THE FACTORS AFFECTING THE SUCCESS OF E-LOGISTIC ON CUSTOMER PERCEPTION IN MALAYSIA

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I hereby declare that the work has been done myself and no portion of the work in this research project proposal has been submitted in support of any application for any other degree or qualification of this or any other university or institute of learning.

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DEDICATION

I would like to dedicate this research to my beloved parents who have raised me up, siblings, companion in love who always give encouragement and guidance through my journey to complete study. On the other hand, I would like to thank Dr. Siti Norbaya binti Yahaya who guide me all the way to complete my thesis.

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ABSTRACT

E-commerce in Malaysia was steady but counter various problems in the logistics industry. Malaysia lacks in terms of logistics industry compared to developing countries such as China, Vietnam, and India. The problem lack of availability of modern logistics facility and technology adoption will make dissatisfaction higher among the customers. The use of e-logistics on organization provides benefit such as increase customer response, enhance efficiency, and reduce cost. E-logistic can describe as a data, hardware, software, and information rules-based system that automates logistics processes like fulfilments, warehousing, and transportation of goods while also providing data integration, visibility, optimization, and data tracking of supply chain management from beginning to end. In this research, the researcher intended to study on factors affecting the success of e-logistic. The factors such as customer satisfaction, technology infrastructure, flexibility of e-logistic and staff service quality. Furthermore, descriptive and explanatory studies are applied in this study. This study conducted using quantitative method. Primary data will obtain using survey by distributing questionnaire to the public who experience using e-logistic. Besides, probability sampling will be applied for selecting 384 respondents. Pilot test, reliability analysis will be done to ensure the consistency of the data. In addition, the results obtained from respondents will be analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics, Pearson's correlation coefficient and multiple regression analysis are used to test hypothesis developed by the researcher. From the result, customer satisfaction, technology infrastructure, flexibility of e-logistic and staff service quality has significant factor affecting the success of e-logistic. While the most significant factor to the success of e-logistic based on the result is flexibility of e-logistic. In future research, the researchers can use the proposed new conceptual framework to carry out the study or add other variables for the study.

Keywords: e-commerce, logistic, e-logistic, supply chain

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ABSTRAK

E-dagang di Malaysia stabil tetapi hadapi pelbagai masalah dalam industri logistik. Malaysia kekurangan dari industri logistik berbanding negara membangun seperti China, Vietnam, dan India. Antara masalah ini, kekurangan kemudahan logistik moden dan penggunaan teknologi mendorong rasa tidak puas hati lebih tinggi di kalangan pelanggan. Penggunaan e-logistik pada organisasi memberi manfaat iaitu meningkatkan tindakbalas pelanggan, meningkatkan kecekapan, dan mengurangkan kos. E-logistik menerangkan sebagai sistem berasaskan peraturan data, perkakasan, perisian dan maklumat yang mengautomasikan proses logistik seperti pemenuhan, pergudangan dan pengangkutan barangan sambil turut menyediakan penyepaduan data, keterlihatan, pengoptimuman dan penjejakan data pengurusan rantaian bekalan dari awal hingga akhir. Dalam penyelidikan ini, pengkaji berhasrat untuk mengkaji faktor yang mempengaruhi kejayaan e-logistik. Faktor antaranya kepuasan pelanggan, infrastruktur teknologi, fleksibiliti e-logistik dan kualiti perkhidmatan kakitangan. Seterusnya, kajian deskriptif dan penerangan digunakan dalam kajian ini. Kajian ini dijalankan menggunakan kaedah kuantitatif. Data primer diperoleh dari tinjauan dengan mengedarkan borang soal selidik kepada mereka yang menggunakan e-logistik. Selain itu, persampelan kebarangkalian akan digunakan untuk 384 responden. Ujian rintis, analisis kebolehpercayaan dilakukan bagi memastikan ketekalan data. Selain itu, keputusan yang diperoleh daripada responden akan dianalisis menggunakan Statiscal Package for Social Sciences (SPSS). Statistik deskriptif, pekali korelasi Pearson dan analisis regresi berganda digunakan untuk menguji hipotesis yang dibuat oleh penyelidik. Daripada hasilnya, kepuasan pelanggan, infrastruktur teknologi fleksibiliti e-logistik. Dan kualiti perkhidmatan kakitangan adalah faktor penting dalam mempengaruhi kejayaan e-logistik. Manakala faktor yang paling ketara kepada kejayaan e-logistik adalah fleksibiliti e-logistik. Dalam kajian datang, penyelidik boleh merangka kerja konsep baru yang dicadangkan untuk kajian atau menambah pembolehubah lain untuk kajian.

Kata kunci: E-dagang, logistik, e-logistik, rantaian bekalan

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter explained regarding the introduction of the research. The introduction of research analyses about the background of the study, problem statement, research objectives, research questions, scope and limitations of the study, and significance of the research.

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1.2 Research Flow

1.3 Background of Study

Coronavirus has transformed the nature of business and has affected global e-commerce. According to studies, 52 % avoid going to physical stores and congested places. Furthermore, 36% said they won't go shopping until they obtain the coronavirus vaccine. Coronavirus has varying effects on different types of items, which implies that COVID-19 has a large influence on certain products and a low impact on others (Andrienko, 2020). Because of this illness, individuals are avoiding going out, keeping social distance, and shopping and working from home, such as Walmart supermarket e-commerce, which has increased by 74% (Nakhate & Jain, 2020; Whiteford, 2020).

Nowadays, technological advancement going smoothly and used almost all over the country in this 21st century. More company transformed their business by practice the use of e-commerce since it is a platform to develop the company. The utilization of e-commerce in logistic sector and supply chain are essential for operation process (Wang, 2006). This is because the use of e-logistics on organization provides benefit including increase customer response, enhance efficiency, and reduce cost (Molla, 2005). Logistics and e-logistic are different in terms of their explanation whereby logistics describe as the total handling how resources are bought, stored, and transported to their eventual destination (Kenton, 2022) while e-logistic is the managing of an organization's physical flows when it sells things on the internet such as website, marketplace.

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Item	Traditional logistics	E-logistics
Shipment type	Bulk	Parcel
Customer	Strategic	Unknown
Customer service	Reactive, Rigid	Responsive, flexible
Distribution model	Supply-driven push	Demand-driven pull
Inventory/order flow	Unidirectional	Bidirectional
Destinations	Concentrated	Highly dispersed
Demand	Stable, consistent	Highly seasonal, fragmented
Orders	Predictable	Variable

Table 1.3: The different between logistic and e-logistic (Georgise, 2020)

Next, consumption of information technology very encouraging within logistic company due to current circumstances that is pandemic Covid-19 which is contagious to people whereby can lead to death (Hashim, Adman, Hashim, Mohd Radi, & Kwan, 2021). Many companies running work from home during the pandemic to prevent spreading the virus. Hence, the use of technology highly encouraged to all people in order to facilitate the daily life regardless personal or for organization.

To go deeper, the use of e-logistic also have many benefits to e-commerce such as partnership, warehousing, help business function, and inventory management (Miller & Addington, 2022). Besides that, e-logistic can allows company gain competitive advantage and growing to future ahead since it is key important for competitive advantage (Kenyon & Meixell, 2007) and successful in competitive environment.

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1.4 Problem Statement

According to (Shamsi and Syed, 2015; Ristovka, Kozuharov&Petkovski, 2017), e-commerce in Malaysia was steady but counter various problems in the logistics industry. Malaysia lacks in terms of logistics industry compared to developing countries such as China, Vietnam, and India (Hameed, 2018; Xiaomin & Yi, 2017). One of the problems issues involved is staff employee service comprising of problems associated with delivery services, communication, distribution of information, courtesy, competence, and understanding of the customers

With the advancement of the focus through e-logistics, more problems occur at Malaysian logistics companies like an insufficient tracking system. This system produces disappointment among customers (Anand & Grover, 2015) besides lessening the level of customer satisfaction and requirements. Hence, it will be prompting to decrease in sales and affects the company's performance. (Osasuyi & Mwakipsile, 2017). Moreover, despite the fact that several security methods have been established to address payment problems, several security problems still remain. In this problem, customers must have faith and confidence in the installation approach provider. We can be misled in some instances. Before making a purchasing decision, it is necessary to check the honesty and reputation of online retailers. (Kanavagalli G., 2019)

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The utilization of technology in this today's century may face some problems. In this problem lack of availability of modern logistics facility and technology adoption will make dissatisfaction higher among the customers. The tracking of the essential products, on the other hand, had an impact on the company's performance (Kidane & Sharma, 2016; Shansi & Syed, 2015). Because customers are less likely to buy something through e-logistics because of these issues, and certain logistic providers cannot guarantee the product bought by the customer.

Furthermore, due to inappropriate site design led to the corporate logistic design does not include all the necessary information about the company and the logistics facility, particularly the payment system (Miraz & Habib, 2016). To ensure the success of e-logistic, this study is conducted to identify the success contribute to e-logistic.

1.5 Research Objectives

The purpose of the study is to inspect the factors affecting the success of e-logistic on customer perception in Malaysia. The research objectives developed in this study were based on the problem statement above as listed follow:

1. To identify the factors affecting the success of e-logistic on customer perception in Malaysia
2. To evaluate the relationship between the factor to the success of e-logistic on customer perception.
3. To examine the most significant factors to the success of e-logistic on customer perception

1.6 Research Questions

The purpose of this study is to respond to the following questions

1. What are the factors affecting the success of e-logistic on customer perception in Malaysia?
2. What is the relationship between the factor to the success of e-logistic on customer perception?
3. What is the most significance factors to the success of e-logistic on customer perception?

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1.7 Scope and Limitations of Study

The research is about the factors affecting the success of e-logistic. The scope of this study includes the factors for the success of e-logistic. This research will be held in Malaysia and the respondents will be taken among the people who experience while using e-logistic only. This study shows Malaysia from the side of the interesting advancement as Malaysia one of the rapid growing e-commerce among emerging countries in Asia.

1.8 Significance of Study

From research perspective, this study is anticipated to be essential in terms of factors affecting the success of e-logistic and motivating people who using e-logistic to be conducted in developing countries to decide the similarity of studies conducted. Furthermore, this study comes out with advantages to e-logistic to act as a reference for logistic people to have great level of understanding about e-logistic in Malaysia. As logistic is increasing, this study can identify the factors affecting the success of e-logistic.

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1.9 Summary

This chapter underline the overview of the research study. The researcher has briefly explained the background of study, defined problem statement, research objectives, and research questions of the study. The research objectives and questions are getting from the problem statement. Moreover, the researcher described scope and limitations of study the coverage and restrictions of this study. Finally, significance of study explained by defining the goal of study and benefit of this research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter examines empirical knowledge on independent and dependent variable of this study. The related literature is explained in terms of customer satisfaction, technology, flexibility of e-logistic and staff service quality. This section come out with background information regarding the conceptual framework developed to evaluate on the relationship between factors affecting the success of e-logistic and e-logistic. In this chapter, hypothesis testing is covered to forecast the anticipated outcome of this study.

2.2 E-logistics

Before going deeper about the definition of e-commerce logistic, it is necessary to understand the definition of e-commerce and logistic one by one. Referring to Andrew (2021), e-commerce is described as a business model that allows individuals and organizations to involve in the purchase or sale of the goods and services over the internet by using computers, smartphones, tablets, and other devices. In addition, it does not engage logistics and distribution but instead ease connecting sellers and buyers via the internet (Diana M, Pirra M, Woodcock A, 2020). As for logistic, it is a form of retailing by means provides room for investment in logistics components and

initiating logistical activities. Logistic is various and dynamic functions that require it to be flexible and need to change according to some constraints and demands imposed on it and with respect to the environment in which it functions (Schönsleben, P., 2022). Moreover, according to Havenga (2018), logistics is meant to be the main component of the supply chain process which assists to the implementation, planning, controlling the physical flow of goods. It also increases the success and efficiency of the storage of goods.

Managing logistics is the more challenging for e-commerce companies. With developments in e-commerce, even logistic industry is viewing innovation and applying technologies supporting to meet the high demand (Lopienski K., 2021). Today, the use of e-commerce allows online buyers to track their consignment from the date of a ship from the factory or warehouse until it delivered to consignee's address (Bhalla P., 2017). Next, before the arrival e-commerce industry, retailers acquired goods either distributors or manufacturers but now they are much online shopping store, the use of intermediaries do not exist whereby leading to offers made directly between suppliers and end users (Fernando J., 2022). The elimination of intermediaries makes e-commerce shipping become vital part of supply chain management besides arise as a particularly specialized service with the most of them being administered by e-commerce companies. In Malaysia, e-commerce boosting because the utilization of the internet and mobile devices besides the outbreak Covid-19 making people buy or selling online more rather than physical buying. At this 21st century e-commerce considered as an essential role for people's daily life because it is giving several benefits such as reduce the cost, sell on Global Scale, manage business, and market the business (Kerick, 2019).

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The definition of e-logistic or e-commerce logistic can describe as a data, hardware, software, and information rules-based system that automates logistics processes like fulfilments, warehousing, and transportation of goods while also providing data integration, visibility, optimization, and data tracking of supply chain management from beginning to end (Gong, Wei., & Xuan Kan, 2013). It can be summarized as implement the concept of logistics electronically through internet.

Figure 2.2: The processes of e-logistic (Wang, 2006)

E-Logistics, according to Coyle (2003), is a system made up of numerous elements, each of which can be run independently. Planning System, Execution System, Research and Intelligence System, Reports and Outputs System are all part of the E-Logistics module. Reduced operational expenses, additional revenue from advertising and marketing, rapid responsiveness to customer requests, and reduced inefficiencies are all advantages of E-Logistics. E-Logistics within an E-Commerce organization will allow them to develop customized logistics process needs estimations (Hwang, 2016).

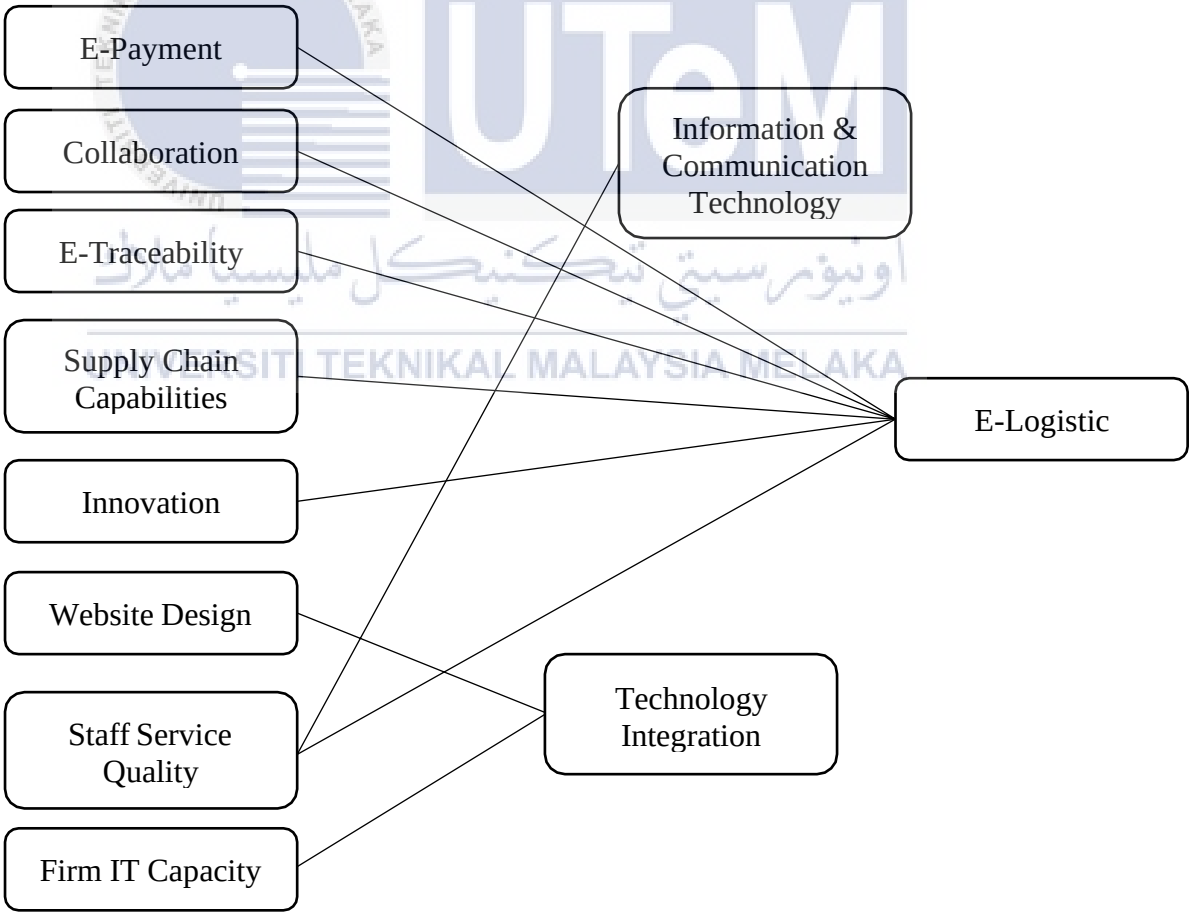

Figure 2.2: Framework developed by A.K. MahbubulHye, (2020)