resulting in a projected market volume of US\$ 1,444 million by 2025.

In addition, Malaysia travel industry marked a progressive tourists' arrivals of 4.8% for the month of January until May 2019 which brings to a total of 10,954,014 tourists. The ASEAN countries meanwhile still being the biggest contributor of international tourist influxes to Malaysia with a contribution of 69.2%. The tourists of Indonesia, Singapore and Thailand are the main contributors towards this statistic. (A. Musa, 2020)

Table 1: Tourists Arrivals and Receipts to Malaysia, 2013-2019
(Source: <https://www.tourism.gov.my/statistics>)

YEAR	ARRIVALS	RECEIPTS (RM)
2019	26.10 million	86.1 Billion
2018	25.83 million	84.1 Billion
2017	25.95 million	82.1 Billion
2016	26.76 million	82.1 Billion
2015	25.72 million	69.1 Billion
2014	27.44 million	72.0 Billion
2013	25.72 million	65.4 Billion

Source: (Tourism Malaysia Corporate Site, n.d.)

The above table proved the huge arrivals of tourists to Malaysia for the year from 2013 to 2019. The data showed the constant growth of tourists' arrivals and receipts. This continuous growth of tourism industry in Malaysia has contributed towards the increased number of hotels in Malaysia. Among the ten Organization of Islamic Cooperation (OIC) countries, Malaysia was awarded as the best top halal friendly holiday destination based on facilities and services offered to Muslim tourists for 9 years in rank except y in 2019, in which Malaysia shared this top rank position with Indonesia (Mastercard & CrescentRating, 2019). It was world recognition that Malaysia is a leading country in introducing an all-inclusive standard for halal merchandises (Shafaei & Mohamed, 2015).

For instance, De Palma hotel, Ampang is one of the hotels that comply with the Islamic concept. It offers 204 rooms and suites equipped and decorated with modern features. It also has Islamic floor on level 6, businesses floor on level 7,8,9,10,11. Then the Islamic floor at level 6 has specific Islamic room type that has been open for service since 2010. On April 2011, the Halal Journal Award 2011 awarded the recognition to the hotel as "The pioneer Hotel in Syariah Compliant" (Zulkifli et al., 2011).

A data obtained from *Halal Directory*, (n.d.), proved that there are 431 hotels and resorts for all states in Malaysia are currently recognized as Halal Hotel by JAKIM which is the core body that administers Malaysian halal certification. However, such Halal recognition was only referred to the food and beverages as well as kitchen section of that particularly hotels and resorts.

Meanwhile, interestingly, In July 2019, 12 hotels throughout the country were acknowledged as Muslim Friendly Hotel by Islamic Tourism Centre having fulfilled all the needed requirements to get such an outstanding recognition. The hotels are: Movenpick Hotel & Convention Centre KLIA; Hotel Grand Bluewave Shah Alam; The Light Hotel Penang; Adya Hotel Langkawi; PNB Perdana Hotel & Suites On the Park Kuala Lumpur; PNB Perdana Kota Bharu; TH Hotel & Convention Centre Terengganu; Zenith Putrajaya; Tamu Hotel & Suites Kuala Lumpur; PNB Ilham Resort Port Dickson; Hyatt Regency Kota Kinabalu; and Grand Darul Makmur Hotel in Kuantan (A. Musa, 2020; The Star, 2019).

Therefore, as Islamic hotels draw their justification from the Islamic Law, their business model should be guided in terms of what kind of offering, behaviour, or hospitality is required, and they also should alert on those things, which they are forbidden to provide (Alserhan et al., 2018).

3. The Statement of Problem and Arising Obstacles to be Solved

Despite of this magnificent update relating to Islamic tourism, a question remains as to the existence of guidelines and proper policy in the development of Islamic Hotel in Malaysia. The statement of the problem, at the moment brought to the question of is there any legislative document that could be tied directly to the Islamic tourism generally and Islamic based or halal hotel particularly. An analysis of the main governing law that so much in control of Malaysian tourism that is Tourism Industry Act 1992 (amended 2018), with its subsidiary legislation, and rules revealed that, there is no provision for MFH or Islamic tourism in this Act. Unlike the Halal regulatory framework which derived its power of authority from Trade Description Act 2011, MFH regulatory framework lacked this. Without a proper and adequate legislative power, it is difficult to enforce as well as to manage the MFH as a practical system.

In 2015 Malaysia Standard Department, had come out with Muslim-Friendly Hospitality Services Standards (MS 2610:2015) which become Malaysia standard on this matter. However, this MS 2610 is quite loose in its content as it does not cover all important aspects of travelling much less on the legal side of it. MFHS standard simply covers three main components which are accommodation premise, tour packages and tourist guide. (A. Musa, 2020; Sahir & Azizan, 2018)

This concern was also shared by (Muhamad et al., 2019a) which suggested that the execution of halal travel industry by Muslim minority nations is among the critical problems that need to be addressed because of the need to guarantee that the products and services supplied are fully in compliance to the Islamic guidelines, while simultaneously, to guarantee that the nations can shape their halal industry into a serious enterprises.

The shortfall of laws and legislation on this matter will create undesirable problem. As a proof, the huge existence of various self-declared Islamic hotels or Syariah Compliant Hotel or Muslim Friendly Hotel is considered to be the indirect consequence behind the problem. The situation become worse when some hoteliers can easily obtain such recognition from any organisation available locally and abroad.

1.16 Arising Problem Due to the Various Standards Available Worldwide

Islamic Hotel Standards either by a name of Syariah Compliant or Muslim Friendly or Halal Hotel Standards have been developed by government bodies, private entities as well as local, regional and international organizations in both the Muslim countries and non the Non-Muslim countries. This became another obstacle in having a uniform laws and regulations as well as a standpoint towards the establishment of the so-called Islamic hotel.

Table 2: Key Features from Selected Conventional and Alternative Standards
(Source: Muslim Friendly Tourism: Regulating Accommodation Establishments in the OIC Member Countries)

Standard	Country	Standard Releasing Body	Type of Body	Criteria Measured	Examples of Establishments Implementing Standard
MS 2610:2015	Malaysia	Standards Malaysia	Government	Various MFT elements (food, prayer, wellness, training) at hotels, tour operators	Grand Seasons Mandarin Oriental
TS 13683⁹⁵	Turkey	TSE (Turkish Standards Institution)	Government	Various elements beyond basic MFT (management, offerings, design, operations, conduct)	Ikbal Thermal Hotel (application in process)
Rulebook of Certifying and Categorization of Hospitality Services, ...	Croatia	Center for Halal Quality Certification	NGO ⁹⁶	Various MFT elements (food, prayer, wellness, recreation)	Esplanade Westin
Crescent Rating⁹⁷	Global	CrescentRating	Private	4 main criteria with 20 elements (related to food, prayer, Ramadan, and recreation)	Grand Blue Wave (Malaysia); Nouvo City Hotel (Thailand); Aljawhara Gardens (Dubai)
Salam Standard	Global	Lagitasu Travel	Private	More of a directory with MFT attributes than a standard	>10 k hotels, incl. Archipelago Hotel Group, chains ⁹⁸
Taiwan MFT certification	Taiwan	China Muslim Association	Government-backed, NGO-run	(standard n/a; likely elements are prayer and food related)	Ambassador Hotel Taipei ⁹⁹
Sofyan Standard¹⁰⁰	Regional (from Indonesia)	Sofyan Hotels	Privately	Full standard n/a, but covers operation, offerings	Radana (Bali)
Instituto Halal internal standard¹⁰¹	Spain	Instituto Halal	NGO-run	Basic MFT elements (Quran availability, prayer rug, Halal food, Qibla, prayer time tables, prayer room)	Alanda, Hotel El Palace, Tryp Meliá Córdoba

Source: DinarStandard

(Source: COMCEC (2017))

The table above explained the key features from a list of selected conventional and alternative standards. The table highlights the criteria being measured, and whether the standards are mandatory or voluntary.

The most notable one is Malaysian Standard MS 2610:2015. This standard was prepared by Malaysia's Department of Standards in 2015 and is now under first review. The second important standard available is the Islamic Quality Standard (IQS 1–7) which started from 'Basic' up to 'Super Excellent Luxury' for hotels. It was developed and introduced by the Universal Crescent Standard Center (UCSC) and Universiti Teknologi MARA (UiTM), Shah Alam in Malaysia. So far, The IQS was awarded to the hotels from Turkey and Malaysia, namely IQS 7 to Caprice Gold Palace, Istanbul, Turkey, IQS 5 for Termal Palace Hotel, Izmir, Turkey, IQS 3 to Grand Bluewave Hotel, Shah Alam, Malaysia and IQS 2 for De Palma Hotel Ampang, Malaysia. Thirdly, Crescent Rating Standard Crescent Rating developed and launched its MFT rating system/standard in 2008. It has since been voluntarily adopted by hotels in several countries. Crescent Rating has developed its MFT standards as part of a larger Muslim travel products portfolio

including apps, a travel portal, consulting services, and travel data. The Salam Standard originated in Malaysia in 2015 was also another in the list. It was introduced by a travel company, Lagisatu Travel (tripfez.com). Over 50,000 Muslim travellers gave their feedback about key MFT criteria to help shape the Salam Standard. Turkey's MFT Standards and Regulations Both the Ministry of Culture and Tourism and the Turkish Standards Institution (TSE) are working on the development of MFT sector. The former had focused on developing Turkey's tourism sector, while the latter is acting in response to demand from accommodation providers and lastly, SMIIC The Standards and Metrology Institute for Islamic Countries (SMIIC), which is an institution working under Organization of Islamic Cooperation (the OIC), is also developing an MFT standard in response to requests from the OIC member countries.

1.17 Halal Certification Problem in Islamic Tourism

According to Suharko et al., (2018), given the circumstance of the arising number of Muslim tourists around the globe, particular needs required for Muslim tourists, a number of goods and services, such as Halal food, Halal hotels, Halal resorts, and Halal restaurants are therefore required. However, the provision of Halal goods and services must be complemented with the Halal certification issued by the Halal Certification Organisation (HCO).

In Malaysia, Jabatan Kemajuan Islam Malaysia (JAKIM) is the core body that administers Malaysian halal certification. JAKIM issues the halal certification logo and approves products which strictly fulfill the halal requirements in accordance to the Shariah laws. Apart from JAKIM, the State Islamic Religious Departments (JAIN) or State Islamic Religious Councils are also accepted bodies for certification. In addition, there are 84 foreign certification bodies that have been recognized by JAKIM as of 5th February 2020 (JAKIM, 2020).

For the purpose of synchronization and coordination, JAKIM is working closely with SIRIM (Standards and Industrial Research Institute of Malaysia) and DSM (Department of Standards Malaysia) together for the development of a Malaysian halal food standard. After the amendments of the Trade Description Act 2011, JAKIM has been authorized to carry out enforcement activities against any business holder or individual who misuses the halal logo.

A lesson should be learned from the Malaysian halal regulatory problem in its infancy time. Due to the lacking of sufficient laws and legislation governing halal industry at that time, a series of halal logo were flooding in the halal market, of which some were doubtful in characters and implementation. Halal self-declaration were rampant to the extent of which anyone could declare their products and services as halal, with no legal repercussion from the authority.

According to Asa (2017), Halal certification is a means to ensure customer satisfaction, assurance, and reliance. Furthermore, it requires not only the food served to be halal, but also the entire process involved in producing it. As such, Halal certified food demands a high level of hygiene, certain standards of cleanliness, safety, and nutrition which fulfils the needs of consumers.

Nor Amrina Dahlan (2016) has clearly concluded law and other regulations are related. Both are needed for the establishment of Halal regulatory framework for Halal certification of hotel in Malaysia (Nor Amrina Dahlan et al., 2016).

4. METHODOLOGY

This study employed an approach of Qualitative research with a combination of doctrinal analysis on various laws and legislation. This was conducted as to support the idea and finding from the interviews conducted towards the key stakeholders in tourism industry namely the hoteliers and the relevant government authorities. It was done to relay the real answer of the intended objective of this research in looking for an answer on the readiness of these main stakeholders towards the idea of pioneering in Islamic tourism industry and to find an answer on the urgent obstacle to be solved. Interviews were normally for lasted 1-2 hours and this interviews were definitely being audiotaped to ease the process of transcribing and analysing the raw data. After the initial interviews was done to the first identified informant, the informant was genuinely requested to recommend other stakeholders whom they thought had relevant characteristics and knowledge about the study topic. This concept more towards a snowball sampling technique. (Berg, B.L, 2004). Therefore, in this study, an interview with prominent public authorities and hoteliers directly involved in this issue were properly transcribed and analysed.

5. DISCUSSION ON INTERVIEW’S FINDING

Table 3 showed the interview’s finding conducted in this exploratory study. As this is an exploratory study, therefore the study has interviewed 3 prominent hotels to get the managers’ inputs as to whether these hotels are Syariah compliant. The findings are shown in Table 3 below. As a whole, the three hotels, showed their understanding as to the meaning of the Islamic hotel. An observation and interview feedback towards their attitude and management reaction inherently portrayed their readiness and accepted response to the idea. The apparent similarity for the three hotels concerned is the implementation of the existence of the Holy Quran in all their guest rooms and providing the basic facilities for praying purposes such as prayer mat and convenience space. This showed that the said three hotels understand the concept of the Syariah compliant in running their daily operation.

Table 3: Findings of interviews conducted with Hotel Managers

No	Scope of Discussion	Hotel A	Hotel B	Hotel C
1	The meaning and understanding of Syariah compliant	<ul style="list-style-type: none"> • Providing a surau (a house of worship for Muslims) that can perform the Friday and congregational prayers. • Hotel surau which is active with reminder, forum, night devotion & 	<ul style="list-style-type: none"> • Paying of business tithe. • Providing Quran, prayer mat, prayer clothe, sarong in every hotel room. • Sounding of the recitation of the Quran for one hour for the guests present during the 	<ul style="list-style-type: none"> • Providing swimming pool for Muslim women, babies, children and adults. • Halal (legitimate according to

		<p>congregational prayers.</p> <ul style="list-style-type: none"> • Breaking of fast, terawih prayer and taking midnight meal in the month of Ramadan • Friday prayer at the hotel surau • Providing an Islamic floor at the second floor. • Listening to the recitation of the verses of the Holy Quran and Hadis for 24 hours continuously. 	<p>month of Ramadan before the commencement of the breaking of fast gathering</p> <ul style="list-style-type: none"> • Inviting of external male Quran reciters to together perform the terawih prayer. • Arrangement of event for congregational dawn prayer at Masjid Muhammadi. • Providing guests with free transportation to and from masjid. 	<p>Muslim law) not only pertaining to food but also concerning to the arrangement of tables and in the rooms.</p> <ul style="list-style-type: none"> • Providing prayer mat, Quran and soap, tooth brush that must be of halal. • Does not sell beers • Ensure that all revenue is halal.
2	The body that issue, monitor and enforce the laws	<ul style="list-style-type: none"> • Department of Islamic Development Malaysia (JAKIM) • Selangor Islamic Religious Department (JAIS) • Department of Consumer 	<ul style="list-style-type: none"> • Department of Islamic Development Malaysia (JAKIM) • Kelantan State Department of Islamic Affair (JAHEIK) 	<ul style="list-style-type: none"> • Department of Islamic Development Malaysia (JAKIM) • Department of Health • Terengganu State Secretary Office (SUK)
3	Problem and challenges	<ul style="list-style-type: none"> • The opinion of the society and the outsiders pertaining to the shariah compliant concept. • Many people do not understand the “syubhah” concept and difficult to change their opinion. • Accreditation from JAKIM because the hotel has been compliant with more guidelines imposed 	<ul style="list-style-type: none"> • The question pertaining to the preparation of alcoholic drink, providing of pub or bar for foreign tourists. • Having limitation of swimming pools separating the swimming pools between male and female. 	<ul style="list-style-type: none"> • Complaints from guests in the Trip Advisor and online. • Foreign tourists who do not understand the culture and regulation of Malaysia. • Complaints about the liveband at

		by ITC (Islamic Tourism Center).		the Tabung Haji hotel. <ul style="list-style-type: none"> • Demand for the provision of alcoholic drink for foreign tourists.
4	Income and promotion	<ul style="list-style-type: none"> • Profit is from investment, sponsorship and companies that make events and charity at the hotel. 	<ul style="list-style-type: none"> • Profit is from investment, sponsorship and companies that make events and charity at the hotel. 	<ul style="list-style-type: none"> • Profit is from investment, sponsorship and companies that make events and charity at the hotel.
5	Contribution and proposal	<ul style="list-style-type: none"> • To extend their existing surau. • To establish their branch hotel in Kedah • To add more Islamic floors and the practice of prayer reading. 	<ul style="list-style-type: none"> • To expand and spread more the hotel concept that provide courses on hotel industry, hotel management and products. • Establish an Islamic hotel chain officially as model for Islamic hotel chain. 	<ul style="list-style-type: none"> • To have the Mosque Programme • To allow the public to utilise the surau for dawn prayer lecture for free.

A closer look to the above data showed the pattern of responses between the three informants were almost similar. They seem to agree that a future proper drafting of inclusive Islamic hotel guidelines need to be clearer as to avoid confusion among the hotel practitioners themselves as well as the public in general. The responses also portrayed that the existing guidelines and policies are still not enough to cater on a wide and various issues in the development of Islamic hotels. For example, a clear explanation on the standardized characteristic of an Islamic Hotel vis a vis Syariah Compliant Hotel or the so called of Muslim Friendly Hotel. This interview data also proved that all these hoteliers are actually ready with this concept of Islamic hotel as they already attempted to prepare at least the basic needs of Muslims such as the availability of the Holy Quran and basic facilities for praying purposes. They have never associated it with their profit or loss. As for them, whatever their image is, the profit generally come from a good investment strategy as well their constant promotion approach. It was also a list in their action plan to extend and provide much more facilities to equip and satisfy Muslims tourists' needs

such as by extending their existing room for congregational prayer and even to have a separation of swimming pool facilities between man and women and some even planned for a specific Muslims floor.

The central concern now is the urgent action by the relevant stakeholders particularly the government side to tackle or at least minimizing all the arising obstacles and hence reducing all the incoming chaos and problems.

6. CONCLUSION

Seeing this phenomenon, it is vital for commercial enterprise humans within the travel and tourism sector to offer Islamic standardized facilities to attract the eye of Muslim tourists. It is said that hotels which can attract attention, provide satisfaction and maintain their customers are hotels that can survive in the long run. Therefore, it is fundamental for hotel managers to understand the relationship between the needs of tourist satisfaction with the facilities of the hotel where they stay, and their intention to return (repurchase intention). Undoubtedly, religious identity appears as a crucial role in shaping consumption experiences including hospitality and tourism choices among Muslim customers. tourism development in Malaysia had steadily grown from an alternative sector to become a major component in the national economic structure. From Malaysia outlook, there exists vast tourism development potential in Malaysia. Ministry of Tourism plans and implements policies and performs regulatory role, while marketing and promotion are conducted by Tourism Malaysia. Significant efforts were and continue to be devoted to the development of the tourism sector. From the perspective of Halal industry, the tourism industry has started to grasp and address the distinct needs of Muslim travellers. Research has indicated the readiness of industry players as well as a vast opportunity for Islamic tourism in generally and Islamic hotel in particular. However, the research indicated that there were some critical obstacles that need to be urgently solved especially by the relevant public authorities.

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SUB-SESSION 13

SOCIAL ENTREPRENEURSHIP

An Emperical Study of Factors Affecting S-commerce Purchase Intention among Students

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Abstract – The increased acceptance and usage of social media has given rise to social commerce (s-commerce) yet, little is known about on consumers' engagement with firms in ways that lead to s-commerce. Therefore, this study addresses this gap by adopting a Technology Acceptance Model to investigate the factors influencing the S-commerce purchase intention among students. Using a quantitative research method, 265 students were selected through simple random sampling technique from one of the public universities in Kelantan. Data were analysed using regression analysis. Findings showed that there was a significant relationship between perceived ease of use and perceived on social commerce purchase intention. The study provides a better understand on customers' purchase intention which then help the company to plan and

Keywords: Perceived Ease of Use, Perceived Enjoyment, Perceived Usefulness, Social Commerce Purchase intention, Technology Acceptance Model.

1. Introduction

Social media such as Facebook, Twitter, Instagram, Google Plus and Youtube are among the important platform for electronic commerce (e-commerce) for the past years. The advancement and high acceptance of the social media platforms create virtual online communities that lead to the emergence of new shopping trends known as social commerce (s-commerce)(Abed, 2018; Akman & Mishra, 2017). According to Yadav, de Valck, Hennig-Thurau, Hoffman, and Spann (2013), s-commerce represents as

“exchange-related activities that take place between and are influenced by social network users in computer mediated social environments, where the activities correspond to the need recognition, pre-purchase, purchase, and post-purchase stages of a focal exchange”.

Purchase intention plays an important role in influencing company profitability. It is considered as one of the vital inputs to measure consumer buying behaviour which then able to help the companies to plan and strategise their sales. A report by PricewaterhouseCoopers (2016) found that nearly 45% of 22,618 digital buyers from the worldwide said that reading reviews, comments and feedback on social media influenced their digital shopping behavior. Therefore, there is a need to explore some the factors that influence the of consumers’ purchase intention in s-commerce.

Past studies showed an increase in studies on purchase intention and s-commerce. Cho and Sagynov (2015) conducted a survey of 216 respondents to examine factors that influence consumers’ intentions to engage in s-commerce. Findings of the study showed that three indicators such as perceived usefulness, perceived ease of use, and trust had a statistically significant effect on customers’ purchasing intention. While Chen, Hsiao, and Wu (2018) revealed that different gender showed a different result on the factors influence customers’ purchase intentions. The study highlighted that that women depends on subjective emotional factors (degree of flow, enjoyment, and perceived usefulness) in purchasing decision-making. In light of the aforementioned, this study rries to anwer following research questions (RQs):

RQ1: What is association of perceived usefulness factor’s that influencing consumer purchase intention in social commerce?

RQ2: What is association of perceived ease of use factor’s that influencing consumer purchase intention in social commerce?

RQ3: What is association of perceived enjoyment factor’s that influencing consumer purchase intention in social commerce?

This paper is structured as follows: Section 2 covers the past studies on Technology Acceptance Model (TAM), social commerce and three factors on purchase intention. Section 3 explains the methods used in the research. The analysis and results of the study are present in Sections 4 and section 5 concludes this study.

2. Literature Reviews

Technology Acceptance Model

Technology Acceptance Model (TAM) was introduced by Fred Davis in 1986. TAM has been directly adopted in research and is considered as an established model in understanding technology acceptance Gefen et al (2003) & W.L.H.Lou et al (2000). The technology acceptance model (TAM) was also applied in a number of the studies. TAM highlights the important roles of perceived usefulness and perceived ease of use, whereas TRA and TPB provide a belief-attitude intention framework to understand individuals' behaviour. Such theories have been widely tested in the IS literature for understanding the adoption of information technology (IT), as well as online shopping behaviour. Thus, there were attempts to empirically examine whether these theories can also be applicable

in the emerging social commerce context. For instance, Chen et al. found that perceived usefulness and perceived ease of use of brand pages on Facebook can entice consumers to spread eWOM.

This model has proven to be a theoretical basis for the use of electronic commerce although it has been used to understand the adoption of computer-based technology in the workplace Chen, Gillenson and Sherrell (2002). According to Davis (1989), there are two variables that influence online shopping behaviour, which is perceived usefulness and perceived ease of use. Both variables have found important factors that influence consumers' intention to use social commerce. There are other variables that motivate consumers to spend on online shopping which is perceived enjoyment Ramayah (2005). This variable is considered as the third external variable in TAM that is believed to influence the intent and attitude of e-commerce users Cha (2011).

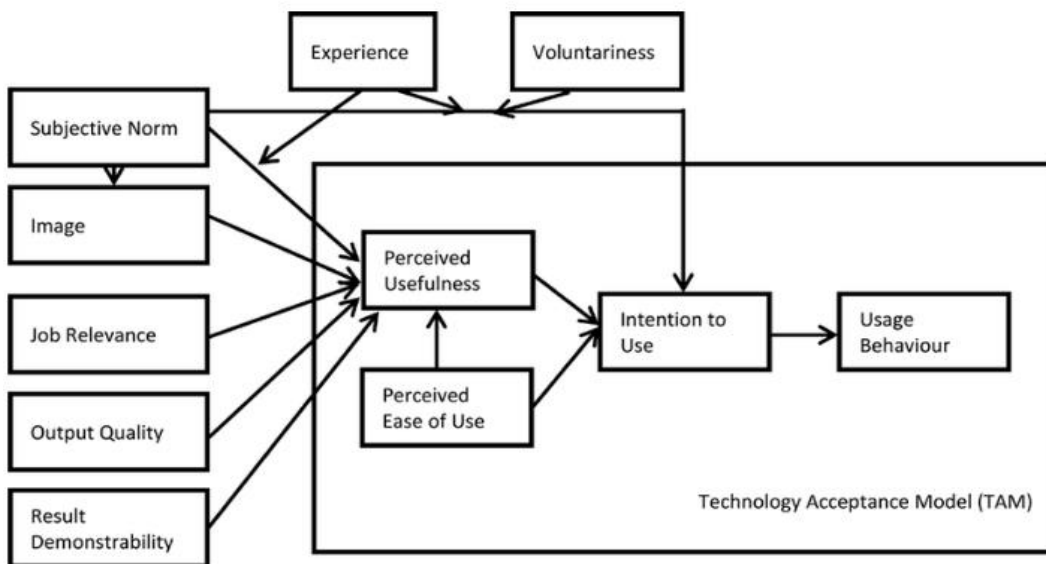


Figure 2.1: Framework of technology acceptance model 2 (TAM2)

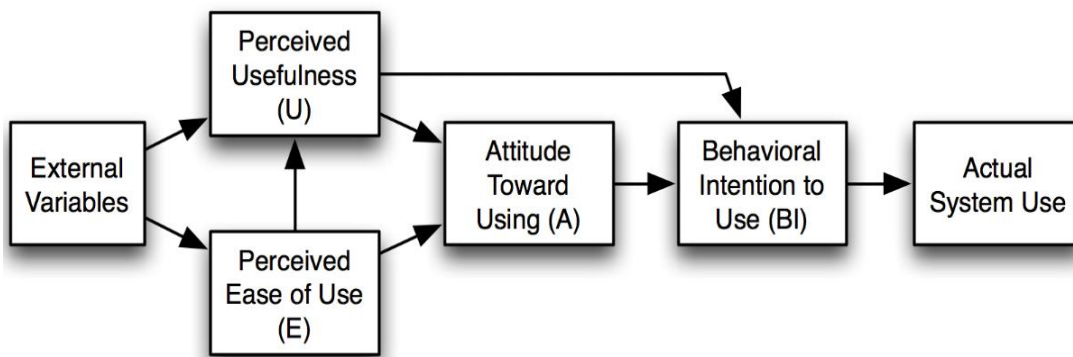


Figure 2.2: The Technology Acceptance Model by Davis, Bagozzi & Warshaw 1989

2.2 Social Commerce

Definition of social commerce (s-commerce) by Liang and Turban (2011) as a trade in which business activities and transaction are carried out through social media. According to Zhang and Benyoucef (2016) Yahia et al., (2018) s-commerce has changed the ways it does business because it has brought about huge changes to the customer mindset and business environment. It remodels the traditional electronic commerce Hew et al., 2018 Mikalef et al. (2017) by combining the power of social networks with online shopping Wesson (2010) and also according to Turban et al. (2010) Zhang et al. (2015) introduces new methods for marketing business offers through social platforms. Researchers Huang and Benyoucef (2013), found that it's gaining popularity in the marketing field because of social networks, for example Instagram, WhatsApp, Yahoo, Twitter, Facebook and LinkedIn. It will be allowing individuals to easily promote their business products to the large audience into market.

2.3 Factors that influence the purchase intention in S-Commerce

This study focuses about purchase intention. Priority of consumer to buy the product and service definition of purchase intention. In another words, purchase intention has another aspect that the consumer will purchase a product after appraisal. Research conducted by Hawkins & Mothersbaugh (2010), found that term of intention is defined as a stimulating predecessor and drive the purchase of consumer products and services. According to Blackwell, Miniard & Engel (2006), Ghalandari & Norouzi (2012) through studying their intentions is one of the most common approaches affected by marketers in gaining an understanding about consumer's actually behaviour. The probability that a particular behaviour will actually be performed by an individual depends on the strength of their intention. Thus, if there is a strong intention, there is higher possibilities that the respectively behaviour will be performed.

2.3.1 Perceived Usefulness

The factor of social commerce purchase intention is perceived usefulness. It is a concept that first time introduced at information system field by Davis in 1989. It has been tested and validated by several researchers. According to Davis, people tend to use certain technology or not to use because they believe that it can helps them in do their job more efficient. Many authors believed that perceived usefulness affect consumers participation in social commerce Geffen and Straub (2000), Lee Park and Ahn (2001). This is because customer prefer to acquire a product when such usage is perceived to be useful.

Alreck et al (2009) argue online merchants who concurrently endorse both time saving and quicker accomplishment of tasks win more buyers than those who are focusing on only one of those benefits. The level in the use of technology will provide benefits to the users on performing certain activities. This development has also established the convenience of booking goods from major online supermarkets. Consumers do not have to rush to the store but simply wait for the item to arrive at the front door. In addition, it

is able to save time and oil. According to Chung-Hoon and Young-Gul (2003), a well-organized and easy-to-manage website display system will also enable customers to find products faster and provide a better user experience.

Perceived usefulness is related to the experience of online shopping (Monsuwe et al.,2004). The detailed information, ease to access and speed are the factors that contribute to online purchases (Khalifa & Limayem,2003; Shim, Shin & Nottingham,2002). For busy and timeless users, the speed and ease of accessing a website easily and quickly helps them enough.

2.3.2 Perceived Ease of Use

Perceived ease of use is defined as the perception of individuals using the new technology with effortless Davis (1993). In the context of online shopping, ease of use refers to consumer perception that shopping on the internet involve a minimal effort by Davis (1993). This means that ease of use is how easy the internet is to be used as a medium of purchasing Monsuwe, Dellaert and Ruyter (2004). Perceived ease of use has a powerful influence on the intention for technology adoption. According to TAM, perceived ease of use has a double impact on consumers' intent to shop through online platforms. Effect on intentions occurs through the use of perceived technologies because the more easily used the technology, the more useful it is Venkatesh (2000) and Dabholkar (1996).

Cho and Sagynov (2015) and Tong (2010) have found significant effects of ease of use on the perceived usefulness among online customers. By improving the ease of use of technology, perceived usefulness can be seen to improve and improve the behavior and acceptance of technology. Furthermore, previous studies have found a positive relationship between perceived ease of use and acceptance of information technology Dishaw and Strong (1999). perceived ease of use also has a positive effect on satisfaction and intention to operate the information system (IS) Bhattacharjee (2001). The positive impact perceived ease of use of technology is supported by many studies such as intention to use Facebook Sibona et al. (2012).

2.3.3 Perceived enjoyment

Perceived enjoyment defined as the extent to which the use of technology is considered enjoyable in and of itself other than any possible performance outcome by Davis, Unazzi, & Warshaw (1992). Users also can know more about technology when using social commerce as a platform in purchasing matters. Research conducted by Kim et al. (2009); Kwon & Chidambara (2000) have found empirical support that perceived ease of use is an important determinant perceived enjoyment. Individuals felt online and social commerce was easy to use may be seen to perceive online and social commerce as useful and enjoyable. Researchers Yang (2012) found that perceived enjoyment positively to adoption of social commerce will be affected by attitudes.

3. Methodology

As this study objective is to identify the factors that influencing social commerce purchase intention among students, correlation research design has been used. This research design was used to test the relationship between independent variables and dependent variables. The population and sample for this study were students at Universiti Malaysia Kelantan (UMK) because of the entrepreneurial cultural environment in UMK. For this research study, Krejcie & Morgan (1970) table has been used in order to determine the actual number of subjects. As the total population are 3264 students in UMK, thus the sample size for this research study was 346 respondents. For sampling method, probability sampling with random sampling technique was used to build and create sample. The questionnaire was used to interpret the information needed in the research objective through the specific responses of UMK students. The questionnaire contains three section which are section A that include demographic profile, section B that related to purchase intention and section C that include perceived ease of use, perceived usefulness and perceived enjoyment. The questionnaire will be administrated by using Google Form to respondents answer to get the response faster. Both of the section B and section C, the respondent asked to tell their level of influencing on the question based on five point Likert Scale which are (1=Strongly Disagree, 2=Disagree, 3=Slightly Agree, 4=Agree, 5=Strongly Agree). In order to complete control over data collected, all the data were analysed by using Statistical Programme for Social Science (SPSS).

4. Analysis and Results

Results of Reliability Test Using Cronbach's Alpha

No.	Construct	Cronbach's Alpha	No. Of Item
1	Purchase Intention	0.804	5
2	Perceived Ease of Use	0.754	5
3	Perceived Usefulness	0.745	6
4	Perceived Enjoyment	0.850	5

Table 1 provides data reliability analysis for all the variables included dependent and independent variables for this study. Findings of the study showed that purchase intention construct was measured by five items and resulted as very reliable which has a Cronbach's Alpha 0.804. As for independent variables, perceived ease of use measured by five items showed an acceptable reliability which resulted a Cronbach's Alpha of 0.754. Next is perceived usefulness showed an acceptable reliability of 0.745 which is measured by six items. Lastly, perceived enjoyment showed a very reliable indicator of a Cronbach's Alpha 0.850. This construct was measured using five items in this study.

Hypothesis Testing and Correlation Analysis

Research Questions	Hypothesis	Findings
RQ1: What is association of perceived usefulness factor's that influencing consumer purchase intention in social commerce?	H1: There is a significant influence between perceived usefulness and purchase intention in social commerce.	0.635
RQ2: What is association of perceived ease of use factor's that influencing consumer purchase intention in social commerce?	H2: There is a significant influence between perceived ease of use and purchase intention in social commerce.	0.643
RQ3: What is association of perceived enjoyment factor's that influencing consumer purchase intention in social commerce?	H3: There is a significant influence between enjoyment and purchase intention in social commerce.	0.357

According to table 2, the positive value of correlation coefficient of perceived ease of use is $r=0.643^{**}$, $p<0.01$ indicated that their relationship is strong. The positive value of correlation coefficient of perceived usefulness is $r=0.635^{**}$, $p<0.01$ indicated that their relationship is strong. In other cases, average correlation of perceived enjoyment is $r=0.357^{**}$, $p<0.01$ indicated that their relationship is weak which it is according to the rules of Thumb of Cronbach's Alpha coefficient size.

5. Conclusion

This study was conducted to identify the factors that influencing social commerce purchase intention among students in Kelantan. To sum up, the findings of this study showed that perceived usefulness and perceived ease of use strong association with purchase intention. As for future research, hypothesis testing can be extended to other variables using other variables of TAM. As for conclusion, the study helps the company to better understand the factors that influence consumers' use of social commerce. Furthermore, findings of the study can be be useful to the business owners to re-evaluate the effectiveness of their product brand using social commerce.

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