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PREFACE

Entrepreneurship, as the mindset and process needed to create and develop economic activity, blending risk taking, creativity, and/or innovation within a new or existing organization, is very depending on the ecosystems to make it flourish in each organization, institutions, nations, and the world. It has been the ventures; yet the change is needed is not just what is thought but how it is taught in the right environment.

The FKP Postgraduate Colloquium 2021 was held in Kampus Kota, Universiti Malaysia Kelantan on 9 and 10 August 2021. It was a delightful event with 54 participants, consists of students and lecturers, had many fruitful discussions and exchanges that contributed to the success of the colloquium. 54 papers have been successfully presented during the colloquium.

The main objective of the colloquium is to be a platform for students to present and publish their works as well as to share their research progress with their colleagues and experts. The theme of **"**Accelerating the Knowledge Revolution via Research Culture" was chosen to represent the power and strength of entrepreneurship and business in the advancement of a society. It is a suitable theme considering the nature of Universiti Malaysia Kelantan that has always been promoting entrepreneurship throughout Malaysia.

All in all, the FKP Postgraduate Colloquium 2021 was very successful. The editors would like to express their gratitude to all participants and the committees that have helped in ensuring the smooth sailing of making the colloquium into a reality.

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Faculty of Entrepreneurship and Business
Universiti Malaysia Kelantan
City Campus, Pengkalan
Chepa Kota Bharu, Kelantan
Malaysia

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Logistics Factors Influence the Logistics Performance in Thailand: A Conceptual Framework

Weerasak Sojipun[1]
Zuraimi Bin Abdul Aziz[1]
Rosmaizura Binti Mohd Zain[1]
[1] Faculty of Entrepreneurship and Business, Universiti Malaysia Kelantan, Malaysia
Correspondence email: vcool99@hotmail.com

ABSTRACT

Logistics service becomes an important function in expanding to the globalization. Many countries have to improve the logistics service operation business to achieve the satisfaction of customer and improve the firm performance. Three of the important components in Thailand logistics activities are service quality, technology and long-term relationship that are the key factors to develop the new conceptual model of service performance in logistics section. The objective of this study is to explore the service quality, technology and relationship that influence to logistics service performance in Thailand. This issue added value to relationship between buyer and supplier to raise the importance of relational resource in logistics activities to improve the logistics performance. Therefore, the study proposes a conceptual framework in which service quality, technology and relationship are pretend to improve the logistics performance of logistics service provider in Thailand.

Keywords: Logistics Service Providers; Effected Factors; Logistics Performance; Service Quality; Technology.

INTRODUCTION

The global logistic market is growing, with revenue anticipated to reach 1,020 trillion dollars in 2020 and 1,094 trillion dollars in 2021. In Asia Pacific, revenue is expected to reach 396 trillion dollars in 2020 and 430 trillion dollars in 2021 (Bandittayarak, 2021). In the international economy, particularly the advanced economies have illustrated the growth volumes in industrial production and transportation in twenty first century and the logistics business is expanding due to increased e-commerce demand, then logistics service providers (LSPs) are investing heavily to increase production capacity. Meanwhile they are attempt to reduce the supply chain cost of their suppliers and service providers (Tomi Solakivi et al, 2018). These changes put pressure on LSPs from a variety of directions, LSPs should be developed logistics performance that consist of efficiency, effectiveness and differentiation (Fugate et al., 2010). Moreover, fulfill logistics technology to improve their growth and profit, also still leader in the market. Then the development has come to be the most important driven of logistics performance in economies.

There are many components that influence the performance such as logistics service quality, logistics technology, and logistics relationship between clients and firms. Leuschner et al., (2013) describe that the result of excellent logistics services quality will lead business performance to the successful, for example, increased customer satisfaction and financial success. Zuraimi et al., (2016) studied the numerous empirical researches, the illustrated how is the technology and innovation capability importance for greater performance. Moreover, there is a strong relationship between LSPs and their clients, the LSPs may deliver logistical

services in a more coordinated manner and improve the quality and performance of logistics services (Panayides & So, 2005). On-demand delivery and real-time data are becoming standard client expectations. In addition, because consumer behavior has changed, prompt and speedy response are required. Moreover, information technology (IT) is rapidly being employed to meet the needs of customers in terms of supply (Wollschlaeger, 2017). Industry 4.0 is already being utilized to achieve client goals, enhance operations, and improve production. This advancement extends to the logistics business, such as on-demand delivery, which provides customers with a quick response (Da Silva, 2018).

In Thailand, the transport and logistics industry worth USD 61.87 billion in 2020, and it is anticipated to exceed USD 100 billion by 2026, with a growth rate of 6% between 2021 and 2026 because the growth of e-commerce business (Mordor, 2020). LSPs have become challenged to logistics business operation as well as knowledge and honesty of LSPs operation can lead the high value and high logistics service quality in their business. In addition, to improve the domestic logistics service, the country has to improve the logistics performance to meet the need of customers (Council, 2020). Logistics and supply chain operations must obtain a degree of awareness and expertise that evolve efficient, particularly middle and high management level who are responsible for developing logistics plans and strategies for their businesses. To improve logistics competitiveness, support must be provided for the implementation of "digitized" logistics and supply chain systems using cutting-edge technology (Siam, 2019). As a result, LSPs must innovate and develop new services in order to satisfy these client specific demands. Some of researchers have studied in logistics service quality model of logistics service providers in Thailand and found that behavioral loyalty was strongly impacted by the logistics service quality and satisfaction (Nunthong, 2019). However, little of the previous study has examined the relationship logistics factor effected to logistics performance and competitive advantage.

This study purpose to investigate the significant logistics factors which focus on conceptual framework that influence the logistics performance in Thailand such as service quality, relationship and technology that would be beneficial to logistics business operation companies and their customers.

LITERATURE REVIEW

Resource-based view

The resource-based view (RBV) proposes that organizations achieve better performance by leveraging competitive advantages derived from specialized organizational resources and skills (Wernerfelt, 1984; Barney, 1991). If a company's resources are valuable, scarce, difficult to duplicate, and non-substitutable, they serve as a source of competitive advantages (Barney, 1991). On the other hand, having these resources available, does not always imply that the company will gain a competitive advantage. Capabilities refer to a company's capacity to use its resources to success specific goals (Amit & Schoemaker, 1993). They allow the company to increase resource productivity and generate economic rent at a faster rate than its competitors. Capabilities are difficult to duplicate because they are firmly established in the firm's organizational procedures and routines. They allow the company to gain and sustain a competitive advantage over its competitors (Grant, 1991; Makadok, 2001).

In the existing literature, the RBV has been used in logistics research. Logistics unique capacity, as established by Olavarrieta and Ellinger (1997), is a key strategic source of competitive advantages for 3PL providers. Lai (2004) recognized four distinct categories of

3PL providers based on their service competence. Liu et al. (2010) identified 13 qualities that are crucial to Chinese 3PL providers' competitive advantages. In the 3PL business, some research used the RBV to empirically assess the influence of resources and competencies on business performance (Liu & Lyons, 2011). Liu and Lyons (2011) compared the performance of British and Taiwanese 3PL providers based on their service capabilities.

Therefore, this study has adapted the RBV to examine the relationship between logistics service quality, relationship of logistics, logistics technology with logistics performance that focus on the conceptual framework only.

Logistics Performance

There are many indicators to measure logistics performance, previous study stated that logistics performance consists of efficiency, effectiveness and differentiation (Fugate et al., 2010). In accordance with Mentzer and Konrad (1991) identified the measurement of logistics performance as effectiveness and efficiency of logistics activities. In addition, Langley and Holcomb (1992) defined by including differentiation as a critical component of logistics performance and using customer value generated from logistics operations as an indicator. For example, customer service component may be used to create value through timeliness of delivery, service availability and relieve of order placing. Krauth et al. (2005) stated that there are four logistics business performance perspectives namely: effectiveness, efficiency, satisfaction, and IT and innovation. However, people frequently confound the phrases effectiveness and efficiency.

Fugate et al., (2010) have adopted the measure of effectiveness as how successfully the resources are expenditure use wisely. Whereas efficiency is a measure of a firm's capacity to achieve outcomes while taking into the resources it uses. In terms of efficiency, the increase in on-time delivery, number of deliveries, and overall loading capacity are monitored. In contrast, firm efficiency will be determined by the reduction in total transportation costs, total delivery fees (Krauth et al., 2005). Logistics performance must be comprehended the differentiation to competitors in the similar sector or compare the result of logistics activities with other firms (Williamson et al., 1990, Langley and Holcomb, 1992).

There are many factors to measure the performance of logistics, Zawawi (2014) stated that information technology is the factor that should be determined the effective and efficiency of logistics performance. Moreover, Mentzer et al. (2001) illustrated that logistics performance is the important component that drive the logistics service provider.

Logistics Service Quality

In order to maintain a strategic competitive edge through greater customer satisfaction, delivering logistics services has become an essential component of any business industry today. Bottani and Rizzi, (2006) investigated the five key characteristics of logistics service providing. Firstly, recognizing the needs and expectations of the consumer in regard to the logistics service. Secondly, evaluate the customer's service perspective. Thirdly, identify the viable elements that have an impact on improving provider service performance of a gap between service offering and customer requirements. Fourthly, determine the costs and benefits of each service interaction. The last is using a cost-benefit analysis to determine the most efficient action to boost customer satisfaction.

In competitive scenarios, Pirttila and Huiskonen (1996) stated that logistics service differentiation attempts to maximize the gap between customer value and the expenses of producing. A variety of service aspects combine to produce the logistics services required for value generation. In this regard, a company's internal differentiation may be based on the number and quality of different logistical services it provides, while value-added logistics services are being viewed as a typical important outward logistical differentiation component (Caro, 2007).

Consumers have used the pricing of services or service prices as a barometer for the quality of service that customer received, as a result of the firm's internal differentiation, which generates multiple logistical service choices of varying value to the customers. In agreement with Hong (2007) state that previously, service providers were primarily focused on a low-cost approach that emphasized price competition alone, and there was a lack of customisation in service delivery. On the other hand, customers demand more complete value-added in logistics services that may produce greater customer levels and the customer ready to pay more for these value-added or differentiated logistics services. Consequently, Bo Enquist (2007) recommended that while evaluating logistics service quality, the price of the service or the service expenses component be considered.

Moreover, the Council of Logistics Management (CLM) have identified quality management strategies influence to logistics performance and customer satisfaction. On the other hand, many of these quality principles have been operationalized by the Malcolm Baldrige National Quality Award into seven measurable criteria that serve as the foundation for quality evaluation in the logistics sector. Nevertheless, some argue that service quality may be determined by combining the expectations of customer for the services given with the impression of the service received (Munusamy et al., 2010).

Due to service quality is an amorphous term, it is impossible to deduce the real items only based on their appearance. Different judgements of the service's quality will be formed when discrepancies in a customer's subjective perceptions are combined. Because of these requirements must be fulfilled, logistic services must be able to retain regularity in service provision performance in order to preserve consumer confidence (Rahayu, 2018). Based on the previous research review, it can be examined the hypothesis following.

H1: Logistics service quality has a positive relationship with logistics performance.

Logistics Technology

By incorporating technological, it would assist businesses in becoming more profitable. For many firms, technological innovation is also a vital source of growth and a fundamental determinant of competitive advantage (Azubuike, 2013). The backbone of information technology is data collecting. In logistics Acquisition technologies such as the bar code system and radio frequency identification (RFID) can help in logistical data gathering and interchange. Because of its ability to identify, trace, and monitor information along the supply chain, these types of technologies play a significant role in supporting logistics and supply chain procedures. For logistics, supply chain management, and fast response systems, technological innovation holds a lot of promise (Zhu et al., 2012). Lin and Ho (2007) recognized the second category of technological innovation as information, communication, and technologies (data communication technologies). Information technology is seen by many logistics managers as a key source of increased efficiency and competitive advantage.

Despite the fact that businesses know the value of supply chain innovation, they nevertheless find it challenging to innovate on their own. As Sumo at al., (2016) illustrated that to incorporate innovation into businesses, partners must collaborate, which entails integrating and exchanging data with others. Furthermore, according to Wang and Wu (2016), enterprises in developing countries face a number of extra obstacles as a result of poor institutions, poor security, and a lack of suitable infrastructure. Consequently, organizations in developing countries must incorporate innovative techniques into their processes, which will lead to more effective delivery of products and services to their consumers (Wadho and Chaudhry, 2018). In smart logistics, it is a management strategy for developing, creating, managing, and implementing transition systems of product movements (e.g., products, information, and values) based on data analytics. The use of new technology and innovative services enables pattern identification, generalization, and self-organization (Wehberg, 2016). Furthermore, Ardito et al. (2019) identified a selection of fourth-industrial-revolution enabling technologies that are most significant for effective firm supply chain integration in their analysis. Moreover, Strange and Zucchella (2018) examined how the extensive use of new information technologies and services (such as Big Data analytics, robotic systems, and additive manufacturing) reflects the company operations within global value chains in their research study. As a result, it is reasonable to conclude that the adoption of novel technology brings both benefits and disadvantages to supply chain players and stakeholders (Dallasega et al., 2018).

Nowadays, which increasingly complicated global market, firms look towards to supply chain innovation as a vital aspect in remaining competitive in their sector and adapting their business strategy appropriately. Despite the crucial relevance of innovation in the supply chain, the link between supply chain technology with performance has yet to excite scholars' interest. Based on the previous research review, it can be examined the hypothesis following.

H2: Logistics technology has a positive relationship with logistics performance.

Relationship

In the logistics literature, the importance of cooperative partnerships between LSPs, suppliers, and consumers has been highlighted (Panayides & So, 2005). Close ties with trading partners, cooperation, collaboration, information sharing and trust, relationship orientation, and connection networks are all referred to as relational resources in the logistics literature. Relationship should be viewed as an LSP's capacity to develop tight bonds with customers and suppliers through collaboration and communication in order to coordinate, exchange important information, and comprehend client demands. These help LSPs to boost their company's performance and gain a competitive advantage. It helps other authors by allowing LSPs to coordinate business operations with trading partners for example, suppliers, manufacturers, distribution centers, customers, and logistics service providers using relationship (Sanders & Premus, 2005).

Others researchers argue that a firm's focus on customer demands necessitates creating relationship networks to acquire a full understand of the buyer's value chain (Chapman et al., 2003). Murphy and Poist (2000) suggested that enterprises should collaborate amongst stakeholders in order to anticipate client demands and clarification to problems. Service providers and users may maintain successful and continuing communication through the exchange of ideas, information, mutual understanding, and teamwork. In addition, Chen and Fung (2013) demonstrated that in managing supply networks, the necessity for the ability to manage relationships within the supply chain network is essential. The previous supply chain literature has placed a strong emphasis on integrated supplier relationships. A well-integrated

supply chain may boost and increase overall supply chain performance by establishing and maintaining high-quality relationships with suppliers (Tsai & Hung, 2016) because of suppliers play a key role to improving supply chain efficiency and responsiveness.

The relevance of supply chain performance monitoring has grown in step with the role of suppliers in a company's commercial success. Due to the complexity of linkages and relationships between enterprises, corporations find it difficult to oversee the performance of their suppliers and supply chain (Maestrini et al., 2017). Based on the previous research review, it can be examined the hypothesis following.

H3: Relationship has a positive relationship with logistics performance.

There is the framework of logistics factors that influence the logistics performance that consist of logistics service quality, logistics technology and relationship of logistics as shown as Figure 1.

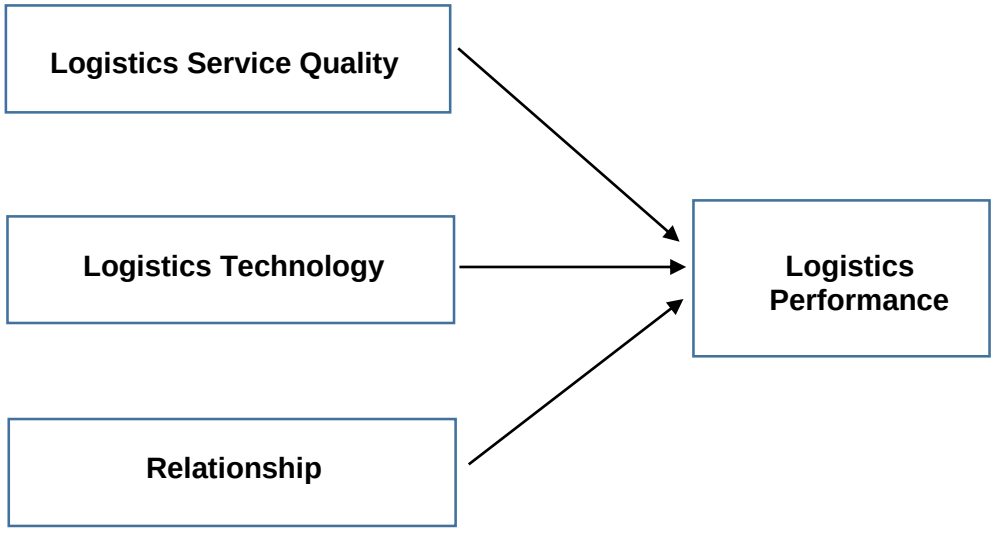

Figure 1: Conceptual framework of logistics factors influence the logistics performance

CONCLUSIONS

There are many components which used to examine the logistics performance such as service quality, technology and relationship. Moreover, the logistics performance can be variety in financial and non-financial component. In addition, technology, quality of service and relational between supplier and customer are become the most important component in all business. One of the business is logistics service process that apply those constructions to the business that can be improve the effectiveness, quality service, timeliness that the source of logistics performance, this is the reason that the factors can support the logistics companies to improve their performance and competitive advantage (Tangpong et al., 2015; Rahayu, 2018; Wadho and Chaudhry, 2018; Jaaskelainen, 2021). As a result, the study identified to measure the logistics performance by three factors consist of logistics service quality, logistics technology and relationship of logistics for perspective in Thailand.

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REFERENCES

Amit, R. and Schoemaker, P. J., 1993, Strategic assets and organizational rent. Strategic Management Journal, 14, 33-46.

Azubuike Vera, M.U., 2013, Technological innovation capability and firm's performance in new product development. Communications of the IIMA, 13(1).

Bandittayarak H. and Hotrawaisaya C., 2021, Improving performance, logistics service quality to further enhance thecreate competitive advantage of logistics service providers: container road transportation. Psychology and education. 58(4).

Barney, J., 1991, Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99-120.

Bo Enquist, 2007, Values-based service quality for sustainable business. Journal of Service Theory and Practice, 17(4).

Bottani E. and Rizzi A., 2006, Strategic management of logistics service: A fuzzy QFD approach. International Journal of Production Economics, 103(2), 585-599.

Caro F., 2007, Dynamic assortment with demand learning for seasonal consumer goods. Management Science 53(2), 276-292.

Chapman R.L., Soosay C., and Kandampully J., 2003, Innovation in logistic services and the new business model: A conceptual framework. International Journal of Physical Distribution & Logistics Management, 33(7), 630-650.

Chen S.N. and Fung K.O., 2013, Relationship configurations in the apparel supply chain. Journal of Business & Industrial Marketing, 28(4).

Da Silva, V. L., Kovaleski, J. L., and Pagani, R. N., 2018, Technology transfer in the supply chain oriented to industry 4.0: a literature review. Technology Analysis & Strategic Management, 1–17, 546–562.

Dallasega, P., Rauch, E., and Linder, C., 2018, Industry 4.0 as an enabler of proximity for construction supply chains: a systematic literature review. Computers in Industry, 99, 205–225.

Fugate B. S., Mentzer J. T., and Stank T.P., 2010, Logistics performance: efficiency, effectiveness and differentiation. Journal of Business Logistics, 31(1).

Grant, R. M., 1991, The resource-based theory of competitive advantage: implications for strategy formulation. California Management Review, 33(3), 114-135.

Hong J., 2007, Logistics development in China: a provider perspective. Transportation Journal 46(2), 55-65.

Lai, K., 2004, Service capability and performance of logistics service providers. Transportation Research Part E: Logistics and Transportation Review, 40(5).

Langley, C.J. and Holcomb, M.C., 1992, Creating logistics customer value. Journal of Business Logistics, 13, 1-27.

Leuschner, R., Charvet, F., and Rogers, D. S., 2013, A meta-analysis of logistics customer service. Journal of Supply Chain Management, 49(1), 47-63.

Lin C. Y. and Ho Y. H., 2007, Technological innovation for China's logistics industry. Journal of Technology Management & Innovation, 2(4).

Liu, C. L. and Lyons, A. C., 2011, An analysis of third-party logistics performance and service provision. Transportation Research Part E: Logistics and Transportation Review, 47.

Liu, X., Grant, D. B., McKinnon, A. C. and Feng, Y., 2010, An empirical examination of the contribution of capabilities to the competitiveness of logistics service providers: a perspective from China. International Journal of Physical Distribution & Logistics Management, 40(10), 847-866.

Maestrini V., Luzzini D., Maccarrone P., and Caniato F., 2017, Supply chain performance measurement systems: a systematic review and research agenda. International Journal of Production Economics, 183, 299-315.

Makadok, R., 2001, Toward a synthesis of the resource-based and dynamic-capability views of rent creation. Strategic Management Journal, 22(5), 387-401.

Menon, M. K., Mcginnis, M. A. and Ackerman K. B., 1998, Selection criteria for providers of third party logistics services: an exploratory study. Journal of Business Logistics.

Krauth E., Moonen H., Popova V., and Schut M.C., 2005, Key performance indicators in logistics service provision - a literature review and framework. Conference: European Operations Management Association International Conference on Operations and Global Competitiveness (EUROMA 2005).

Mentzer J.T., Flint D.J. and Hult G.T., 2001, Logistics service quality as a segment-customized process. Journal of Marketing, 65(4), 82-104.

Mentzer, J.T. and Konrad, B.P., 1991, An efficiency/effectiveness approach to logistics performance analysis. Journal of Business Logistics, 12, 33-62.

Mordor Intelligence, 2020, Thailand freight and logistics-growth, trends, covid-19 impact, and forecast (2021-2026), Date of access: 25/7/2021. https://www.mordorintelligence.com/industry-reports/thailand-freight-and-logistics-market

Munusamy, J., Chelliah, S. and Hor W. M., 2010, Service quality delivery and its impact on customer satisfaction in the banking sector in Malaysia. International Journal of Innovation, Management and Technology, 1(4).

Murphy P.R., and Poist R.F., 2000, Third-party logistics: some user versus provider perspectives. Journal of Business Logistics, 21(1), 121- 133.

Nunthong K., Chummee P. and Suvannin W., 2019, Logistics Service Quality Model of Logistics Service Providers in Thailand. BU academic review, 18(2).

Office of the national economic and social development council, 2020, Thailand's logistics report 2019, Date of access: 15/4/2021. www.nesdc.go.th/ewt_dl_link.php?nid=10948

Olavarrieta, S. and Ellinger, A. E., 1997, Resource-based theory and strategic logistics research. International Journal of Physical Distribution & Logistics Management, 27(9/10), 559-587.

Panayides P. M. and So M., 2005, Logistics service provider-client relationships. Transportation Research Part E Logistics and Transportation Review, 41(3), 179-200.

Pirttila T. and Huiskonen J., 1996, A framework for cost-service analysis in differentiation of logistics services. International Journal of Production Economics, 45(1), 131-137.

Rahayu, S., 2018, Customer satisfaction and service quality to develop trust and positive word of mouth in vocational education. KnE Social Sciences, The 2nd International Conference on Vocational Higher Education (ICVHE) 2017, pp. 356–371

Sanders N. and Premus R., 2005, Modeling the relationship between firm IT capability, collaboration and performance. Journal of Business Logistics 26(1), 1-23.

Siam Shipping by Doc shipper Asia.co.,Ltd, 2019, Thailand's logistics challenge, Date of access: 25/7/2021. https://siam-shipping.com/thailands-logistics-challenge/