#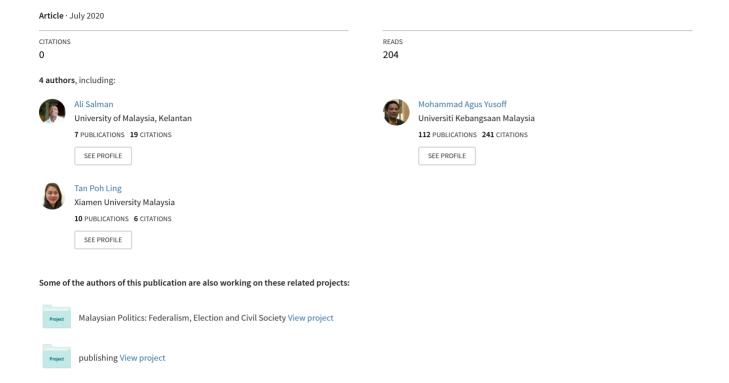 SEARCH Journal of Media and Communication Research Determinants of online purchasing decision among university students

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Determinants of online purchasing decision among university students

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ABSTRACT

Information and Communication Technology (ICT) has led to the uptake of online purchasing which has become widespread among netizens. This study was undertaken to identify the factors that affect students' acceptance of communication technology for online shopping. This study used the Technology Acceptance Model. A key driver of this study is by using elements of perceived usefulness, perceived ease of use, ICT safety, ICT skills, and social influence as independent variables in relationship to online purchasing decision. Using quantitative method, a survey using questionnaires was administered to 222 students sampled as respondents for the study. Pearson correlation analysis was used to test the hypothesis for significant relationship. From the results, the independent variables; perceived usefulness, perceived ease of use, ICT skills, ICT safety and social influence, had a significant relationship with the dependent variable—online purchasing decisions. This study can serve as a guide to online sellers in the process of attracting students to repeatedly buy online.

Keywords: **online purchasing decision; university students; perceived usefulness; perceived ease of use; ICT safety**

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INTRODUCTION

The rapid development and growth of Information and Communication Technology (ICT), started as early as the 80s (Bray, 2017). However, its developmental ripples happened around the early 70s. While most countries face management challenges of new world economy, the answer to the challenge is through efficient, flexible and efficient use of computers. The rapid development of ICT has indeed changed the lives of humans and it continues to this day. ICT has always played an important role in modern society as it became a necessary tool and used in various fields (Niebel, Kopp & Beerfeltz, 2013). Hence, it is not impossible if an individual can make a purchase online by merely using the smartphone.

Most urban Malaysians use online shopping application in purchasing various items due to fast internet network and their busy daily routine. In line with the lifestyle nowadays, online purchasing methods have gained attention from many and it has also become a starting point for shopping without queuing at the counter or being at a very congested mall (Norli Baharin, 2013).

With the emergence of information technology allowing for rapid message transmission to anyone, anywhere; this has made it possible for a number of shoppers nowadays to buy online rather than the conventional method due to the online banking facilities. This is because online purchase can take place anywhere and anytime (Anon, 2014).

Online transactions are becoming increasingly reliable and popular. This is because, through online transaction costs, such as traveling costs, parking fees, time and energy are saved. However, online transactions are prone to scams (Aslinda Onn, 2015). Hence, this study will also identify the use of technology and its relationship to online purchase decisions with regard to ICT safety.

This paper aims at determining the factors that have relationship with online purchase decisions. The objective of this paper is to identify the level of communication technology use by students in making online purchasing decisions and to evaluate the relationship between usefulness, accessibility, ICT skills, ICT security, social influence and online purchase decisions among university students.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Evolution of online businesses

There are on-going efforts worldwide to enhance confidence in electronic platform-based transactions, build human resources, bridge the digital divide and create new business activities (Oemar Hamdan & Abd Manaf, 2015). This is an enormous opportunity to develop technology-driven businesses at an international level. Anandya Cahya (2013) stated that online purchases does not require buyers and sellers to meet face-to-face, and this enables the sellers to have the opportunity to be connected to buyers worldwide.

Based on a report by Communications and Multimedia Commission (2013), the evolution of online purchases has encouraged the need for reliable courier services. The combination of communication technology, reliable courier service and digital lifestyle nowadays has led to the growth that is closely related to online businesses. The report also found that most websites during the year were only for advertising purposes and some were using website facilities to introduce organizations' products and services to customers.

Surfing the internet is easy and can be done at any time (Made Dwipayani and Ketut Rahyuda, 2016), hence, it is not impossible for people to opt to shop online. The current lifestyle of the society has also changed, due to the development of the technologies. One of

the most obvious impacts of these development are activities that slant towards online purchase (Anandya Cahya, 2013).

Zaleha et al. (2016) emphasised that online purchases are more convenient, time-saving and cost-efficient because transactions are done virtually rather than as a direct purchase which requires an individual to come to the store to purchase an item. This statement is also supported by Fatin Hafizah and Mohd Shahar (2013) that the advantages of buying on the Internet are shopping opportunities at any time of day, night or midnight. Customers are not inconvenienced to look for parking. Dwipuspita, Mulyana et al. (2012) and Umair Cheema et al. (2013) further asserted that customers do not need to struggle with traffic, parking and walking from one store to another.

In line with that, Farhan et al. (2016) and the Communications and Multimedia Commission (2013) pointed out that the advantages of online shopping are that customers do not have to queue up at the mall. They can compare brands, prices and order items 24 hours a day from anywhere. This is because in this era, many entrepreneurs use online applications such as blogs, Facebook, Instagram and online business applications to enhance business access, facilitate the sales and purchase of their items (Faradillah, Rahim & Ali Salman, 2015). Hence, with this kind of medium, it is not a problem for an individual to spend a small amount of time, as it is easy and at their fingertips.

Online purchasing decisions

There are various factors that affect the buying decision of a consumer, both internally and externally (Verina, Yulianto & Latief, 2014). Purchase decision is an individual activity directly involved in the decision making to purchase the product offered by the seller (Anandya Cahya, 2013). Based on a survey conducted by Jan Wong (2013), 65% of the respondents make online purchases after one to two hours of shopping via the Internet.

Perceived usefulness of technology

Technology usefulness is one of the key variables in the Technology Acceptance Model (TAM). According to Davis (1989), users must believe that using technology will improve their performance. This clearly illustrates the usefulness of the technology for its users in many aspects. Hence, the usefulness of the technology is able to form a belief in accepting the technology or vice versa. Generally if users trust the usefulness of a particular technology, then they will accept and use it and vice versa (Endang Fatmawati, 2015).

Perceived ease of use of technology

Perceived ease of use of technology is also one of the important variables in the TAM model. The perceptions of ease of use according to Davis (1989), that the application is easy to use without much effort. This includes ease of use of information systems in accordance with the wishes of its users. Findings from Davis's research (1989) showed that the convenience of the user explains the reason why users are prefer technology. Study on the perception of ease of use by Mona Windi and Christiawan Hendratmoko (2015) among students in Surakarta found that online shopping provided by the Internet and has facilitated students in online shopping.

Information communication technology skills

The generation Z (1995-2010) and Alpha (2010-2023), have been exposed to various types of gadgets as young as one year old. The first generation of Y "touched" by technology, makes Z generation a more versatile generation with technology and gadgets. This generation relies heavily on digital technology such as the Internet and social media. Meanwhile, the Alpha generation emerged from the effects of economic crisis and are expected to be more adaptable

towards technology and more educated compared to previous generation (Adi Kusma, 2013). This led them to be more interested in technology when they are in school and they prefer activities related to multimedia technology.

ICT security and usage of technology

Internet is used for various activities such as research, banking and trading. In every transaction, with an online business, users need to feel secured (Seddeq H. Belgassem, 2004). Customers who explore the Internet world are looking forward to buying products hence ICT security is essential in making online purchase decision (Andy Putra et al., 2014). Farhan et al. (2016) clearly demonstrated that ICT security is one of the major factors that affect online purchase decision.

Social influence on online purchase decision

Social influence is one of the main factors affecting the use a technology. A research conducted by Rasimah et al. (2014), showed that in identifying factors affecting parents' acceptance of the eWaris school management system at MUSLEH network primary school in Klang Valley, social influence is a major factor, followed by usefulness. Based on the results of this study, it is clear that social influence has a great impact on adapting a technology. Social influence can also be said to come from the surrounding community. For example, based on studies conducted by Mujiyana and Elissa (2013), on the stage of information retrieval, consumers will search online references from all aspects using search engines or online stores. The information sought is the opinion of others who have benefited from the product purchased and thus able to influence online purchase decisions.

Theoretical framework

The Technology Acceptance Model (TAM) explains the factors affecting technology acceptance. The theory was developed by Davis (1989) as shown in Figure 2.1 and later adapted by other scholars such as Adam et al. (1992), Szajna (1994), Chin and Todd (1995), Davis and Venkatesh (1996), Gefen and Straub (1997), Igbaria et al. (1997), Venkatesh and Morris (2000) and others (Sanjaya, 2005). TAM is an adaptation of the Theory of Reason Action (TRA).

According to Davis (1989), TAM have two important variables that influence behaviour in the use and acceptance of technology, which are perceived usefulness and perceived ease of use. Previous empirical studies show that both the individual internal variables have strong support in observation (Venkatesh & Morris, 2000). This study further added three variables in perceiving an individual interest in using information technology, especially new media.

TAM has been tested from various perspectives. Moon and Kim (2001), Der Heijden (2004), concluded that TAM proposed by Davis (1989), not only involved one's extrinsic motivation in technology use but also includes intrinsic motivation such as pleasant or entertaining element. Margaret et al. (2006) extended the TAM to understand the internal factors or external factors that influence a person in accepting and using technology, such as feeling happy and entertained in using technology. Personality factors have shown better result in measuring the acceptance of information technology than cognitive factors.

TAM focuses on factors affecting the acceptance of new technology (Endang Fatmawati, 2015). For this study, two variables from TAM (Davis, 1989) perceived usefulness and perceived ease of use and three new variables are included in the conceptual model namely ICT skills, ICT security and social influence to measure their relationship with online purchase decision. Hence, based on the framework of this study, five independent variables namely

perceived usefulness, perceived ease of use, ICT skills, ICT security and social influence were used to measure their relationship with the independent variable (online purchase decision).

The perceived usefulness is an independent variable that emphasises on the extent of the usefulness of a particular technology which facilitate users in making online purchase decisions. It also examines the aspect of internet accessibility at all times without limit. In addition, the role of technological usefulness is also supported with the existence of various new media that exist today together with the interactive features included in the new media. The new media also facilitate the sale and purchase of goods and services compared to traditional buying and selling which take up energy and time.

The perceived ease of use is a variable that emphasises the extent to which technology can facilitate purchase decisions online. Meanwhile, ICT skill is an independent variable that emphasise on the skill level of a student using the latest technology in online purchasing. ICT skill is needed to facilitate successful trading online. The ability in handling technologies such as laptops, computers, tablets and smartphones to access social media, as well as websites can make more students purchase items online rather than buying them directly at the retail outlets.

The security variable towards new technology is an independent variable, which is also studied in this research. Security and safety are key factors of technology acceptance among online users for online purchasing decisions. Additionally, the study also examined the security features of the technology in preventing cyber-crime related to personal data information, which can bring a huge loss if it occurs. Safe technology applications can also attract more people, including students to buy online and are able to maintain their use for a longer time.

Social influence is the final variable in this study in determining the relationship of the independent variables with online purchase decision among the university students. The aspects that are studied included the social influence of family members, friends and surrounding communities and their influence on the students' online purchase decisions using new technologies. The goal is to see how far social influence can stimulate students to make purchase online rather than physical shopping.

HYPOTHESIS OF THE STUDY

Emanating from the literature review and theoretical framework, five hypothesis were developed and tested for their significance. The hypothesis testing, evaluated the relationships between the independent and dependent variables in terms of significance.

Hypothesis 1: There is a significant relationship between perceived usefulness and online purchase decision.

Hypothesis 2: There is a significant relationship between perceived ease of use and online purchase decision.

Hypothesis 3: There is a significant relationship between ICT skill and online purchase decision.

Hypothesis 4: There is a significant relationship between ICT security and online purchase decision.

Hypothesis 5: There is a significant relationship between social influence and online purchase decision.

MATERIALS AND METHODS

The study was conducted at two Research Universities located in Klang Valley, namely Universiti Kebangsaan Malaysia (UKM) and Universiti Putra Malaysia (UPM). This study adopted the quantitative research method, utilising questionnaire as instrument for data collection. The researchers applied purposive sampling in selecting the respondents to ensure that the respondents fit the criteria that are set earlier for this study, which limit the respondents to only those who by goods online.

Some 222 respondents consisting of 110 males (49.5%) and 112 females (50.5%) were purposively sampled for the study. The age group of the respondents, 19 to 25 years made up 151 (68%) of the respondents. The second age group, between 26 and 30 years old consisted of 31 (14%) respondents and followed by the age group 31 to 35 years old with 18 respondents (8.1%). The respondents aged 41 years and above represented 5.9% of the sample with 9 respondents. The least number of respondents came from the age group 36 and 40 years old representing 4.1 percent of the sample with 9 respondents.

The data were analysed using the Statistical Package for Social Sciences (SPSS) version 22. Descriptive and inferential statistical analysis were applied. For the descriptive statistics, Means and Standard Deviation (SD) were used. Meanwhile, for inferential statistics, Pearson correlation analysis was used to analyse the data.

In building the instrument, items for the variables were adopted from both TAM (Davis, 1989) and past studies (Table 1). A pilot study was conducted to test the questionnaire for reliability using Cronbach Alpha. Prior to this, the questionnaire was tested for validity involving two lecturers and a PhD student. The reliability results for Cronbach Alpha of the variables are presented in Table 2 below.

Table 1. Source of items for the variables

Variables	Source of Items
Perceived Usefulness	Davis, 1989
	Endang Fatmawati, 2015.
Perceived Ease of Use	Davis, 1989
	Mona Windi & Christiawan Hendratmoko, 2015.
ICT Skills	Adi Kusma, 2013
ICT Security	Seddeq H. Belgassem, 2004
	Andy Putra et al., 2014
	Farhan et al., 2016
Social Influence	Rasimah et al., 2014
Online Purchase Decision	Anandya Cahya, 2013
	Made Dwipayani & Ketut Rahyuda, 2016
	Zaleha et al., 2016
	Fatin Hafizah & Mohd Shahar, 2013

Table 2. Cronbach alpha of the variables

	Cronbach Alpha		
Variables	Pilot Study	Actual Study	Items
ICT Skill	0.843	0.798	4
Ease of Use	0.734	0.836	10
Perceived Benefits	0.806	0.913	11
Social Influence	0.798	0.820	9
ICT Security	0.786	0.866	10
Online Purchase Decision	0.864	0.913	11

RESULTS OF THE STUDY

Based on Table 3, ICT skills have the highest overall mean (mean = 3.94, SD = 0.614). The second highest is perceived usefulness (mean = 3.63, SD = 0.637) and followed by online purchase (mean = 3.61, SD = 0.661). Social influence and perceived ease of use both have mean value of 3.57 (SD = 0.557) and 3.53 (SD = 0.559) respectively. The variable with the lowest mean value is ICT security (mean = 3.41, SD = 0.664).

Table 3. Overall Mean Value and Standard Deviation (SD)

Variables	Mean*	SD
ICT Skills	3.94	.614
Perceived Usefulness	3.63	.637
Online Purchase Decision	3.61	.661
Social Influence	3.57	.557
Perceived Ease of Use	3.53	.559
ICT Security	3.41	.664

(N=222) *(scale 1-7) (1.0-3.0 = low) (3.1-5.0 = moderate) (5.1-7.0 = high)

The findings from this section is reported based on the inferential statistics that have been conducted to test the relevance of the hypothesis of the study. There were five hypotheses tested using the Pearson correlation analysis. The test was conducted to identify the significant relationship between all the independent and the dependent variables. The measure of strengths and weaknesses of the relationships between the variables were based on Hinkle, Wiersma and Jurs (1989) measurements as shown in Table 4.

Table 4. Measurement of relationship power (Hinkle, Wiersma & Jurs, 1989).

Pearson Correlation	Relationship Power
.90 to 1.00	Very High
.70 to .90	High
.50 to .70	Moderate
.30 to .50	Low
.01 to .30	Very low
00	No Correlation

Table 5. Pearson Correlation between independent and dependent variables

Independent Variables	Online Purchase Decision	
	R	P
ICT Skills	.330**	.000
Perceived Ease of Use	.606**	.000
Social Influence	.596**	.000
ICT Security	.619**	.000
Perceived Usefulness	.699**	.000

Hypothesis testing

The five hypothesis are tested using the Pearson correlation as shown in Table 5 above.

Hypothesis 1: *There is a significant relationship between perceived usefulness and online purchase decision*

The results show a significant relationship between the two variables where the value of r = .699 with a significant level of *p* <0.01. Hence, hypothesis 1 is accepted. The correlation coefficient value indicates a moderate relationship between perceived usefulness and online purchase decision among the university students. This is because the measurement of Hinkle, Wiersma and Jurs (1989), the correlation coefficient 0.50-070 shows that there is a simple relationship. This demonstrates that perceived usefulness is relevant for online purchase decision.

Hypothesis 2: *There is a significant relationship between perceived ease of use and online purchase decision*

The results show a significant relationship between the two variables where the value of r = .606 with a significant level of *p* <0.01. Hence, hypothesis 2 is accepted. The correlation coefficient value indicates a moderate relationship between perceived ease of use and online purchase decision among the university students. This is because the measurement of Hinkle, Wiersma and Jurs (1989), the correlation coefficient 0.50-070 shows that there is a moderate relationship. This demonstrates that perceived ease of use is important for online purchase decision.

Hypothesis 3: *There is a significant relationship between ICT skills and online purchase decisions*

The results show a significant relationship between the two variables where the value of r = .330 with a significant level of *p* <0.01. Hence, hypothesis 3 is accepted. However, the correlation coefficient value indicates a low relationship between ICT skills and online purchase decision among the university students. This is because the measurement of Hinkle, Wiersma and Jurs (1989), the correlation coefficient 0.30 - 0.50 shows that there is a low relationship. This demonstrates that ICT skill is somehow important for online purchase decision.

Hypothesis 4: *There is a significant relationship between ICT security and online purchase decisions*

The results show a significant relationship between the two variables where the value of r = .619 with a significant level of *p* <0.01. Hence, hypothesis 4 is accepted. The correlation coefficient value indicates a moderate relationship between ICT security and online purchase decision among the university students. This is because the measurement of Hinkle, Wiersma and Jurs (1989), the correlation coefficient 0.50 – 0.70 shows that there is a moderate relationship. This demonstrates that ICT security is important for online purchase decision.

Hypothesis 5: *There is a significant relationship between social influence and online purchase decisions*

The results show a significant relationship between the two variables where the value of r = .596 with a significant level of *p* <0.01. Hence, hypothesis 5 is accepted. The correlation coefficient value indicates a moderate relationship between social influence and online purchase decision among the university students. This is because the measurement of Hinkle, Wiersma and Jurs (1989), the correlation coefficient 0.50 – 0.70 shows that there is a moderate relationship. This demonstrates that social influence is important for online purchase decision.

DISCUSSION

This study was set out to examine the determinants of online purchasing decision among university students. Specifically, the study investigated the relationship between the technology factors (perceived ease of use; perceived usefulness; ICT security), individual factor (ICT skills) and social factor (social influence) with online purchase decision among university students. The study found that most of the university students spent more than an hour each time surfing the internet. The results of this study are similar to the study conducted by Pramudita and Samsudin (2011) that 80 percent of respondents have access to the Internet and one third of them surf the internet for more than 7 hours a week. The findings are also in line with Shamsul Azahari (2015) that not only the students but the Malaysian community also spent more time browsing the Internet than conventional media such as television, radio and newspapers because of the widespread Internet network for social networks.

However, the results of this study found that the university students were not very addicted to the internet. The findings showed that they did not feel worried about not surfing the internet. The results of this study were contrary to the study conducted by Teong and Ang (2016), which found that students were the most highly addicted internet-based groups. Students make the internet as their major tool for accomplishing tasks, which include other leisure task such as surfing Facebook, playing games and chatting online. Additionally, a report by MCMC has also shown that the 72% of the 18.6 million local internet users are as young as seven years to 35 years old (Anon, 2014). Internet addiction among students is not at the alarming stage as the overall usage is more about learning objectives, where Harlina Halizah and Abdus Salam (2015) find out that high internet usage leads to better academic results as it provides opportunities of learning as explore to the world of information.

The second objective of the study is to measure the relationship between the independent variables, perceived usefulness, perceived ease of use, ICT skills, ICT security and social influence with online purchase decisions. The perceived usefulness of technology helps students learn more about communication technology because of the many benefits they can obtain. Based on the findings, the research hypotheses are accepted where there is a positive correlation between the perceived usefulness and the online purchasing decision among the students. Furthermore, the results of this study indicated that most students like to shop online because of the various facilities available. The results of this study is in line with Fransiske and Hendratmoko (2015) which found that the availability of many transaction facilities made students prefer to shop online compared to physical shopping.

In addition to the usefulness of the communication technology, the students also felt that technology was able to facilitate the purchase of goods. The results demonstrated that the average university student knew that in addition to saving time, communication technology also help them in buying things that they wanted online. The results of this study is in line with a research by Norli Baharin (2013) who found that online shops made it easier for shoppers to buy limited edition or missing items in the market online. The information on items has also eased their shopping experience as they were able to make comparisons between the quality of goods from various brands (Pinto, 2013) leading them to make online purchase.

The perceived ease of use of the communication technology facilitates the completion of online purchase. Most tertiary institutions provide access to internet, allowing students to access anytime they want (Nik Adlin, 2009). Accessing the internet with unlimited time and space using wireless internet facilities around the campus makes it possible for students to shop online. This clearly concurs with the findings of this study, where there is a significant correlation between perceived ease of use of the technology and online purchase decision.

Apart from perceived ease of use, most of the students as the study revealed, were equipped with the skills to surf the Internet and were able to perform payment with PayPal,

ipay88 and so on. However, higher ICT skill is not the main factor that people need in order to make online purchase. With the basic knowledge of electronic banking, social media and online payment systems, a student is able to shop online. This is contrary to Faradillah, Samsudin and Ali Salman (2015) that the information society requires a great deal of expertise in finding and understanding internet content to overcome the digital divide. Unlike ICT skills, ICT security is essential to provide a sense of security, especially when making online payment. As such, for the university students, security has always been the focus in order to avoid being scammed. Echoing the students' online security concerns, Ahmad Suhael (2017) claimed that online fraud cases have increased with a record 3,921 cases in 2016 alone involving various cases such as data theft and fraud schemes relating to online purchase and Internet banking. Hence, as this study found out, safety features influenced the students' desire to shop online. The results of this study were congruent with Arisah et al. (2016) where security factor was the most important factor in making online purchases. Similarly, the results of this study were also in line with the study of Dwipuspita, Mulyana and Elita (2012) that some Indonesians did not purchase online because of the various frauds.

In addition to the technology factors, this study also established that social influence have a significant relationship with the university students' online purchase decisions. This finding was supported by Susanti, Yunus and Chan (2015) that opinions or views provided by other users on a platform or comment room, can influence the decision to purchase a product online. Similarly, Tyra and Clara (2014) found that there was a significant positive relationship between social influence and online shopping behaviour. These findings were further supported by Arisah et al (2016), Graham, Rothlauf and Hinz (2013), Zhang, Hu and Zhao (2014) that goods and services sold online used various channels such as social media (Facebook, Twitter, Instagram), websites and advertisements on individual blogs, to influence students as they can read the testimonial provided by other online shoppers to purchase same items online.

THEORETICAL IMPLICATIONS AND CONCLUSION

From the results, there are theoretical implications for TAM. Among the constructs found in TAM are perceived usefulness, perceived ease of use, and behavioral attitudes. However, the researchers only used perceived usefulness and perceived ease of use for this study. Thus, in this study, three new variables were added, namely ICT skills, ICT security and social influence to measure their relationships with online purchase decision among university students and were found to have significant relationship with purchase decision. Hence this study has added a new knowledge in the field of factors having relationship with technology acceptance.

The skill element is actually not new in the world of technology because the skill element relates to individual use of information and communication technology in order to measure the level of skill of students using the existing technology. Meanwhile, the security element in the technology itself helps the process of using and accepting a particular communication technology by students making them shop online. Dubious security features are capable of making a person refuse to use a technology in getting the desired item. For the social influence element, which comes from the surrounding community or the immediate family members, facilitate the acceptance of a particular technology by students for online purchases.

Hence, the relevance of TAM for online purchase decision among university students requires the inclusion of the elements of ICT skills, ICT security and social influence. This might apply to other population as well, in cognizant of the fact that online users, especially those who shop online, need a secured platform for their transactions.

It is clear that the inclusion of technology in the education sector has made the students enhance their skills in using communication technology to facilitate their daily life. Therefore, the level of use of this communication technology is very important in order to ensure the level of communication technology skills among students can be enhanced, especially those who make information communication technology as the primary medium for online shopping. The online shopping sites have opened up the eyes of many people, especially students enabling them to utilise the existing technology and further enhance the level of technology utilisation skills. In essence, this communication technology as a primary medium for online shopping has been accepted and adopted among netizens, as they are aware of the benefits.

In conclusion, this study on technology utilisation among students for online purchase decision has shown a positive level of technology usage and supported the perception that the current information communication technology is very important, especially for the online trading sector. University students have accepted the new technologies of today and utilised them to facilitate their lives. This study has provided evidence that the ease of use of technology has enabled netizens to purchase online anything that they wanted at their fingertips. The findings have shown the importance of communication technology among university students. Therefore, the researchers hope that not only students but also the general public, parents, senior citizens and others will be able to utilise the best possible communication technologies, especially for online purchasing and transactions to facilitate their busy life.

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