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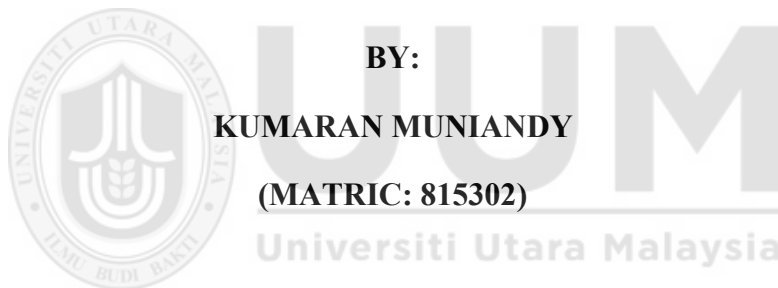
**SUPPLY CHAIN MANAGEMENT PRACTICES AND
PERFORMANCE OF TEXTILE AND APPAREL FIRMS IN
MALAYSIA**



UNIVERSITI UTARA MALAYSIA

2017

**SUPPLY CHAIN MANAGEMENT PRACTICES AND PERFORMANCE
OF TEXTILE AND APPAREL FIRMS IN MALAYSIA**



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**Thesis Submitted to
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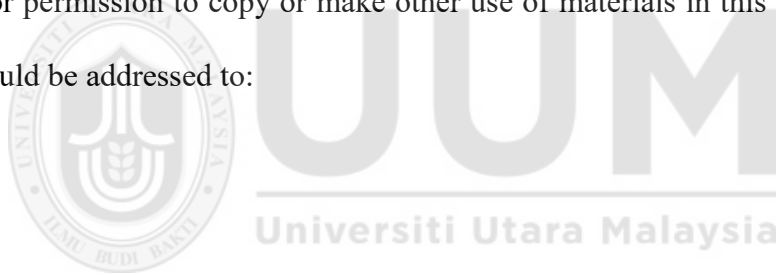
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ABSTRACT

Supply Chain Management (SCM) plays a significant role in determining the success of manufacturing companies. Despite the relevance and applicability of SCM to manufacturing firms, the review of the previous research reveals that there is limited research that attempted to investigate the effect of SCM practices on the performance of manufacturing companies, particularly among the textile and apparel companies in Malaysia. As a result, there is not only lack of information but also little knowledge concerning SCM practices and its effect on the performance of textile and apparel companies in the country. This study initiates an attempt to address this limitation by examining the relationship between SCM practices and the performance of textile and apparel firms in Malaysia. By using structured questionnaire, the data for the study was collected from 100 firms operating in the textile and apparel industry. The results of the analysis of the data indicate that SCM practices such as customer relationship, strategic supplier partnership, and strategic outsourcing adopted by the textiles firms are significantly associated to their performance.

Keywords: supply chain management practice, customer relationship, strategic supplier partnership, strategic outsourcing, and organizational performance.

ABSTRAK

Pengurusan rantaian bekalan memainkan peranan penting dalam menentukan kejayaan sesebuah syarikat pembuatan. Walaupun pengurusan rantaian bekalan relevan dan sesuai kepada firma-firma pembuatan, kajian kesusasteraan mendedahkan bahawa terdapat penyelidikan terhad yang mengkaji hubungan antara amalan pengurusan rantaian bekalan dengan prestasi firma perkilangan, terutamanya di syarikat tekstil dan pakaian di Malaysia. Oleh yang demikian terdapat bukan sahaja kekurangan maklumat tetapi juga pengetahuan yang sedikit mengenai amalan pengurusan rantaian bekalan dan hubungannya dengan prestasi syarikat tekstil dan pakaian di Negara ini. Kajian ini merupakan satu usaha untuk mengatasi had tersebut dengan mengkaji hubungan antara amalan pengurusan rantaian bekalan dengan prestasi syarikat tekstil dan pakaian di Malaysia. Dengan menggunakan soal selidik berstruktur, data untuk kajian ini telah dikumpulkan daripada 100 firma yang beroperasi dalam industry tekstil dan pakaian. Hasil analisis data menunjukkan bahawa amalan pengurusan rantaian bekalan seperti perhubungan pelanggan, perkongsian pembekal strategik, dan penyumberan luar strategik yang diguna pakai oleh syarikat tekstil dan pakaian mempunyai hubungkait yang signifikan berkaitan dengan prestasi syarikat mereka.

Kata Kunci: amalan pengurusan rantaian bekalan, perhubungan pelanggan, perkongsian strategic pembekal, penyumberan luar strategik, dan prestasi organisasi.

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LIST OF ABBREVIATIONS

CR	Customer Relationship
DSAM	Direct Selling Association Malaysia
FMM	Federation of Malaysian Manufacturers
IBBM	Institute Bank-Bank Malaysia
MATRADE	Malaysian External Trade Development Corporation
MGMA	Malaysian Garment Manufacturers Association
MIDA	Malaysian Investment Development Authority
MKMA	Malaysian Knitting Manufacturers Association
MOF	Ministry of Finance
MTMA	Malaysian Textile Manufacturers Association
MQA	Malaysian Qualifications Agency
OP	Organizational Performance
ROA	Return on Assets
ROI	Return on Investments
SCM	Supply Chain Management
SCMP	Supply Chain Management Practices
SME CORP.	Small and Medium Enterprises Corporation
SPSS	Statistical Package for Social Science
SO	Strategic Outsourcing
SSM	Suruhanjaya Syarikat Malaysia
SSP	Strategic Supplier Partnership

CHAPTER ONE

INTRODUCTION

1.1 Introduction

The textile and apparel industry plays a significant role in the Malaysian economy. According to the Malaysian Investment Development Authority (MIDA), the textile and apparel industry is one of the main contributors to the manufacturing sector in Malaysia. The Department of Statistic Malaysia reported that in 2011, the exports from the textile and apparel firms were valued at RM10.81 billion and they contributed about 1.7% of the total growth experienced by the manufacturing sector in Malaysia.

The textile and apparel industry is considered important to the manufacturing sector in Malaysia. Despite the importance of the textile and apparel industry, the literature indicates that as an area of study, firms in this particular industry have not received much research emphasis. More specifically, the review of literature reveals not only limited studies have investigated textile and apparel firms but also research in this area seems to be neglected as well. As a result, there is not much information about the nature of textile and apparel firms as well as how these firms are being managed in the Malaysian context.

In view of the gaps in research and information, this study attempted to examine textile and apparel firms from the SCM perspective. More precisely, the study represents an effort to investigate the relationship between SCM practices and performance of textile and apparel firms in Malaysia.

1.2 Background of Study

The business environment in which the textile and apparel firms operate is not only continuously changing but also becoming more complex, dynamic, unpredictable, as well as becoming more globalized in nature. The changes in such a business environment have posed both opportunities and challenges to the textile and apparel firms. However, in order to exploit the opportunities and cope with the challenges, these firms need to adopt effective management practices such as SCM.

In highly competitive business environment, firms not only have to compete with each other directly but also the competition exists among their supply chain. Organizations need some form of competitive advantage to compete successfully. With regard to this, findings from previous studies have found that supply chain management (SCM) plays an important role in providing firms the competitive advantage that they need to improve their organizational performance (Schneller & Smeltzer, 2006; White & Mohdzain, 2009).

Furthermore, rapid changes and intensive competition required that organizations develop their capabilities to response as well as provide high quality products and services to their customers (Fawcett & Magnan, 2001). Organizations can strengthen their capabilities by developing and implementing effective SCM practices. The adoption of effective SCM practices can help organizations to not only sustain their competitive advantage and organizational performance but also integrate their internal functions to external parties such as suppliers and customers.

In the context of global marketplace, customers are demanding more varieties, better quality, higher reliability and faster delivery. Moreover, product life cycle is becoming shorter, product variety is increasing and technological advances are developing at a faster pace (Li & Lin, 2006). In order for firms to deal with all these challenges, they need to develop strong upstream and downstream integration of their elaborate network of business relationships through effective SCM practices (Gorane&Kant, 2017).

In addition to the study by Gorane and Kant (2017), and the research conducted by Sundram, Ibrahim and Govindaraju (2011) further implied that the adoption of SCM practices has provided benefits such as operational success for firms. This in turn has enhanced the organizational competitive advantage. As a result, SCM has been regarded as one of the most effective business practice as well as a successful management tool for organizations to keep up their business stability, development and prosperity.

SCM involvement helps organizations to integrate their manufacturers, distributors, suppliers, and customers. By adopting SCM, organizations are able to develop more cohesive business model that can improve their long-term performance (Chopra & Meindl 2007; Gorane & Kant, 2017).

SCM also enables organizations to share their data and information, developed products together, negotiate prices and terms, make inquiry concerning potential partners and product specifications as well as determine demand expectations from their customers and suppliers. By allowing organizations to perform these activities, SCM is considered

essential to the performance and success of organizations (Chopra & Meindl 2007; Gorane & Kant, 2017).

Although the literature emphasizes on the importance of SCM to organizational performance, research in this area remained limited. In particular, the review of past research reveals that there is not many studies that attempted to investigate SCM practices among textile and apparel firms, especially in the Malaysian context. Given this research gap, this study initiates an attempt to examine the effect of SCM practices on the performance of Malaysian textile and apparel companies.

1.3 Problem Statement

Like other manufacturing firms, textile and apparel firms need to adopt effective SCM practices in order to compete successfully in the market. This is because the business environment within which these firms compete is changing rapidly and becoming more competitive. The rapid changes and competition affect the products produced by the textile and apparel firms as well as the way they sell them in the market.

Coping with the changes and competing in the marketplace require that textile and apparel firms adopt effective SCM practices. Nevertheless, the literature indicates that there is little information about SCM practices adopted by Malaysian textile and apparel companies. Furthermore, the review of past research suggests that there are not many studies that investigate SCM practices among the textile and apparel firms in the Malaysian context. In Malaysia, textile and apparel firms represent a significant numbers of enterprises in the

manufacturing sector. Yet research on textile and apparel firms from the SCM perspective has not attracted much interest and emphasis.

Despite the importance of textile and apparel firms to the Malaysian economy as well as the relevance and applicability of SCM to these firms, empirical studies in this research area remained not only restricted but also neglected in Malaysia. This limitation has resulted not only in little information but also not much knowledge about SCM practices among the textile and apparel firms in Malaysia.

Furthermore, although the literature emphasizes on important relationship between SCM practices and organizational performance, past empirical studies have mostly concentrated on investigating large business firms (Sufian, 2010). The review of the literature further suggests that the effect of SCM practices on the performance of textile and apparel companies has not attracted much research attention, particularly in the local context. The lack of information and research suggest the need for more studies to be conducted in this area of study. In view of this limitation, this study investigates the impact of SCM practices on the performance of Malaysian textile and apparel companies.

1.4 Research Questions

This study initiated an attempt to examine not only the SCM practices adopted by textile and apparel firms in Malaysia but also to determine their relationship to their organizational performance. Therefore, the study intends to answer the following research questions:

1. To what extent do textile and apparel firms in Malaysia adopted SCM practices?
2. Is there a relationship between the SCM practices adopted by the textile and apparel firms in Malaysia and their performance?

1.5 Objective of the Study

The main objective of this study is to investigate the relationship between SCM practices and the organizational performance of the textile and apparel firms. More specifically, the objectives of the study are:

1. To determine the SCM practices adopted by textile and apparel firms in Malaysia.
2. To determine the relationship between the SCM practices and performance of textile and apparel firms in Malaysia.

1.6 Scope of the Study

There are not only many textile and apparel firms in Malaysia but they are also located in many parts in the country. The textile and apparel firms involved in this study were restricted to those firms that are members of the Federation of Malaysian Manufacturers (FMM). The listing of textile and apparel firms obtained from the FMM was used as the sampling frame of this study. The research model developed in this study was used to assess the SCM practices of the textile and apparel firms within this sampling frame. Furthermore, the study investigated only firms that have been involved in activities related to textile and apparel for at least four years.

1.7 Significance of the Study

The purpose of this study is to investigate the SCM practices adopted by textile and apparel firms and their relationship to organizational performance. The findings of this study would be useful for new and existing textile and apparel firms in Malaysia. More specifically, the study would be able to offer the following theoretical and practical contributions.

1.7.1 Theoretical Contribution

Information from the study will contribute to the literature on SCM practices among Malaysian textile and apparel firms. This study helps to increase our understanding of SCM practices and organizational performance of textile and apparel companies in Malaysia. In particular, the finding of the research is expected to extend the body of knowledge on textile and apparel companies by providing empirical evidence that suggests the influence of SCM practices on organizational performance. In addition, this study may also provide information on the current understanding of SCM practices among the textile and apparel firms in the manufacturing sector in Malaysia.

1.7.2 Practical Contribution

Finding of the study would provide some practical managerial contributions. For instance, the research will provide the owners and managers of textile and apparel firms insight into the importance of SCM practices for improving not only their performance but also their manufacturing activity. The findings of the study would also be useful in identifying and developing assistance and consultancy programs needed by textile and

apparel firms, especially those that are important for improving their skills and knowledge that they need for competing in the marketplace.

1.8 Definitions of Key Terms:

The definitions of the important terms used in the study are presented below:

SCM practices referred to the way in which a firm integrates its suppliers, manufacturers, distributors and customers in order to compete, pursue, achieve and maintain its competitive advantage in an industry. More specifically, the study adopted the following three practices; customer relationship, strategic supplier partnership and strategic outsourcing.

Organizational Performance in the study is measured subjectively in terms of the following; sales, return on investment, market share, profit margin, delivery, cost saving, product and service quality, forecasting accuracy, inventory level, flexibility, return on assets and customer satisfaction.

Textile and apparel firms in this study are defined as those firms involved in the production and selling of textile products and apparels and that they have been operating for more than four years.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides the literature review related to the current research. More specifically, the literature is presented in two sections. The first section focuses on the concepts of SCM and SCM practices. Next, the second section presents the literature on the research variables related to this study.

2.2 Supply Chain Management

There is no one universal accepted definitions of supply chain management. The literature indicates that concept of SCM has been defined in a variety of ways. However, in general, SCM refers to a business network that organizations adopt to enable them to manage and provide the products and services based on customer needs, right product (Dale, et al., 1994), right quality and quantity (Brewer & Speh, 2000; Carmignani, 2009; Chan, et al., 2001) from the right sources (Carr & Smeltzer, 1999) at reasonable price (Chin, et al., 2004) by utilizing the right technology (Basnet, et al., 2003; Boubekri, 2001) as well as encompasses all activities needed to fulfill customers' demands and requests.

The SCM activities involve the transformation of the raw material stage through the end users where they also contain the relevant information and funds flow (Ling, 2007). All the products will move through an organization from its original sources of raw materials

through the end user. Furthermore, SCM is regarded as a management and planning of activities which required establishing resources and purchases of products, conversion and logistics activities. It also comprises collaboration among partners, intermediate channels, suppliers, customers and service providers to obtain a successful management to manage the supply and demand.

With regard to the adoption of SCM, organizations focus on their strengths and core activities in order to ensure that their supply chain activities are executed specifically based on the required activities of organization (Sweeney & O'Riordan, 2007). In addition, other studies viewed supply chain management in terms of flow of resources across and within organization. Some of the researcher, view supply chain management as a strategic and operational tool to integrate business operations in building capabilities for customization which promises a sustainable customer satisfaction by effectively manages the total flow of inventory from ultimate supplier to the end user (Cooper & Ellram, 1993; Mentzer, et al., 2001). Meanwhile, other researchers define supply chain management as a management of philosophy (Tyndall, Gopal, Partsch, & Kamauff, 1998; Wolf, 2011).

Furthermore, SCM is also known as a chain of relationships between organizations in various business entities to promotes and foster strong coordination. In order to ensure the effectiveness of strong coordination, an organization must integrate all the value added activities and all the processes of supply chain must be smooth. Besides that, supply chain management is also refers as a links to all partners not only within an

organization but it is also known as a links with external partners including suppliers, carriers, third-party companies, and information systems providers (Lummus & Vokurka, 1999a). Supply chain management is also widely accepted as an imported customer service component. Hence, the important thing in supply chain management is that the entire process must be viewed as one system.

The true capabilities of the process in supply chain management must be assessed carefully, if any insufficient incurred across the SCM that involves suppliers, manufacturing plants, warehouses, customers (Lummus & Vokurka, 1999a). The processes of SCM exist in such as manufacturing and service organizations; even though the managerial complexity of the SCM might be vary from industries and different firms (Ellram, 2004).

Chopra and Meindl (2003) in their study define supply chain management as cycle view which the processes and flow as an essential element for operational decisions. In order to have a clear understanding of operational requirement and to fulfill the customer's needs, an organization must have knowledge and understanding of the sequence processes, and flows in a supply chain. Kleindorfer and Van Wassenhov (2004) describe SCM as process of integrating part of many business entities such as manufacturers, suppliers, retailers, distributors and customers.

Sprague and Cllarman (2010) stated in their study that the important factor of integrated entities is managing the flow of resources such as material flows (products, servicing,

recycling), information flows (coordination of physical flows, order transmission, and tracking), and financial flows (credit terms, consignment arrangements, and payment schedules). Therefore, all information must be continuous and benefit all contributors in the SCM as operating an integrated SCM in order to create the optimum product flow (Hadaya & Pellerin, 2010; Mouritsen, Skjøtt-Larsen, & Kotzab, 2003).

Lambert and Cooper, (2000) believe in order to create the most valuable process for the entire SCM network; the organization should identify good SCM members, critical to link with, and the processes needing linkage. On the other hand, Chandra and Kumar (2000), in their research found that supply chain management turns out to be a way of improving competitiveness through the reduction of uncertainty and the enhancement of customers' service.

2.3 Supply Chain Management Practices

SCM practices refer to the operational activities or functional activities of an organization that are required to enhance the effectiveness of its SCM (Kayakutlu & Buyukozkan, 2010). It is proven that SCM practices as a multi-dimension concept and should be viewed in a broader concept and comprehensively (Li et al., 2005).

The purpose of SCM can be explained through a strategic nature of SCM practices, namely to enhance the organizational performance of an individual and to enhance the performance of the entire supply chain (Trkman, McCormack, Oliveira, & Ladeira, 2010; Wong, et al., 1999). The effectiveness construction of various SCM practices will lead an

organization to be highly competitive and to obtain sustainable profitability development where SCM seeks to have close integration of internal function within the organization and external linking with customers, suppliers, and other members (Kim, 2006b). SCM practices become an essential prerequisite in order to an organization stay in the competitive global race as well as growth profitability (Moberg et al., 2002; Power, et al., 2001; Sezen, 2008).

The complete set of actions taken in organizations to improve the effectiveness in the internal supply chain is referred as the practice of supply chain management. In the modern evaluation, supply chain management practices are consisted of partnership with supplier, process of outsourcing, compression of cycle time, continuousness of process flow and sharing of technology and information (Li et al., 2006). This modern evaluation is implementing by using the quality of purchasing and relations with the customer of supply chain management.

Previous studies indicated that the dimensions of supply chain management practices are come from variety of perspectives. Li et al. (2005), from his study had attempted to develop and validate a measurement instrument for supply chain management practices. The study stated that there are six instruments empirically validated and reliable dimensions which include customer relationship, strategic supplier partnership, information sharing and quality, internal lean practices and postponement.

In line with the views presented in previous studies, other researchers have also identified the dimensions of SCM practices that include outsourcing, continuous process flow, quality, purchasing, customer relationships, strategic supplier partnership, information sharing, core competencies, inter-organizational system use, postponement, SCM, geographic proximity, just in time capability, cross-functional teams and , product modularity (Chen & Paulraj, 2004; Min & Mentzer, 2004; Tan et al., 2002).

Having presented the concept of SCM and SCM practices, the section below explains the three important aspects of SCM practices as well as firm performance. Of the various SCM practices presented in the literature, customer relationship, strategic supplier partnership, and strategic outsourcing have been identified as the most important SCM practices. Given this, this study adopts these three important practices. The following section further explains customer relationship, strategic supplier partnership, and strategic outsourcing as SCM practices.

2.3.1 Customer Relationship

Customer relationship is considered as a key of important practice in SCM (Croxtton et al., 2001; Tan et al., 1998). Previous studies had highlighted the benefits of customer relationship. The benefits highlighted by previous researchers are the success of an organization in SCM practices leads to improve the organizational performance (Ellram, 1991; Moberg et al., 2002; Scott & Westbrook, 1991; Turner, 1993), increased in sale and profit (Bommer et al., 2001), sustaining customer loyalty, product differentiation from competitors, and greater value provided to customers (Magretta, 1998).

Vickery et al. (2003) in his study stated that to establish a long-term and close relationship with customers, it is importance for the organization to practice of supply chain integration. The good relationship between the organizations and customers is to ensure organizations enable to give a fast respond to its customers.

In addition, an organization that has a good relationship with customers is able to differentiate their product from competitors by providing valuable customer relationship and sustain customer loyalty through their satisfaction (Cox, 2004). Consequently, this could establish a good relationship with customers through enhanced customers loyalty and customers' satisfaction (Elofson& Robinson, 2007). Furthermore, the requirement for personalized service and mass customization may make a customer relationship as one significant component CSR practices (Wines, 1996).

2.3.2 Strategic Supplier Partnership

In order to have a good relationship between organization and its suppliers, an organization has to create great value through a long term relationship with suppliers. Thus, strategic supplier partnerships define as a long term relationships among the companies and their suppliers that impact the strategies and the capabilities of individual companies participation in helping them to obtain important ongoing benefits (Balsmeier & Voisin, 1996; Noble, 1997; Stuart, 1997).

In addition, Sufian (2010) indicated that, strategic supplier partnerships include activities such as buy goods and services from suppliers which may impact the system of suppliers

and operational capabilities; then increase the firm value as well as enhance the SCM performance of an organization. Hence, strategic supplier partnership enable an organization to be more effectively work with supplier that are likely to share and responsible for the successful of the products and services provided. Suppliers who participate in the early process of products can offer an organization the more influential choice of design, help them to choose the best mechanisms and tools, and help in design assessments (Tan et al., 2002). Thus, the aligned organization strategies can work carefully together with suppliers to remove wasteful time and efforts (Balsmeier &Voisin, 1996).

2.3.3 Strategic Outsourcing

The concept of strategic outsourcing has been defined variously by researchers. In general strategic outsourcing is concerned with the transfer of goods and services that have been carried out internally to an external provider (Domberger, 1998) to the procurement of products or services from external sources of organization (Lankford & Parsa, 1999). The transaction normally consists of two parts which are known as the transfer to a third party of the responsibility for the operation and management of part of an organization, and the provision of services to the organization by the supplier, usually for a period of several years involved to describe the main features of strategic outsourcing.

Gorane, and Kant (2017) defined strategic outsourcing as the use of resources outside an organization to perform tasks that are usually handled internally by the organization

itself. Khong (2005) stated to gain a competitive advantage over other organizations; an organization must have a successful planning of strategic outsourcing. Successful strategic outsourcing is measured through a relationship between the organization and their partners.

According to Elmuti (2003), the right partners of strategic outsourcing are chosen based on several criteria such as credibility, reliability, and expertise. These criteria of right partnership eventually will lead to closer ties the relationships between organizations and their partners (Barthelemy, 2003). Kolawa (2004) states strategic outsourcing has enabled most of the organizations to concentrate on their main core capabilities and enhance overall organization performance while leaving the non-core activities to specialized third-parties. Furthermore, strategic outsourcing also provide an organizations with a competitive advantage such as better accessing to new markets, higher level of skills and leading technology, a bigger pool of resources, lower inventory and greater flexibility (Kolawa, 2004).

Strategic outsourcing is believed to be sustainable practices of organization. For instance, Lankford and Parsa (1999) in their study revealed that those organizations which already execute the operations of strategic outsourcing are satisfied with the result of implementation of outsourcing. Hence, now strategic outsourcing have been as an integrate part of corporate strategy in organizational activities. The significant of outsourcing framework and model presented in identifying the organizations' core business (Franceschini et. al., 2003; McIvor, 2002) and core competence (McIvor, 2003).

The core competence is referred to an organizational understanding on what internal resources and skills should own organization to monitor the activities of organization through internal contracts in order to sustain their business success. Besides that, core competence is referred to an organization understand of the business activities namely the operations, tactical and strategic (Gavin & Matherly, 1997). Since the outsourcing activities can give benefits and advantages to an organizations; organization will explore and carefully scrutinized the outsourcing activities (Jennings, 2002; Linder et al., 2002; Lankford & Parsa, 1999; McIvor 2003).

Therefore, outsourcing can be summarized as an operations that help an organization daily activities by reducing the cost, increase expertise and services, enhance employee productivity and credibility as well as morale, and create a more positive corporate image by allowing the organizations to focus on their core business in finding the resources such as buy technologies from vendors rather than reproduce internally, review back the organizations' plans in order to be more efficient by saving time and money and improve the plans' service level to their employees by making the information more consistent and more reliable (Lankford & Parsa, 1999).

2.4 Organizational Performance

According to Gorane, and Kant (2017), the important objectives of supply chain management practices are to improve the organizational cycle performance and reducing costs. This study is in line with the study done by Harrison and New (2002) where they show that two of the top four management priorities were reduced their order cycle time

and reduced inventory costs in order to increase their organizational performance. In addition, reducing serving costs and delivery costs was also shown to be significant measurement of operational objectives.

Furthermore, Yeung (2008) stated that in order to improve financial performance, an organization needs to improve its customer's satisfaction as well as customer's loyalty which eventually contribute to market share growth. In the previous study, researcher revealed that a satisfied customer will more likely to repurchase the goods which lead to the increment of sales and market share (Cronin & Morris, 1989).

The study by Verhoef (2003) found that customer satisfaction can improve organization profitability because it will influence the repurchase behavior of customers. Thus, customer satisfaction will lead to customer loyalty, which in turn contributes to the profitability of an organization (Mittal & Kamakura 2001). Homburg et al., (2005), stated satisfied customers may be willing to pay premium prices for products which can lead to an increase of profitability (Homburg et al. 2005). The other study found that a loyal customer is more profitable for organizations than investing huge sums of money in attracting new customers (Ennew, 2003).

Organizational performance is defined as an achievement on how well an organization of its market oriented goals as well as its financial goals (Yamin, Gunasekruan, & Mavondo, 1999). The primary short-term objectives of SCM practices is to increase an organization productivity and reduce inventory as well as cycle time, while the long-term primary

objectives are to rise market shares and profits for all members of the supply chain (Tan, Kannan & Handfield, 1998). A tool used by the organization to compare and evaluate an organization's behavior over time is through its financial metrics (Holmberg S, 2000).

The ultimate objectives of any organizational initiative, including SCM practices must lead to enhance the performance. The prior research measured performance using both market and financial criteria, including market share, return on investment, profit margin on sales, the growth of market share, the growth of sales, and overall competitive position (Vickery, Calantone, Droge, 1999; Zhang, 2001).

2.5 Supply Chain Management Practices and Organizational Performance

Previous studies have found positive relationship between SCM practices and organizational performance. The study by Li et al. (2005) indicates that the effectiveness of SCM practices in an organization can improve competitive advantage as well as organizational performance.

The other study by Koh et al. (2007) has also indicated that SCM practices have significant direct positive impact on SME's performance. Moreover, the study by Khang, Arumugam, Chong and Chan (2010) have found the significant effect of SCM practices such as IT adoption, customer orientation, customer leadership, and training with service on organizational performance. In addition, the more recent study by Yap and Tan (2012) further provides the evidence that suggests SCM practices can potentially enhance organization's competitive capabilities such as in terms of cost leadership, customer

service, and product differentiation. In short, the evidence provided in previous empirical studies appears to suggest that SCM practices are closely link to organizational performance.

2.6 Summary

In summary, the literature emphasizes not only on the importance of SCM but also the need for organizations such as the textile and apparel firms to adopt SCM practices. Furthermore, the review of the literature and past studies indicates the linkage between SCM practices and the performance of business organizations. Accordingly, the following chapter three explains the research methodology adopted in this study.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the research methodology adopted for the study. More precisely, the chapter explains the research framework, the research hypotheses, the measurement of variables, the development of questionnaire, the sampling procedures and research subjects, the data collection method as well as the statistical analysis used to analyze the data as well as test the hypotheses developed in the study.

3.2 Research Framework

As mentioned in the previous chapter, despite the importance and the increase in knowledge in the area of SCM, research that investigates SCM practices in textile and apparel firms remained limited, particularly in the context of Malaysia. The literature indicates that previous studies on SCM practices do not offer much evidence that suggests the significant relationships between SCM practices and the performance of Malaysian textile and apparel firms.

This study attempts to narrow the research gap in the area of SCM and performance of textile and apparel firms. The study seeks to advance the knowledge in this area by empirically investigating the linkage between SCM practices and organizational performance. Based on the suggested relationships of these variables as presented in the

literature and past studies, it was hypothesized that SCM practices are associate to the performance of the textile and apparel firms in Malaysia.

Figure 3.1 below presents the research model of the study. As shown in Figure 3.1, the research model consisted of two focal research variables. The two variables include; SCM practices (customer relationship, strategic supplier relationship and strategic outsourcing) as the independent variable and organizational performance as the dependent variable.

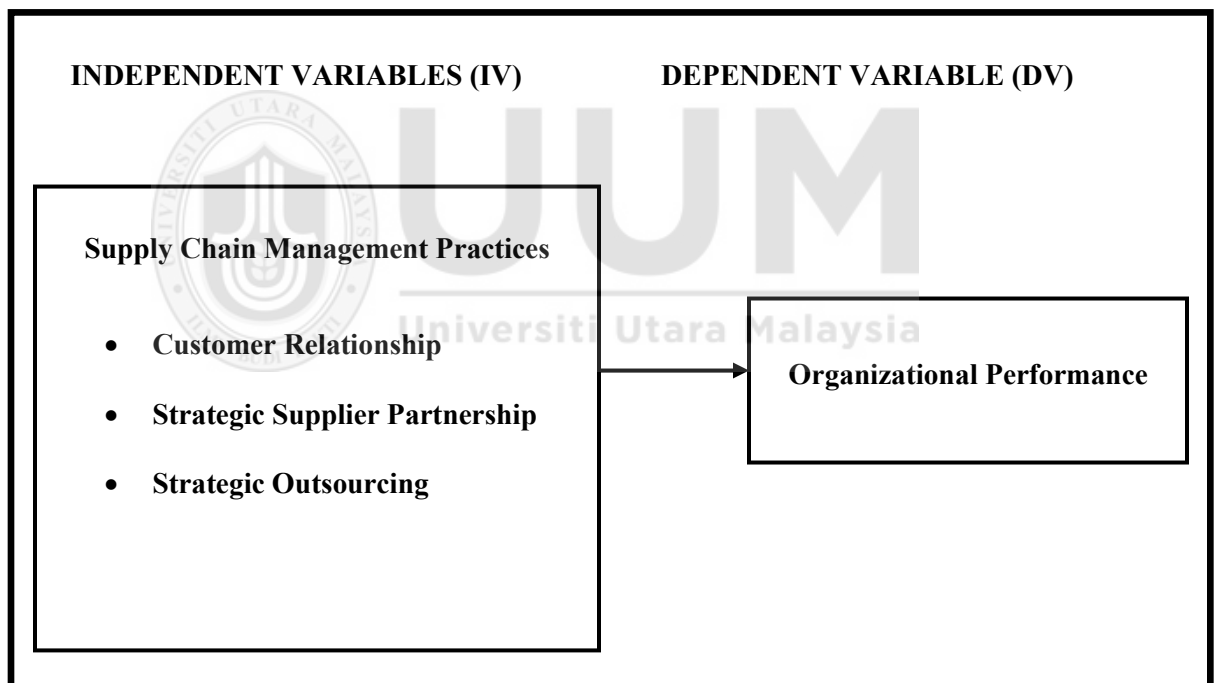


Figure 3.1:
Research Framework

3.3 Hypotheses Development

This study developed several hypotheses. As indicated earlier, the literature suggests the general proposition that SCM practices are associated to the performance of textile and apparel firms. Applying this general proposition generates the following hypotheses:

H1: There is significant relationship between customer relationship and performance of textile and apparel firms.

H2: There is significant relationship between strategic supplier relationship and performance of textile and apparel firms.

H3: There significant relationship between strategic outsourcing and performance of textile and apparel firms.

3.4 Measurement of Research Variables

As previously stated, the research variables involved in this study consist of SCM practices (customer relationship, strategic supplier relationship and strategic outsourcing) as the independent variables as well as organizational performance as the dependent variable. These variables were adapted from previous studies. A five point numerical scale ranging from “strongly disagree” to “strongly agree” was used to measure the variables. Table 3.1 below summarizes the research variables, their dimensions as well as the studies from which the variables they were adapted from.

Table 3.1
Measurement of Research Variables

Variables	Numbers of Items	Source
Demographics	16	
Organizational Performance	16	Gorane & Kant (2017) Zhang (2001)
Supply Chain Management Practices:		
Customer Relationship	10	Li et al. (2006) Gorane & Kant (2017)
Strategic Supplier Partnership	10	Li et al. (2006) Gorane & Kant (2017)
Strategic Outsourcing	20	Li, Rao, Nathan (2002)
Total	72	

3.5 Questionnaire

The questionnaire used in this study contains 72 items and is divided into 5 sections. The questionnaire was adopted and modified from previous studies to suit the context and the purpose of this study. All sections in the survey questionnaire were written in English. Section A required the respondents to provide the demographic details. Section B consists of items used to measure organizational performance. Following this, the items in Sections C, D, and E are used to measure SCM practices (customer relationship, strategic supplier partnership and strategic outsourcing). The respondents were asked to rate each item based on a five points scale ranging from (1) strongly Disagree to (5) strongly Agree.

3.6 Reliability and Validity of Measurement

The reliability of the measurement of the research variables was examined by using reliability analysis. The coefficient alphas of the measures were used to determine the reliability of the measurement. The questionnaire was also assessed for validity through the content (face) validity approach. Copies of the questionnaires were also showed to experts (associate professors and professors) and their feedback suggested that most of the measures reflected their conceptual content. Therefore, some tentative evidence of validity of the variables was obtained in this study. Table 3.2 presents the Cronbach Alpha values for the research variables adopted in this study.

Table 3.2
Result of Reliability Analysis

Variables	Cronbach Alpha (α)(n=100)
Customer Relationship	0.924
Strategic Supplier Relationship	0.932
Strategic Outsourcing	0.884
Organizational Performance	0.936

3.7 Target Population and Sampling

The target population of this study was the firms operating in the textile and apparel industry in Malaysia. The textile and apparel firms involved in this study were confined only to those firms that were members of the Federation of Malaysian Manufacturers (FMM). The listing of textile and apparel firms obtained from the FMM Directory was used as the sampling frame of this study. From the FMM Directory, the study identified and selected 423 firms. These firms were involved in the production and selling of textile products and apparels and that they have been in operation for more than four years.

3.8 Data Collection Method

The data for the study was collected by using the structured questionnaire. The questionnaires were personally distributed to the Managing Director/CEO, General Managers and Senior Managers of the selected textile and apparel firms. During the distribution of the questionnaires, the respondents were requested to answer the questionnaires and informed that the researcher would come back to collect them after two weeks. Of the 423 questionnaires distributed, the researcher was only able to collect back 110 questionnaires. From the 110 questionnaires, only 100 respondents completed the questionnaires. The response rate was 26 percent.

3.9 Statistical Analysis

The Statistical Package for Social Science (SPSS 22.0) was used to analyse the data collected in the study. The first part of the data analysis involved descriptive statistics. This included determining the percentages, minimum, maximum, modes, means, and

standard deviations value of the number of items used in the study. In the second part, the correlation analysis was used to test hypothesis 1 through hypothesis 3. The correlation analysis was undertaken to determine the relationships between SCM practices (customer relationship, strategic supplier relationship and strategic outsourcing) and organizational performance of the textile and apparel firms. The Multiple Regression model was used to test the statistically significant relationship that exists between SCM practices and performance.

3.10 Summary

In short, this chapter presented the research methodology adopted in this study. More precisely, the chapter explained the research framework, the research hypotheses, research variables, the questionnaire, the research sample procedures, the data collection method as well as the analysis of the data collected in the study. Correspondingly, the following chapter 4 provides the results of the study.

CHAPTER FOUR

THE RESULTS

4.1 Introduction

In this chapter, the results of the study are presented in two parts. In the first part, the chapter provides the descriptive statistics of the characteristics of the respondents, the profile of the participating textile and apparel firms as well as the research variables investigated in the study. Following this, the second part shows the results of the hypotheses testing. The research hypotheses developed in the study was tested by using the correlation analysis and multiple regression.

4.2 Demographic Characteristics of the Respondents

The data on the demographic characteristics of the 100 respondents in the study were collected and analyzed. The following section presents the frequency and percentage of the demographic characteristics of the respondents that were involved in this study.

Table 4.1
Demographic Characteristics of Respondents

Items	Category	Frequency	Percentage
Position in Company	CEO	10	10.0
	President	2	2.0
	Director	4	4.0
	Manager	18	18.0
	Others	66	66.0
	Total	100	100.0

Table 4.1 (Continued)

Items	Category	Frequency	Percentage
Gender	Male	33	33.0
	Female	67	67.0
	Total	100	100.0
Age	Below 20	5	5.0
	20-29	71	71.0
	30-39	9	9.0
	40-49	11	11.0
	50 and above	4	4.0
	Total	100	100.0
Race	Malay	28	28.0
	Indian	20	20.0
	Chinese	50	50.0
	Others	2	2.0
	Total	100	100.0
Marital Status	Single	81	81.0
	Married	15	15.0
	Divorce	4	4.0
	Total	100	100.0
Highest Academic Level	Bachelor Degree	75	75.0
	Master Degree	8	8.0
	STPM	4	4.0
	Diploma	6	6.0
	SPM	4	4.0
	Certificate	2	2.0
	Others	1	1.0
	Total	100	100.0
Total Years of Working Experience	1-5 years	71	71.0
	6-10 years	10	10.0
	11-15 years	6	6.0
	> 15 years	13	13.0
	Total	100	100.0

Table 4.1 (Continued)

Items	Category	Frequency	Percentage
Length of Service	Less than 1 year	38	38.0
	1-2 years	24	24.0
	3-4 years	19	19.0
	5-6 years	9	9.0
	>6 years	10	10.0
	Total	100	100.0
Number of Employees	100-250	63	63.0
	251-500	14	14.0
	501-1000	13	13.0
	Over 1000	10	10.0
	Total	100	100.0
Legal Form	Sole Proprietorship	21	21.0
	Partnership	14	14.0
	Private Limited Company	39	39.0
	Public Limited Company	21	21.0
	Others (specify)	5	5.0
	Total	100	100.0
Membership of Association	MATRADE	12	12.0
	MTMA	6	6.0
	MKMA	4	4.0
	MGMA	5	5.0
	SME's Corp, Malaysia	42	42.0
	FMM	8	8.0
	Others (Please State)	23	23.0
	Total	100	100.0
Size of Company	Micro	6	6.0
	Small	30	30.0
	Medium	44	44.0
	Large	20	20.0
	Total	100	100.0

Table 4.1 (Continued)

Items	Category	Frequency	Percentage
Annual Sales Turnover (RM) in 2016	Below RM300,000	43	43.0
	Within RM300,000 to RM15 Million	34	34.0
	Within RM15 Million to RM50 Million	17	17.0
	More than RM50 Million	6	6.0
	Total	100	100.0
Supply Chain Position	Upstream (closer to raw material)	11	11.0
	Midstream	32	32.0
	Downstream (closer to consumers)	47	47.0
	All the above	10	10.0
	Total	100	100.0
Number of Suppliers	< 5	27	27.0
	6-19	47	47.0
	20-99	20	20.0
	> 100	6	6.0
	Total	100	100.0

Table 4.1 presents the positions of the respondents that participated in this study. As shown in Table 4.1, majority of respondents (about 66%) held staff positions in their company. Ten (10%) of the total of 100 respondents were Chief Executive Officers (CEO), another two respondents (2%) held the position of President, the other four respondents (4%) were Directors and the remaining 18 respondents (18%) were Managers.

From the findings results on demographic analysis on gender of respondents, we could say that majority involved female respondents about 67% whereas only 33% of it was involved by male respondents.

In this study, the age of respondents was divided into 5 sections. The age between 20 and above 50 were selected. Table 4.1 shows the ages of the respondents based on the frequency and percentage. As shown in the table, only 5% of the respondents were below the age of 20, 71% of respondents were between 20-29 years old, 9% were between the ages of 30-39, 11% between 40-49 years old and the remaining 4% were above the age of 50 years.

Table 4.1 also indicates the race of the respondents. Half of the respondents (50%) in this study were Chinese. Meanwhile, twenty eight respondents (28%) were Malay; Indian represented 20% of the respondents and the remaining 2% belong to the other races.

This study also obtains the respondent's marital status. Majority of respondents in this study were single (81%), 15% already married whereas 4% of respondents were divorced.

In terms of the education level of respondents, majority of the respondents held a Bachelor degree (75%), eight respondents (8%) had a Master's degree, four respondents (4%) had STPM certificate, six respondents (6%) had a Diploma, four respondents (4%) had SPM certificate, about 2% has other certificate, and only 1% has other level of education.

With regard to working experience of respondents, 71% of the respondents have between 1 to 5 years of working experience. The other ten respondents (10%) have total years of

working experience between 6 to 10 years. Meanwhile, only 6% has total years of working experience between 11 to 15 years, and 13% of respondents have more than 15 years of working experience.

In addition, majority of respondents (38%) have served their company for less than 1 year. Twenty four (24%) of them have provided their services to the company between 1-2 years, 19% of respondents have length of services between 3-4 years, and only 9% of respondents have length of services between 5-6 years. Meanwhile, respondents who have been provided their services in company above 6 years are about 10%.

As for the number of employees, 63% of the firms had between 100 to 250 employees, about 14% firms had between 251 to 500 employees, 13% firms had between 501 to 1,000 employees and 10% firms have more than 1,000 employees.

Majority of the firms (39%) were private limited company. The other 21 firms (21%) were sole proprietorship and public limited company. Another 14 firms (14%) were partnership and the remaining five firms (5%) did not specify their legal status.

With regard to their memberships, 42 firms (42%) were registered with the Small Medium Enterprises Corporation (SME's Corp.), and 23 firms (23%) registered with the other associations such as the Institute Bank-bank Malaysia (IBBM), Ministry of Finance (MOF), the Malaysia Qualification Agency (MQA), and the Direct Selling Association Malaysia (DSAM). Twelve firms (12%) indicated that they registered with the Malaysian

External Trade Development Corporation (MATRADE), another six firms (6%) were members of the Malaysian Textile Manufacturers Association (MTMA), the other 5 firms (5%) were members of the Malaysian Garment Manufacturers Association (MGMA), and the remaining four firms (4%) were members of the Malaysian Knitting Manufacturers Association (MKMA).

In terms of the sales of the firms, 43 firms (43%) had annual sales turnover of below RM300,000, 34 firms (34%) had annual sales turnover between RM300,000 to RM15 million, about 17 firms (17%) had annual sales turnover between RM15 million to RM50 million, and the remaining six firms (6%) had annual sales turnover of more than RM50 million in 2016.

As for the firms' supply chain positions, 32 firms (32%) indicated that they had midstream supply chain position, another 11 firms (11%) reported having upstream supply position (which is closer to raw material), and the remaining 10 firms (10%) reported that they executed all the three supply chain positions that included; upstream, midstream, and downstream.

With regard to the number of suppliers used by the firms in the study, 47 firms (47%) indicated that they had between 6 to 9 suppliers (47%), another 27 firms (27%) had less than 5 suppliers; about 20 firms (20%) between 20 to 99 suppliers, and the remaining six firms (6%) reported that their firms had more 100 suppliers.

4.3 Supply Chain Management Practices and Performance

Table 4.2

Mean Values of Supply Chain Management Practices and Performance

	<i>Mean</i>	<i>Std. Deviation</i>	<i>Level</i>
Customer Relationship	3.7290	.72073	Moderate Important
Strategic Supplier Partnership	3.6260	.58234	Moderate Important
Strategic Outsourcing	3.5935	.54163	Moderate Important
Organizational Performance	3.7112	.55872	Moderate Important

Table 4.2 indicates the mean scores of the supply chain management practices as emphasized by the firms and their performance. As shown in Table 4.2, the mean values of SCM practices range from 3.59 to 3.73. These results suggest that the firms in the study emphasized on SCM practices.

4.4 Relationship between SCM Practices and Performance

The Pearson Correlation analysis was used to determine the relationship between SCM practices (customer relationships, strategic supplier partnership, strategic outsourcing) and organization performance. According to Cohen (1988) as cited in Utah (2013), if the value of “r” is between 0.50 to 1.00, the correlation is strong. But if the value of “r” is between 0:30 and 0:49, the correlation is considered as moderate and if the value of “r” is

0.10 to 0.29, it shows weak correlation. The results of the correlation analysis are summarized in Table 4.3.

Table 4.3
Results of the Pearson Correlations Analysis

		CR	SSP	SO	OP
CR	Pearson Correlation	1	.833**	.785**	.656**
	Sig. (2-tailed)		.000	.000	.000
	N	100	100	100	100
SSP	Pearson Correlation	.833**	1	.912**	.596**
	Sig. (2-tailed)	.000		.000	.000
	N	100	100	100	100
SO	Pearson Correlation	.785**	.912**	1	.679**
	Sig. (2-tailed)	.000	.000		.000
	N	100	100	100	100
OP	Pearson Correlation	.656**	.596**	.679**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	100	100	100	100

***. Correlation is significant at the 0.01 level (2-tailed).*

***Note: Correlations significant at p 0.01 (p<0.01)*

4.4.1 Results of the Pearson Correlation Analysis

i. Relationship between Customer Relationship (CR) and Organizational Performance (OP)

The results in Table 4.3 shows that customer relationship is positively related to organizational performance ($r=0.656$). This indicates strong positive correlation between customer relationship and the performance of the textile and apparel firms.

ii. Relationship between Strategic Supplier Partnership (SSP) and Organizational Performance (OP)

The results in Table 4.3 show that strategic supplier partnership is positively related to organizational performance (coefficient value is 0.596). This result indicates strong positive relationship.

iii. The Relationship between Strategic Outsourcing (SO) and Organizational Performance

Table 4.3 show that strategic outsourcing has a positive relationship with organizational performance (correlation coefficient value is 0.679). Similarly, this result suggests strong relationship.

4.4.2 Multiple Regression

In addition to the correlation analysis, the multiple regression was used to determine the effect of SCM practices on the performance of the textile and apparel firms. Results of the multiple regression shows that SCM practices affect the performance of the textile and apparel firms. Table 4.4 presents the results of the multiple regression analysis.

Table 4.4
Results of Multiple Regression Analysis

		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
Model		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
1	(Constant)	1.248	.264		4.736	.000
	CR	.356	.099	.459	3.600	.001
	SSP	-.438	.184	-.457	-2.377	.019
	SO	.758	.177	.735	4.282	.000
Dependent Variable : Organizational Performance						
p<0.01, **p<0.05		R=0.727	R ² =0.528	F=35.822	Sig.=.000	

The results in Table 4.4 above shows that SCM practices influence the performance of the textile and apparel firms. The results indicate that customer relationship (CR), strategic supplier partnership (SSP), and strategic outsourcing (SO) affect the organizational performance of the textile and apparel firms. The R² value of 0.528 indicates that customer relationship (CR), strategic supplier partnership (SSP), and strategic outsourcing (SO) explained 52.8% of organizational performance.

As a whole, the results of the multiple regression analysis showed that SCM practices influenced the performance of the textile and apparel firms (F = 35.822, p = 0.000). The results also shows that customer relationship (β = 0.459) and strategic outsourcing (β = 0.735) had a positive beta coefficient value whereas, for the strategic supplier partnership indicates the negative value of beta coefficient at β = -0.457. Customer relationship (p = 0.001), strategic supplier partnership (p=0.019) and strategic outsourcing (p = 0.000) showed a significant relationship with performance (p < 0.01 and p <0.05).

4.5 Summary of the Results of the Hypothesis Testing

Table 4.5 presents the summary of the results of hypothesis testing in this study. As shown in Table 4.5, the results of the hypotheses testing supported the three hypotheses developed in the study.

Table 4.5
Summary of Hypothesis Testing

HYPOTHESES		RESULT
H1	: There is significant relationship between customer relationship and performance of textile and apparel firms.	Supported
H2	: There is significant relationship between strategic supplier relationship and performance of textile and apparel firms.	Supported
H3	: There is significant relationship between strategic outsourcing and performance of textile and apparel firms.	Supported

4.6 Conclusion

This chapter presents and discusses the results of the study. Descriptive statistics such as frequency and percentages were utilized to analyze the demographic characteristics of the respondents involved in this study. Next, the Pearson Correlation analysis and multiple regression were adopted to test the hypotheses developed in the study. The results of the study indicate significant relationship between SCM practices (customer relationships, strategic supplier partnership and strategic outsourcing) and the performance of the textile and apparel firms.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the conclusion and recommendation regarding the major findings of the study. The chapter begins by providing a brief overview of the study. Following this, the chapter provides the implications and limitation of the study as well as the suggestions for possible further research in the area of SCM practices and textile and apparel firms.

5.2 Overview of the Study

This study focuses on textile and apparel firms from the perspective of supply chain management. The study specifically attempted to examine the relationship between SCM practices and organizational performance of textile and apparel firms in Malaysia.

This study was a cross-sectional sample survey firms operating in the textile and apparel industry. The primary data for the study was gathered through questionnaire distributed to the managers of the 100 textile and apparel firms that participated in the study. The data about each of the respondents was collected by means of a structured questionnaire. The questionnaire consisted of previously used instruments and questions which were designed to measure items of interest to this study.

5.3 Conclusion

This study was conducted specifically to examine the relationship between the SCM practices and performance of textile and apparel firms. The SCM practices were measured in terms of customer relation, strategic supplier relation and strategic outsourcing. The organizational performance was measured by using subjective measures such as sales, return on investment, market share, profit margin, delivery, cost saving, product and service quality, forecasting accuracy, inventory level, flexibility, return on assets and customer satisfaction.

The first objective of this study was to determine the extent to which the textile and apparel firms adopted SCM practices as measured in terms of customer relation, strategic supplier relation and strategic outsourcing. With regard to this, the results of the study indicate in general the firms that participated in the study adopted SCM practices.

The second objective of the study was to determine the relationship between SCM practices and performance of the textile and apparel firms. With regard to this second objective, the results of the study appear to indicate that there is significant relationship between SCM practices (customer relation, strategic supplier relation and strategic outsourcing) and performance of the textile and apparel firms that participated in this research.

The results of this study support findings of previous studies that found significant positive relationships between SCM practices and organizational performance. The

findings of the study further appear to concur with the general view presented in the literature that suggests the linkage between SCM practices and organizational performance. In addition, the results of the study seem to support the SCM perspective that suggests effective SCM practices provide competitive advantage to help organizations perform better and sustain their performance. This study offers implications for textile and apparel firms. On the basis of the results of this study, owners and managers of textile and apparel firms should realize that there is not one best SCM practice to be adopted. In view of this, the textile and apparel firms should attempt to adopt SCM practices that match with the capabilities of their firms. Furthermore, to ensure that their firms would be able to compete in international markets, owners and managers of textile and apparel firms need to focus on developing SCM practices that can provide them competitive advantage.

5.3.1 Relationship between Customer Relationship and Organizational Performance

The second objective of the study was to investigate the relationship between customer relationship and organizational performance. The findings of the study indicate that there is a significant influence relationship between customer relationship and organizational performance at $p < 0.01$. This result is similar to the findings of the study by Li et al., (2006). Customer relationship plays an important role as one of the important SCM practice that can influence organizations. In addition, having a good relationship with customers can help organizations to differentiate their product with competitors and sustain more loyal customers by improving of organizational performance.

5.3.2 Relationship between Strategic Supplier Partnership and Organizational Performance

The results of the study also show that strategic supplier partnership is significantly related to organizational performance ($p=0.019$, $p<0.05$). However, this result shows that strategic supplier partnership is negatively related to the performance of the textile and apparel firms.

Organization need to have good relationship not only with their customers but also with their suppliers. This is because strategic supplier partnership is important for an organization to emphasized on direct, long-term association, encourages mutual planning, and problem solving such as in providing the goods and services in terms of quality, competitive price, as well as provide the goods on time (Gunasekaran et al., 2001).

Furthermore, the relationship between organizations and supplier can help both of them to share significant ongoing benefits in one or more key areas such as technology products and markets as well as improvement in organizational performance (Balsmeier & Voisin, 1996; Yoshino et al., 1995).

5.3.3 Relationship between Strategic Outsourcing and Organizational Performance

The study also investigated the relationship between strategic outsourcing and performance of the textile and apparel firms and their organizational performance. The results of the study suggests that strategic outsourcing is associated to organizational

performance ($p=0.000$, $p<0.01$) This study is supported by study of Koh et al.(2007), where he had stated in his study that strategic outsourcing might directly influence organizational performance by enhanced the organization operation performance. On the other hand, Gorane, and Kant (2017) stated that supply chain management practices of strategic outsourcing enable organization to leaving the non-core activities to third parties while focusing on their core competencies with improve their organizational performance.

Strategic outsourcing is considered one of the most important supply chain management practices to be implemented in organizations. Organizations adopt strategic outsourcing practice help them cope with their daily operation activities such as warehousing, and freight payment transportation (Boyson et al., 1999). More recently, this practice has also included logistic outsourcing that involves activities such as order processing, inventory control, product assembly, packaging, labeling, products returns, and information technology (Koh et al., 2007). An organization needs to plan its outsourcing practice well in order to ensure its daily activities become more efficient and effective as well as free from customers' complains.

5.4 Implications of the Study

From the academic perspective, the results of this study can be used as a reference by future researchers in conducting studies on supply chain management practices. Meanwhile, from the practical aspect, findings of this study can help firms in the manufacturing industry to identify and implement supply chain management practices

that may be useful to ensure the effectiveness and efficiency of their daily activities as well as improve their organizational performance in areas such as financial, markets, and operations.

5.5 Limitations of the Study

Several limitations can be identified from the study. First, answering the research questions and collecting the data for the study require engagement with as many manager and owners of textile and apparel firms. In the study, getting the firms to cooperate and participate in the study was a major problem. When the firms were asked to participate in the study, many were reluctant and refused. Second, the number of firms surveyed in the study may be considered small. Although the sample size consisted of 432 textile and apparel firms, only 100 firms participated and completed the questionnaires. Third, the firms that were involved in the study were mainly represented by the textile and apparel industry. Fourth, the SCM practices adopted in this study were limited only to customer relationship, strategic supplier partnership, strategic outsourcing and organizational performance.

5.6 Suggestions for Future Study

Although SCM practices is considered essential to the performance of textile and apparel firms, empirical research in this area of study is very limited in Malaysia. This study suggests several opportunities for researchers interested in further examining the association between SCM practices and organizational performance.

Although the results of this study suggest that SCM practices are related to the performance of textile and apparel firms in Malaysia, these results are based on one study. As such, they should be regarded as only suggestive. More empirical studies are therefore needed to provide more evidence to further support the notion that SCM practices and organizational are strongly related, particularly among the firms in the textile and apparel industry in Malaysia.

Furthermore, there is also a need to conduct studies on firms in the other different business sectors such as wholesaling, retailing, and construction in order to develop a more comprehensive theory and understanding of the SCM practices adopted by the firms in these other sectors. In particular, this is important in the Malaysian context because very few studies have investigated firms in these other sectors. Future research might also focus on examining the industrial effects as well as entrepreneurial types on the adoption of SCM practices among different types of firms.

Researchers may also use the present study as a starting point for future research. For example, the other relevant as well as important aspects of SCM practices such as SCM formulation, implementation and evaluation which this study did not address, would present as research areas to be further investigated. Moreover, it is also important to note that the SCM practices identified in this study may not necessarily prevail in firms that operate in the other business sectors.

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APPENDIX



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Dear Sir/Madam,

This survey seeks to explore **SUPPLY CHAIN MANAGEMENT PRACTICES AND PERFORMANCE OF TEXTILE AND APPAREL FIRMS IN MALAYSIA**. The information obtained from this survey is important to meet the objective of the research in fulfilling the requirement for Master of Science Management (MSc.) of University Utara Malaysia (UUM). This survey will take approximately 10 minutes to be completed.

Please do not disclose your name or contact details on the questionnaire. It will remain anonymous. Your information will be treated strictly confidential and used only for statistical analysis and academic purposes. Your honesty and sincere answers to the questions asked are very much appreciated.

I sincerely thank you for your participation and cooperation in this study.

KUMARAN MUNIANDY

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SECTION A

Kindly tick (✓) the appropriate answer.

1. What is your gender?

☐

Male

☐

Female

2. What is your age?

☐

Below 20

☐

20-29

☐

30-39

☐

40-49

☐

50 and above

3. Race

☐

Malay

☐

Indian

☐

Chinese

☐

Others

4. Marital Status

☐

Single

☐

Married

☐

Divorce

5. Position in Company

☐

CEO / President

☐

President

☐

Director

☐

Manager

☐

Others (lain – lain).....(Please state)

6. Highest Academic Level

☐

Bachelor Degree

☐

Master Degree

☐

STPM

☐

Diploma

- ☐ SPM ☐ Certificate
☐ Others (Please state)

7. Total years of working experience

- ☐ 1 – 5 years ☐ 6 – 10 years
☐ 11- 15 years ☐ > 15 years

8. Length of service at your company

- ☐ Less than 1 year
☐ 1 - 2 years ☐ 3 - 4 years
☐ 4 - 6 years ☐ >6 years

9. Number of employees in your company?

- ☐ 100 - 250 ☐ 251 – 500
☐ 501 – 1000 ☐ over 1000

10. What is your legal form of your company? (Circle one) 1 2 3 4 5

1. Sole proprietorship
2. Partnership
3. Private limited company
4. Public limited company
5. Others (specify)_____

11. Indicate the association/s that your company is registered to:

- ☐ Malaysian External Trade Development Corporation (MATRADE)
- ☐ Malaysian Textile Manufacturers Association (MTMA)
- ☐ Malaysian Knitting Manufacturers Association (MKMA)
- ☐ Malaysian Garment Manufacturers Association (MGMA)
- ☐ Small and Medium Enterprises Corporation (SMEs Corp. Malaysia)
- ☐ Federation of Malaysian Manufacturers (FMM)
- ☐ Others (lain – lain) (Please state)

12. What is the size of your company?

- | | |
|---------------------------------|--------------------------------|
| <input type="checkbox"/> Micro | <input type="checkbox"/> Small |
| <input type="checkbox"/> Medium | <input type="checkbox"/> Large |

13. Annual sales turnover (RM) in 2016:

- ☐ Below RM300,000
- ☐ Within RM300,000 to RM15 Million
- ☐ Within RM15 Million to RM 50 Million
- ☐ More than RM50 million

14. What is the supply chain position of your company?

- ☐ Upstream (*closer to raw material*)
- ☐ Midstream
- ☐ Downstream (*closer to consumers*)
- ☐ All the above

15. How many suppliers do your company have?

☐

< 5

☐

6-19

☐

20-99

☐

> 100

16. To what extent does your company emphasized on supply chain management?

☐

Not at all

☐

A little

☐

Very much



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SECTION B

Organizational performance refers to the extent an organization is able to achieve its market-oriented as well as financial objectives. By using the following scale, rate the performance of your company for the past five years.

Scale: 1 = Significant decrease, 2 = Decrease, 3 = Remain the same, 4 = Increase, 5 = Significant increase.

	STATEMENT	SCALE				
		1	2	3	4	5
1.	Sales					
2.	Growth in sales					
3.	Return on investment (ROI)					
4.	Growth in return on investment.					
5.	Market share					
6.	Growth in market share					
7.	Profit margin					
8.	Overall competitive position.					
9.	Deliver dependability (on-time delivery, order fill rate, frequency of delivery, and delivery speed) performance					
10	Cost saving					
11	Product and service quality					
12	Forecasting accuracy					
13	Reduced inventory level					
14	Flexibility (firm's ability to adapt to changes in the business environment)					
15	Return on assets (ROA)					
16	Customer satisfaction					

SECTION C

The following statements explain the customer relationships emphasized in supply chain management. By using the following scale, please indicate your level of agreement with each of the following statements.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

	STATEMENT	SCALE				
		1	2	3	4	5
1.	We frequently interact with customers to set reliability, responsiveness, and other standards for us.					
2.	We frequently measure and evaluate customer satisfaction.					
3.	We frequently determine future customer expectations.					
4.	We facilitate customers' ability to seek assistance from us.					
5.	We periodically evaluate the importance of our relationship with our customers.					
6.	Flexibility towards variety of demands from customers (product mix, volume and delivery)					
7.	Commitment to improve the management of everything that customers suggest					
8.	We share a sense of fair play with our customers					
9.	We have frequent follow-up with its customers for quality/service feedback					
10.	We frequently evaluate the formal and informal complaints of its customers					

SECTION D

To what extent do you agree with the following statements describing the strategic supplier relationships in your company's supply chain management? Kindly use the following scale.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

	STATEMENT	SCALE				
		1	2	3	4	5
1.	We consider quality as our number one criterion in selecting suppliers.					
2.	We regularly solve problems jointly with our suppliers.					
3.	We have helped our suppliers to improve their product quality.					
4.	We have continuous improvement programs that include our key suppliers.					
5.	We include our key suppliers in our planning and goal-setting activities.					
6.	We actively involve our key suppliers in new product development processes.					
7.	We rely on few dependable suppliers					
8.	We certify our suppliers for quality					
9.	We strive to establish long term relationship with our suppliers					
10.	We rely on few high-quality suppliers					

SECTION E

The following statements explain strategic outsourcing of services in your organization.

To what extent do you agree with these statements? Please use the following scale to rate your agreement.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

	STATEMENT	SCALE				
		1	2	3	4	5
1.	Organization outsources some of the manufacturing activities from outside vendors					
2.	Organization has reliable and committed outsourcing partners.					
3.	Organization outsources the manufacturing activities to focus on core competencies.					
4.	Improvement in customer services due to outsourcing.					
5.	Organization grabs the opportunity of emerging technology through outsourcing.					
6.	Inventory liabilities of the organization have gone down due to outsourcing.					
7.	Organization has succeeded in diverting capital investment due to outsourcing.					

8.	The orientation of my company has shifted from managing vertical functions to integrating full stream processes from the supplier to the consumer					
9.	My company has developed and is pursuing a plan to establish and maintain business partnerships					
10.	My company extensively measures logistics performance in terms of cost, productivity, customer service, asset management, and quality					
11.	My company successfully utilizes time-based logistics solutions like continuous replenishment, quick response, and just-in-time with customers and/or suppliers					
12.	Manufacturing or logistics information systems in my company are being expanded to include more integrated applications					
13.	My company utilizes more strategies to postpone movement and final product configuration today than two years ago					
14.	My company has procedures in place to facilitate reverse logistics					
15.	My company has undergone extensive logistics process re-engineering during the past two years					
16.	My company considers logistics as one of the core strengths					
17.	My company believes in the strategic values of using IT in our supply chain. Therefore, the development of IT is driven and planned by senior management					
18.	My company has partnerships with customers / suppliers who operate under principles of rewards and risks.					
19.	Management emphasis has shifted from managing separate logistics functions to managing whole supply chain.					
20.	My company has common, agreed to policies and procedures to standardize logistic operation					

-THE END, THANK YOU –