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TOTAL QUALITY MANAGEMENT PRACTICES AND THE EFFECT ON SUPPLY CHAIN MANAGEMENT OF SHOPEE MALAYSIA

NORHAFIFAH BINTI MAJID

Final project paper submitted to National Defence University of Malaysia, in fulfilment of the requirements for the Master of Business Administration (Supply Chain and Logistics)

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ABSTRACT

Digitalization heralds the dawn of the industry 4.0 era. The current generation's tendency for online activities, such as shopping or transacting on e-commerce platforms, is among the primary reasons for the high degree of competition among online trading service provider applications. However, despite the widespread use of Total Quality Management in developed countries, little attention was paid to the implementation and evaluation of quality initiatives by organizations in the most notably leading e-commerce platform in Malaysia i.e. Shopee. The main objectives of this study to determine the level of TQM practices and supply chain management practices among Shopee Malaysia employees and to examines the relationship between TQM practices and supply chain management practices among Shopee Malaysia employees. This study applied crosssectional method with quantitative approach. Data are gathered by using purposive random sampling method through questionnaire. The data collected are analyzed using SPSS software. For the purpose of comparing the level of supply chain management practices by selected socio-demographic factors among Shopee employee, Independent t-test and ANOVA has been employed. Correlation analyses such as Pearson correlation and Multiple Linear Regression has been employed to ascertain relationship between dependent and independent variables in this study. The level of TQM practices in this research has been measured with six dimensions namely leadership, knowledge and process management, training and education, customer focus, organizations and human resources. Based on the results, the researcher found that TQM practices and supply chain management practices is at moderate mean score. For correlation analysis, TQM and supply chain management practices indicated a non-significant relationship. Insignificant relationships between TOM and supply chain management practices may indicate the presence of an indirect or nonlinear relationship. The absence of a significant link between TQM variables and supply chain management practices may imply the existence of a mediational interaction between TQM practices.

ABSTRAK

Pendigitalan menandakan permulaan era industri 4.0. Kecenderungan generasi semasa untuk aktiviti dalam talian, seperti membeli-belah atau berurus niaga di platform edagang, adalah antara sebab utama persaingan yang tinggi dalam kalangan aplikasi penyedia perkhidmatan dagangan dalam talian. Walau bagaimanapun, penggunaan Total Quality Management (TQM) semakin meluas di negara maju, sedikit perhatian diberikan kepada pelaksanaan dan penilaian inisiatif kualiti oleh organisasi dalam platform edagang yang paling terkemuka di Malaysia iaitu Shopee. Objektif utama kajian ini untuk menentukan tahap amalan TQM dan amalan pengurusan rantaian bekalan di kalangan pekerja Shopee Malavsia dan untuk mengkaji hubungan antara amalan TOM dan amalan pengurusan rantaian bekalan dalam kalangan pekerja Shopee Malaysia. Kajian ini menggunakan kaedah cross-sectional dengan pendekatan kuantitatif. Data dikumpul menggunakan kaedah persampelan rawak bertujuan melalui soal selidik. Data yang dikumpul dianalisis menggunakan perisian SPSS. Bagi tujuan membandingkan tahap amalan pengurusan rantaian bekalan oleh faktor sosio-demografi terpilih di kalangan pekerja Shopee, ujian t-test dan ANOVA telah digunakan. Analisis korelasi seperti korelasi Pearson dan Regresi Linear Berganda telah digunakan untuk memastikan hubungan antara pembolehubah bersandar dan bebas dalam kajian ini. Tahap amalan TQM dalam penyelidikan ini telah diukur dengan enam dimensi iaitu kepimpinan, pengurusan pengetahuan dan proses, latihan dan pendidikan, tumpuan pelanggan, organisasi dan sumber manusia. Berdasarkan keputusan, pengkaji mendapati amalan TQM dan amalan pengurusan rantaian bekalan berada pada skor min sederhana. Untuk analisis korelasi, TQM dan amalan pengurusan rantaian bekalan menunjukkan hubungan yang tidak signifikan. Hubungan yang tidak signifikan antara TQM dan amalan pengurusan rantaian bekalan mungkin menunjukkan kehadiran hubungan tidak langsung atau tidak linear. Ketiadaan hubungan yang signifikan antara pembolehubah TQM dan amalan pengurusan rantaian bekalan mungkin membayangkan wujudnya interaksi pengantaraan antara amalan TOM.

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APPROVAL

This thesis was submitted to the Senate of Universiti Pertahanan Nasional Malaysia and has been accepted as fulfilment of the requirements for the degree of Master of Business Administration (Supply Chain and Logistics). The members of the Supervisory Committee were as follows.

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	Chain Management of Shopee Malaysia

Academic session : 2021/2022

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter introduces the background of the research, identifies problem statement, research questions and aligns with the objectives of the research as well as research hypothesis. Apart from that, it highlights the significance of the study, scope and limitations of the study, conceptual and operational definition and organization of the study.

1.2 Background of the study

Digitalization heralds the dawn of the industry 4.0 era. With the advancement of technology and growth of online culture, purchasing habits will shift towards e-commerce systems (Electronic Commerce) (Mashur et al., 2019). The increase in the number of stores represents a movement in trading habits away from physical stores and toward digital platforms. Current generations' preference for online activities such as buying and transacting on e-commerce platforms, is reflected in the data, where it is among the primary reasons for the high degree of competition among the technologies used by internet trading service providers (Safia et al., 2019). Hence, it is rational to assume that online purchasing transactions will skyrocket rapidly.

E-commerce is a concept that refers to the process of purchasing and selling goods and services through the Internet, as well as the exchange of products, services, and information via information networks. It was originally introduced in 1994 and used for company's promotional and advertising purposes in a web page (Maula, 2017). Worldwide retail e-commerce sales have been consistently expanding, hitting \$2.382 trillion in 2017 and \$2.928 trillion in 2018, contributing for 10.4% and 12.2% of total retail sales, respectively (eMarketer, 2019). Despite a difficult year for retail in 2020, global retail ecommerce sales were expected to have increased 27.6 percent year over year to \$4.280 trillion (eMarketer, 2020). This is a significant increase over the 16.5 percent growth estimated in the mid-pandemic period.

At its most fundamental level, e-commerce technology enables faster internal communication and more efficient resource management within the organization. Furthermore, many advantages accrue to the business when transactions are conducted via e-commerce, including reduced cost of transactions (Reynolds, 2000), reduced costs for advertising (Yang et al., 2016), the improvement of communication between suppliers and purchasers (Indahingwati et al., 2019), supply chain simplification (Shousong, Xiaoguang, & Yuanjun, 2018), reducing the amount of transportation required, lowering shipping costs, and eliminating the need to sell storage space (Primanto, ABS, & Slamet, 2018). It is one of the key factors that contributes to the high level of competition among online trading service provider programs that the present generation enjoys engaging in online activities such as shopping or transacting on e-commerce platforms (Safia et al., 2019).

The seamless exchange of information via shared electronic files and networked computers significantly improves the productivity of business activities such as documentation, data processing, and other back-office functions (e.g. organizing incoming orders and preparing invoices) (Ahmad et al., 2014).

However, global retail sales decreased 3.0% to \$23.839 trillion in the year of 2020. It is also worth noting that China still leading on digital buyers in 2021, with 792.5 million (33.3 percent of the global total). It produced \$2.779 trillion in ecommerce sales (56.8% of the global total) and become the first country in history to transact more than half of its retail sales digitally (52.1% of retail will be ecommerce) (eMarketer, 2020).

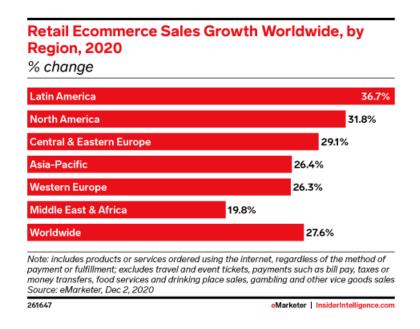


Figure 1.1: Retail Ecommerce Sales Growth Worldwide, by Region, 2020

Top 10 Countries, Ranked by Retail Ecommerce Sales, 2020 & 2021

billions and % change

	2020	2021	% change
1. China*	\$2,296.95	\$2,779.31	21.0%
2. US	\$794.50	\$843.15	6.1%
3. UK	\$180.39	\$169.02	-6.3%
4. Japan	\$141.26	\$144.08	2.0%
5. South Korea	\$110.60	\$120.56	9.0%
6. Germany	\$96.86	\$101.51	4.8%
7. France	\$73.80	\$80.00	8.4%
8. India	\$55.35	\$67.53	22.0%
9. Canada	\$39.22	\$44.12	12.5%
10. Spain	\$36.40	\$37.12	2.0%

payment or fulfillment; excludes travel and event tickets, payments such as bill pay, taxes or money transfers, food services and drinking place sales, gambling and other vice goods sales; *excludes Hong Kong Source: eMarketer, Dec 2020

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Figure 1.2: Top 10 countries, Ranked by Retail Ecommerce Sales, 2020 & 2021

According to Mukhtar et al. (2016), Malaysia, along with Hong Kong, Korea, and Singapore, is an Asian country predicted to have rapid growth in the online business industry. Indeed, Malaysia is recognized as a developing country that is heavily invested in both local and international e-commerce. This is particularly pertinent today that several Malaysian authorities have been established to assist and promote the advancement of e-commerce, such as the Malaysian Communications and Multimedia Commission (MCMC) and Multimedia Development Corporation (MDeC) (Ahmad et al., 2015). With the growth of internet users and digital applications, e-commerce continues to attract investors' attention, and Shopee is one of the most active online marketplaces.

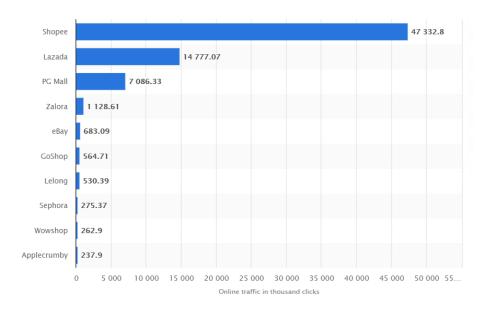


Figure 1.3: E-commerce Application in Malaysia (Source: eMarketer, 2020)

Electronic Commerce (E-Commerce) has reshaped the commercial landscape. Governments have been advocating for the adoption and usage of E-Commerce by Small and Medium-sized Enterprises (SMEs) for more than a decade. E-commerce has been widely promoted as a technology that helps SMEs to compete with larger firms. According to prior research, customer demand and the pressures of business sector competition are two of the most well-known driving factors for SMEs to adopt E-Commerce (Acılar & Karamaşa, 2010; Evans & Bosua, 2017; Kartiwi, 2010; Mazzarol, 2015). In terms of benefits, considerable emphasis has been given in the existing literature to define the benefits or values of E-Commerce in SMEs, such as cost savings, increased customer retention, and improved external linkages (Kartiwi, 2010; Mazzarol, 2015; Alemayehu Molla & Heeks, 2007; Alemayehu. Molla & Licker, 2005). Notably, Shopee, a Malaysian e-commerce programs has grown rapidly in a short period of time. Shopee is one of several organizations that capitalize on e-commerce business potential by energizing the mobile marketplace segment through mobile applications that permit buying and selling via mobile devices. From 2017 to 2019, Shopee remained at the top of Southeast Asia's most popular e-commerce competition as the most downloaded apps on the Play Store (Praja et al., 2018).

Making the decision to purchase something on an e-commerce platform is driven by the desire to make a purchase. The consumer participates in a series of browsing on numerous e-commerce options available on the desired goods. Then, the specific buying intention becomes a purchase decision, culminating in fulfilment and a repurchase plan (Fang et al., 2014; Kim & Yang, 2020; Khoa et al., 2020). Consumers expect online platforms such as Shopee to be responsive in resolving customer issues with sellers, and accommodating their demands and requirements. Consumers will always expect sellers to respond quickly to their inquiries, and as a 'middleman,' the online platform provider must act immediately to ensure both sellers and consumers' satisfaction.

Before venturing into online retailing, it is critical for Malaysian businesses to have a firm grasp on the market for their products and their target clients (Louis & Leon, 1999). With a strong understanding of their target customers, online retailers and entrepreneurs may build more successful and targeted online retail operations that fulfil the needs and expectations of their new online purchasing clients (Shannon, 1997). This is important to the success of their internet retailing business in Malaysia. As a result, the likelihood of them switching to comparable sellers with a higher response rate and positive ratings is extremely considerable. Thus, online platforms are required to make every effort to respond to their customers' questions and demands to elicit and maintain their loyalty, as well as to secure positive reviews.

1.3 Problem Statement

In today's business environment, management must be capable of producing a highquality product and services. Enhancing the quality of products and services must also coincide with increasing worker productivity. Thus, by enhancing vital factor such as labour performance, firms may flourish in today's global business environment. According to Prajogo and Brown (2004), the connection between TQM practices and quality performance in Australian firms was robust and strong. Furthermore, the "process management, and top-management commitment and support" all contribute significantly to the quality performance. Arumugam et al. (2008) discovered that TQM practices are moderately correlated with quality performance in 122 Malaysian firms. Additionally, it was discovered that "senior management, customer focus, and continuous improvement" are recognized as dominating TQM techniques in terms of quality performance, but also contribute significantly to quality adoption.

TQM is an integrative management concept that focuses on the efficient and effective execution of processes, goods, and services in order to maximize customer satisfaction and organisational performance by achieving or exceeding customer expectations (Garca-Bernal & Ramrez-Aleson, 2015; Sadikoglu & Olcay, 2014). Hence, organizations adopted TQM to boost their company's success by differentiating their products and establishing a competitive position in the market (Herzallah et al., 2014; Perez & Gutierrez, 2013).

Numerous past studies have been conducted on the relationship between TQM and supply chain management practices. Studies on TQM by Ooi et al. (2006; 2011) demonstrate the association between TQM and employees' inclination to stay with a major Malaysian semiconductor packaging company. Ooi et al. (2011) also discovered that TQM entails an organization-wide effort to foster an environment conducive to constant improvement in delivering high-quality products and services to customers. Additionally, a framework was developed to study the factors affecting the successful implementation of TQM and its impact on organizational performance (Montes et al., 2003). They recognized the idea and components of TQM as critical elements that influence organizational success. Hence, this thesis envisioned that using TQM principles in such an organization would result in more efficient and long-lasting results in their supply chain management practices as well. Various researchers emphasize strongly that initiatives to improve the quality of various approaches and tools for quality management, as well as continuous improvement have been made and that the concept of TQM is advocated (Abdallah et al., 2013; Bani-Hani & Al-Omari, 2012).

A number of studies of online commerce place a premium on the customer perspective, including the factors influencing customers' purchase intentions (Hsu & Chuang, 2015; Erkan & Evans, 2016; Mousavizadehet al., 2016), customer satisfaction (Hult et al., 2018), and customer shopping behaviour (Clemons et al., 2017). However, there are few studies that examine online business difficulties from the perspective of sellers (Low & Verma, 2018). Flexible and quality-driven management with global perspectives can be seen in the quality management systems deployed by business organizations. While total quality management (TQM) is widely used in industrialized countries, little attention has been paid to the implementation and evaluation of quality initiatives by enterprises, including the most prominent of which is Malaysia's top e-commerce platform. Therefore, in this study, the researcher would like to perform a study to determine the effect of Total Quality Management (TQM) practices on supply chain management practices in Shopee Malaysia.

1.4 Research Objectives

The general objective of this research is to study the effect of Total Quality Management (TQM) practices on Shopee Malaysia supply chain management practices.

Specific objectives of this study are:

- 1. To determine socio demographic (gender, age, level of education, ethnicity, income) of Shopee Malaysia employees.
- 2. To determine the level of TQM practices and supply chain management practices among Shopee Malaysia employees.
- To examines the relationship between TQM practices and supply chain management practices among Shopee Malaysia employees.

1.5 Research Questions

- What is the socio demographic (gender, age, level of education, ethnicity, income, positions) of Shopee Malaysia employees?
- 2. What is the level of TQM practices and supply chain management practices among Shopee Malaysia employees?
- 3. What is the relationship between TQM practices and supply chain management practices among Shopee Malaysia employees?

1.6 Scope of Study

The purpose of this research is to study TQM dimension that might influences Shopee Malaysia supply chain management practices. Shopee Malaysia is one of the most active online marketplaces in Malaysia. Therefore, the performances of Shopee Malaysia organization is important to be measured to ensure service quality provided by the employee is at maximum level. The limitation of this study exists as it includes only selected independent variables. Although several factors have been associated with supply chain management practices, the present study limits its independent variables with TQM dimension with supply chain management practices as dependent variable.

1.7 Significant of the study

This study explores the effect of TQM practices (human resources, training and education, leadership, knowledge and process management and customer focus) on supply chain management practices. There are limited studies that look into the issues of online business from the sellers' point of view (Low & Verma, 2018). Flexible and quality-driven management with global perspectives can be seen in the quality management systems deployed by business organizations. However, despite the widespread use of TQM in developed countries, little attention was paid to the implementation and evaluation of quality management initiatives by organizations in the most notably leading e-commerce platform in Malaysia; namely Shopee Malaysia. The study is predicted to have an effect on the supply chain management practices of Shopee Malaysia and other leading online platforms, hence benefiting Malaysia's well-being and achieving more skilled organizations in the long term.

1.8 Operational Definition of Terms

The next part focuses on the operational definition of terms for this study, which covers aspects such as human resources, training and education, leadership, knowledge and process management and customer focus towards supply chain management practices.

1.8.1 Human Resources

Human resources are defined as work and occupations that are deliberately developed, organized, and managed to promote individual initiative and self-direction (EFQM, 2003). Human resources encompass the following: investment in training and development; creation of new values and standards; redefining the reward and promotion system; and enhancing organizational learning and decision-making (Jones, 2004). Human resource focus is the important component of TQM, which has a positive impact on business performance (Haffer & Kristensen, 2010).

1.8.2 Training and Education

According to Goldstein (1986), training is defined as "the systematic acquisition of skills, norms, concepts, or attitudes that result in improved performance." Individuals rely on training to enhance their existing abilities and acquire new ones (Mathieu et al., 1992). Training is crucial for a company to expand its employees' skills and competence in order to meet future challenges and improve performance (Azmawani et al., 2013). Effective management training and continuous improvement in quality ensure the success of company. In fact, effective training increases employees' commitment to the company, motivation, and performance. On the other hand, a number of studies have found that training is associated with improved operational performance in the field (Phan & Abdallah, 2011), inventory management performance (Phan & Abdallah, 2011) and employee performance (Fuentes, Montes & Fernandez, 2006).

1.8.3 Leadership

Leadership is the ability of top management to set practices and lead a long-term vision for the organization (Anderson, Rungtusanatham, and Schroeder, 1994; Choi & Behling, 1997). Leadership establishes quality policies, goals, resources, problem-solving training, and encourages improvement, which is critical for TQM implementation and business performance (Juran & Gryna, 1993; Karaszewski, 2010; Rui, Emerson, and Luis, 2010). Leaders are expected to emphasize quality, allocate resources for continuous quality improvement, and evaluate employees based on performance (Minjoon, Shaohan, & Hojung, 2006).

1.8.4 Knowledge and process management

According to Chow et al. (2005), knowledge management (KM) can be defined as the collection of actions that enable the creation, storage, distribution, and application of knowledge in organization. Effective knowledge management ensures that employees have access to the data and information they required to perform their jobs effectively and efficiently within the organization (Sadikoglu & Olcay, 2014). This is the only way to achieve the anticipated benefits of TQM techniques. Through a series of methodological and behavioural activities, process management places an emphasis on activities rather than results. In quality management, it involves both preventive and proactive measures that are designed to eliminate variability in the process while simultaneously improving the quality of the result (Sadikoglu & Olcay, 2014). Previous research has established that knowledge and process management improve operational

performance (Lee et al., 2003; Phan, Abdallah & Matsui, 2011; Forza and Filippini, 1998) inventory management performance (Phan, Abdallah & Matsui, 2011), innovation performance (Phan, Abdallah & Matsui, 2011, Kim et al., 2012), social responsibility (Adam,Corbett & Flores, 1997) and overall firm performance (Macinati, 2008; Zu, Fredendall & Douglas, 2008; Zehir & Sadikoglu, 2003).

1.8.5 Customer focus

Customer-focus is a system of beliefs that prioritizes the customer's interests above all others, including owners, managers, and employees, in order to generate long-term profitability (Nwokah & Maclayton, 2006). Customer focus is a business strategy that places the customer at the center of all business development and management decisions. Client expectations and requirements should be fully understood before any items or services are delivered with regard to the demands, expectations, and complaints of the customer base. Previous studies have demonstrated that customer focus positively affects supply chain management performance, employee performance (Dow, Samson & Ford, 1999; Samson & Terziovski, 1999; Jari & Claver, 2008), innovation performance (Phan, Abdallah & Matsui, 2011; Kim et al., 2012; Zehir & Sadikoglu, 2012) and aggregate firm performance (Zehir & Sadikoglu, 2012; Joiner, 2007).