

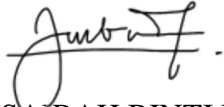



The Effects of Supply Chain Integration on Firm's Supply Chain Performance



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

I hereby acknowledge that this project paper has been accepted as part of fulfilment for the degree of Bachelor of Technology Management (Supply Chain Management And Logistics) With Honors

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**THE EFFECTS OF SUPPLY CHAIN INTEGRATION ON FIRM'S SUPPLY CHAIN  
PERFORMANCE**

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**The thesis is submitted in partial fulfilment of the requirements for the award of Bachelor of  
Technology Management (Supply Chain Management and Logistics) with Honors**



**Jan 2022**

## DECLARATION OF ORIGINAL WORK

I hereby declare that this project thesis is my own original work, and it has been written by me in its entire. I have duly acknowledged all the sources of information which have been used in the thesis

  
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## DEDICATION

I would like to appreciate the dedication of my cherished family members's commitment in helping me completing my degree. Without them, it will be not easy for my completion in FYP. And I express a deep sense of gratitude to my lecturer whom also my supervisor for my final year project, Dr. Nusaibah Binti Mansor and my fellow friends. They have given me their assistance and advice throughout this research. With their support, I was able to complete this research report smoothly. Thank you for their encouraging and guiding with their knowledge throughout this whole research.



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Lastly, I would like to express my appreciation to all respondents who had responded to the questionnaire. Their effort provides me valuable feedback which has assist me in completing this research paper without any trouble.

## ABSTRACT

Integration of the supply chain is the most notable factor in order to establish sustainable competitive advantage in the manufacturing sectors. Despite large numbers of studies related to SCI concept and its dimension have been done, empirical studies by using the data from Malaysia manufacturing firm to investigate the connections between supply chain integration and company supply chain performance SCP received little attention. The goal of this research paper is to determine the impact of SCI towards SCP. This study was conducted using quantitative methods. 129 respondents who work for Malaysia manufacturing company is chosen to complete the questionnaire. The data is collected on a five-point Likert scale. This study will be carried out in Melaka where there are located plenty of manufacturing SMEs. Findings from this research indicated that Supplier integration and Customer integration contributes significantly to SCP, while Internal integration were not drivers of SCP. Manufacturer should establish collaboration on all member of supply chain to improve their supply chain performance. Managers should also focus a lot on customer integration.

**Keywords:** Supply chain integration, Supplier integration, Customer integration, Internal integration, Supply chain performance

## ABSTRAK

Penyepaduan rantaian bekalan SCI ialah salah satu dimensi yang paling tersendiri dalam mencapai kelebihan daya saing jangka panjang dalam industri pembuatan. Walaupun banyak kajian berkaitan konsep SCI dan dimensinya telah dijalankan, kajian empirikal dengan menggunakan data daripada firma pembuatan Malaysia untuk mengkaji hubungan antara integrasi rantaian bekalan dan prestasi rantaian bekalan firma SCP menarik perhatian sedikit. Tujuan kajian ini adalah untuk menyiasat kesan SCI terhadap SCP. Kaedah kuantitatif telah digunakan dalam menjalankan penyelidikan ini. Data dikumpul pada skala Likert lima mata melalui soal selidik daripada 129 responden yang merupakan pekerja firma pembuatan di seluruh Malaysia. Pakej Statistik untuk Sains Sosial (S.P.S.S) versi 29 digunakan untuk menganalisis data. Kajian ini akan dijalankan di Melaka di mana terdapat banyak PKS pembuatan. Dapatan daripada penyelidikan ini menunjukkan bahawa integrasi Pembekal dan integrasi Pelanggan menyumbang dengan ketara kepada SCP, manakala integrasi Dalaman bukan pemacu SCP. Pengilang harus mewujudkan kerjasama dalaman dan luaran untuk meningkatkan prestasi rantaian bekalan mereka. Pengurus juga harus memberi perhatian yang besar kepada integrasi pelanggan

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Kata kunci: Penyepaduan rantaian bekalan, Penyepaduan pembekal, Penyepaduan pelanggan, Penyepaduan dalaman, Prestasi rantaian bekalan



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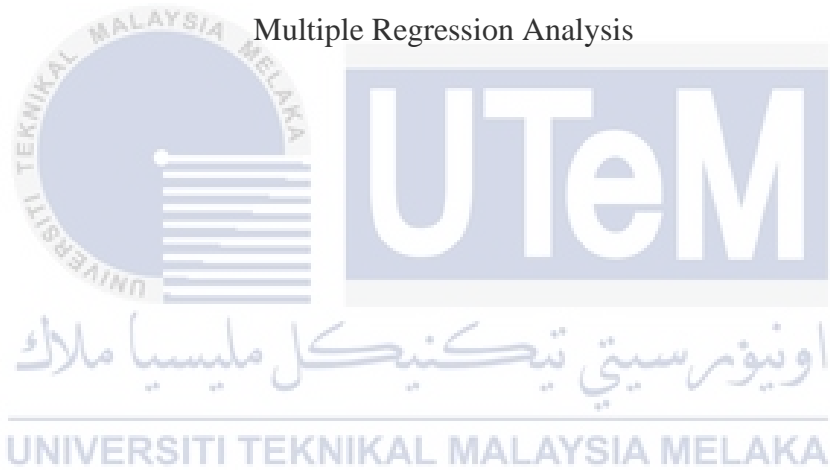
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## LIST OF ABBREVIATION

ABBREVIATION	MEANING
SME	Small and Medium Enterprise
SCI	Supply Chain Integration
SCP	Supply chain performance
MRA	Multiple Regression Analysis





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# THE EFFECTS OF SUPPLY CHAIN INTEGRATION ON FIRM'S SUPPLY CHAIN PERFORMANCE

## CHAPTER 1



### 1.1 Introduction

In this chapter, researcher will cover the background of the study as the effect of Supply chain integration (SCI) on organization Supply Chain Performance SCP. The problem statement, research question and research objective was presented. Besides the chapter will also explains the scope of study, research significance and its limitations.

### 1.2 Background of the study

Globalization pushes firms to expand their resources in order to improve internal and external practises and reach higher goals and competencies. Internal capabilities are no longer the most important factor to increase their competitiveness. As a developing country, Malaysia has shift form an economy based on agriculture to an industrialized economy. (Atikah Shamsul et al,2018) In most developed and emerging countries, SMEs are now essential for the economic growth. Firms used to compete on price and quality. However, to be competitive and

thrive in the global economy, they must compete across all competitive characteristics within their supply chain operations (Molokomme, 2019).

It was seemingly and frequent mention in previous studies that many firm may not be able to enhance their competitiveness if there is isolation within firm's internal process and structure with their external supply chain members. The Competition between the entire supply chain of the operation with another supply chain entities will become the factors that affects the firm's Supply Chain Performance SCP the attention to supply chain practices is becoming more and more sensible especially as companies expand their networking and collaboration outside the boundaries of the organisation. As a result, organization have to explore innovative strategies to accomplish and maintain their competitive advantages when facing new era intensive competitors.

For firms to remain competitive, supply chain management should be focused while seeking to improve organisational productivity and profitability through Supply Chain Management SCM. It has recently gotten a lot of attention because of its position in industrial organisations, which includes everything from raw material acquisition through final product delivery. Growing competitive pressure, on the other hand, has prompted many companies to use their supply chain as a competitive instrument to achieve operational and financial success. (Eva liljebloom, et al, 2020)

Supply chain integration SCI which involving coordination and alignment of all parties in making firm's SCM a source of sustainable competitive advantages. In a more conventional manner, SCI is often linked with manufacturing process and the aim is for making the manufacturing process as productive as possible with the resources available. For instance, SC integration can help companies to react and counter strategic, operational and technological obstacles effectively. This is the reason why SCI has received significant interest of researchers from both developed and developing market. (Kalyar et al, 2019). SC in the manufacturing industry considered complex in terms of information exchange, it is complicated because it entails various interactions between supply chain participants including raw material suppliers, manufacturer, various distribution channels and finally customer in the SC system. in addition,

problems regarding resources supplies and demand uncertainty have partially added to the complication of the SC system

Companies in such industries frequently face changing client needs, new competitors, and rapid change of the environment. They need to counter difficulties to maintain their advantage and adapting their business model to the current trend. It enhances the development of SCI and SCP as organisation changes in their operation process. Innovativeness may mature and improve as organization builds inter-relationships with customers and SC partners. It enables firms to become more integrated internally and externally to develop high productivity and cost-effective supply chain.

### 1.3 Problem statement

Since organizations are interconnected, firms need to ensure that there is a strong bond throughout all processes from upstream to downstream. This network creates greater value for organizations and for end customers (Marcelo Martins de, et al 2019). There are several evidences that support the relationship between SCI between the SCP. Many of these applications have occurred within the developed world with only very limited range of example from the developing world.

Malaysia's importance as a global hub has been bolstered by the trend of supply chain convergence. Many MNC including Volkswagen, Nestle, IDT, IKEA are moving their SC activities to Malaysia. Malaysia's strategic position and efficient trade infrastructure will help them service their expanding in Asian market. This transformation results in the creation of high-skilled jobs as well as the transfer of knowledge and technology to Malaysian businesses. (MIDA, 2021)

Traditional management approach has become rather inefficient or insufficient to outperform competitors and add value to final customers. (Turkulainen et al 2018) This situation has grown the significance of supply chain management for Malaysia SME and

manufacturing industries to adapt in this competitive environment. However, failing to conduct comprehensive planning and integration on the who supply chain, most of the firms are unable to properly monitor their supply chain and improve their decision-making service from their overall operations. (Zahra Lotfi, 2013). Therefore, it is important to improve the awareness of SCI within Malaysian SME to increase competitiveness of their business. Thus, this study will be conducted on what is the factors that affects SCI in Malaysia and the role SCI towards firm's SCP.

To enhance the performance of manufacturing companies through SCM, firms have to design the integration of internal cross-functional activities and efficiently link them the supply chain processes of their business partners, suppliers and customers in the supply chain The SCI strategy adds value to a company's customers by involving suppliers and customers in the process.

The link between SCI and company performance has been verified by a growing body of empirical evidence. However limited success of integration in SC were identified in literature and its contributing factors towards firm's SCP are not fully understood (Zurita Mohd Saleh, et al, 2014). This study will be conducted on what does SCI improve in firm's SCP. The next question is to what extend that the Integration process can facilitate the external process integration (customer and suppliers) and internal process integration (cross functional operations to deliver better SCP. (Tharaka de Vass, Himanshu Shee, Shah Miah , 2018) Thus, this study aims to investigate the effects of SCI that turn in enhancing both SCP and firm performance

#### **1.4 Research Question**

This study aims to answer the following research questions:

- i. What are the factors that contributes to SCP?
- ii. What is the relationship between the SCI on firm SCP?
- iii. What are the significant impactful contributing factors toward SCP?

### 1.5 Research objective

The objective of the research was to determine the effects of integration towards firms' SCP. The research objective was designed as a guide through this research in order to fulfill the study goal. Below is the research objective of this research:

- i. To determine the factors that contributes to SCP.
- ii. To analyze the relationship between and SCI on firm SCP.
- iii. To determine the significant impactful contributing factors towards SCP.

### 1.6 Significances of Study

Firms in emerging economies are required to restructure their SCM that suites their relationships with suppliers, producers, logistic provider to end customers. They also need to rethink in terms of the market they are in and the technology advancement provided. In order to attain a higher level of integration that will improve the competitiveness, innovation, and performance of the company

Only few studies and research have looked into SCI in specific content of emerging countries (Alsadi Amin K et al, 2021). However, in a totally different environment, some enablers of integration might be different. These difference in the environment may have influence how a company strategic planning and ability could affect its SCP. This emphasized the importance of conducting more research on emerging countries such as Malaysia. More research is demanded to include SCI with others factors to help SME in Malaysia to identify and understand the role of SCI and the real value from firms in different business environments.

The result of this research will facilitate many SMEs in Malaysia that are trying to implement new supply chain approaches. The result of this study will allow company to gain better understanding about the supply chain orientation and the factor that enable or affects SCP. It may help firms to set up future plan for their supply chain investment and reduce risk and unnecessary loss. If the result of innovativeness and integration are not favorable, company does not need to invest heavily in this area

## 1.7 Scope and Limitation

The scope of the research is to determine the effects of SCI towards firm's SCP. The survey / questionnaire will mainly at targeted manufacturing companies in Malacca This is because in Malacca have a lot of industry that operating supply chain related operations. However, the study was majoring focus in this state only. Therefore, some limitations had appeared due to the time limit and restricted location in this research paper. The researcher had only three months to complete the data gathering, therefore time was very limit throughout the research. Honesty of the respondent will also become the limitations for conducting this study. This is because the research might include some of the confidential information of the firms or their own experience.



## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

The problems, issue, idea, point of view, and other research results in the field of study was addressed in this section. It intended in providing some knowledge related to this study to the reader. SCI and the definition of firms' SCP was discussed in this section. It will then be followed by the explanation of four independent variables. It aims to provide an in-depth discussion on these variables from other researchers to identify relevant theories and missing links in the research. The theory of other significant variables and how they were related were outlined in the research framework. Lastly, the hypothesis were developed based on the prediction of the research outcomes.

#### 2.2. Supply chain management (SCM)

Supply chain management is described as an integrated management system for implementing the process of material procurement and selection, product development and production from the producers to the final customers. (Roh, Taewoo, et al, 2022). SCM approaches has been used to achieve organization long term and short-term goals. For example, SCM is used to improve the effectiveness and efficiency of the production process, inventory control, reduces waste and leads to improve in market share and sustain organization growth (Shahbaz et al, 2019).

A number of methodologies and strategies that have a good effect on a firm's SCP, such as just-in-time, lean, flexibility, and supply chain collaboration, have been developed and confirmed in several SCM literature. However, Globalization leads to more complicated supply chain operations and is hard for the organization to sustain their operations alone. The current challenge is Integrating firm's capability to enhance their sustainable competitive advantages under supply chain disruption and ambidexterity (Geyi et al, 2020). Therefore, supply chain