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THE IMPACT OF SUPPLY CHAIN INTEGRATION ON OPERATIONAL  
PERFORMANCE AMONG HALAL FOOD INDUSTRY IN MALAYSIA

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THIS REPORT IS SUBMITTED IN PARTIAL FULFILMENT OF THE  
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## DECLARATION

A research project submitted in partial fulfillment of the requirements for degree in Bachelor of Technopreneurship with Honours by the coursework Final Year Project 2 in the Faculty of Technopreneurship, Universiti Teknikal Malaysia Melaka, 2019.

“I declare that this research is my own, unaided work, in exception of citation and references, which I have explained. It has not been submitted before for any other degree or examination in any other or this university”.

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## DEDICATION

I would like to dedicate this research to my beloved parents and siblings. Big appreciations to my family who always give me supports in term of moral, motivation, advice and financial. It will not be easy for me to go through the completion of my FYP without their concern and support. Their unconditioned love and encouragement have allowed me to strive and push myself beyond limits that never thought would be possible. With their support, I was able to complete this research paper smoothly. Thank you for always supporting me.

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## ABSTRACT

Nowadays industry 4.0, Malaysia Halal Food Industry has going thru rapid development in term of IT and data sharing that contribute to the integration between the organization and their supplier. So, the Supply Chain Integration (SCI) method replaced the traditional method of relationship between the organization and the supplier because the SCI is the method that provide a systematic relationship of information sharing that will influence to an excellent productivity of the organization. Excellent SCI could have impacted an operational performance, this research aims to find the impact of SCI among Halal Food Industry in Malaysian, to find the relationship between SCI and OP among Halal Food Industry in Malaysian and identify impact of SCI on OP among Halal Food Industry in Malaysian. Quantitative research is used to conduct this research and this research aim to get 200 respondents is Halal Food Industry in Malaysian. The research design that being used in this research is explanatory research. Therefore, researcher hope that this research will show the excellent results of impact of SCI in operational performance.

*Keyword: Supply Chain, Integration, Performance, Halal Food Industry in Malaysian, Operational, Organization, Supplier, Impact, Malaysia,*

## ABSTRAK

Pada masa kini industri 4.0, Industri Makanan Halal Malaysia telah melalui perkembangan pesat dari segi IT dan perkongsian data yang menyumbang kepada integrasi antara organisasi dan pembekal mereka. Kaedah Integrasi Rantaian Bekalan (SCI) menggantikan kaedah tradisional hubungan antara organisasi dan pembekal kerana SCI adalah kaedah yang menyediakan hubungan sistematik perkongsian maklumat yang akan mempengaruhi produktiviti yang sangat baik organisasi. SCI yang bagus dapat mempengaruhi prestasi operasi (OP), penyelidikan ini bertujuan untuk mencari kesan SCI di kalangan Industri Makanan Halal di Malaysia, untuk mencari hubungan antara SCI dan OP dalam Industri Makanan Halal di Malaysia dan mengenal pasti kesan SCI di OP dalam Industri Makanan Halal di Malaysia. Penyelidikan kuantitatif digunakan untuk menjalankan kajian ini dan penyelidikan ini bertujuan untuk mendapatkan 200 responden adalah Industri Makanan Halal di Malaysia. Reka bentuk penyelidikan yang digunakan dalam kajian ini adalah penyelidikan penjelasan. Oleh itu, penyelidik berharap kajian ini akan menunjukkan kesan impak SCI dalam prestasi operasi yang sangat baik.

Kata kunci: Rantaian Pembekalan, Integrasi, Prestasi, Industri Makanan Halal di Malaysia, Operasi, Organisasi, Pembekal, Impak, Malaysia,

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## CHAPTER 1

### INTRODUCTION

#### 1.0 Introduction and Background Research

Supply chain is most important element for company in order to develop a products or services successfully. The supply chain plays an important role in delivering products or services that satisfy the needs of the consumer. Supply chain can be characterized as an organizational system that includes internal and external activities such as the individual, resources and activities incorporated into the production of a product or service from supplier to customer. In process of Supply chain management involve the activities of transformation initial output resources such as raw materials, and components turn to a finished product that is delivered to the end user (Chadwick and Rajagopal, 1995). In a simple term supply chain is a cooperation between the internal and external in order to meet company goals in making a products or services. In supply chain integration (SCI) there a different level in organization, basically the first step in integration in supply chain the company will find a specific supplier or vendor that able to fulfil their needs, after company able to find their specific vendor an agreement, they will be making in order for them to set amount of inputs during the year at a set cost with the supplier (Ellram and Carr, 1994). With SCI company will sustain/compete in way competitive business in the world.

Supply chain integration show an important role in determine a company performance including the operational performance. Supply chain needs to measure and need analyse in order to know on which level company performance is. For examples of such measurement are: Customer Satisfaction (Christoper, 1994), Information flow (Nicoll, 1994), Supplier Performance (Davis, 1993), and Risk

Management (Johnson and Randolph, 1995). This research will see on how the supply chain integration impact on firm performance.

### **1.0.1 Importance of Supply Chain Integration in the world scenario**

SCI cannot be denied has being one of important element in that impact the world scenario of company performance. The global recession in the late 1980s and early 1990s prompted companies to look at ways of adding value and eventually cutting costs. This resulted from euphemistically called "down-size" large-scale redundancy systems to define savings. Managers were obligated to build positive benefits at the latest; for example, an effort to improve quality and reduce inventories (Schonberger, 1990). Over the past decade, consumers have begun to understand the potential for a secure closer relationship with suppliers and this known as SCI (Chadwick and Rajagopal, 1995), Whereas previously, relationships with suppliers were typically adversarial and usually only lasted for the duration of particular communications for the short term (Ellram and Carr, 1994). The new relationship development has now been characterized by fewer vendors in order to foster mutual trust and dedication over a period of time. (Spekman and Johnston, 1986; Barney and Hansen, 1994).

Globalization has significantly changed the international market landscape. The results nowadays, the conventional supply chain is moving towards a Globally Integrated Supply Chain-one that acts more as an integrated, automated and collaborative network spanning roles, geographies and business partners (Sean Ryu, Michelle Kam etc 2008) Nowadays company will working more frequently with supplier or will make the supplier as their big organization in order to penetrate the global market, for example local Halal Food Industry will work together with the supplier in order to make a halal products that can penetrate international halal market.

## **1.0.2 Supply Chain Integration between Halal Food Industries in Malaysia**

In the new world market that being drive by the industry 4.0 and halal market become one of the biggest markets that growth rapidly (Dierks, 2011). The definition halal refers to the manner in which products and services are manufactured which have been approved by Islamic law or which are well recognized as ' Syariah '. This halal definition not only apply to the food products or food preparation but also include in financial practices. (Abdul Manaf Bohari, 2013). Halal food industry is one of the most important industries for Muslims in the world, as it helps to ensure that the food requirements they eat every day are ' syariah ' complaints. The rapid growth of Muslim all around the world, the market product is forecasted increase from 45.3 billion U.S. dollars in the year 2016 to over 58.3 billion by the year 2022. The huge sector in the international halal industry first is Islamic finance with the score 43 percent market share, and the second is the halal food itself with a 36 percent market share (M.Shahbandeh, 2019). This form of trend is projected to increase to USD 2.1 trillion in accordance with the five-fold dynamics driven by the global halal food industry: growth in the Muslim population, the main market for halal food; increased incomes in the major halal food markets; increased demand for healthy, high-quality food in primary markets; increased demand for more halal food varieties in primary markets; and incidence. (Dagang Asia Net, 2011).

### **1.1 Problem Statement**

Malaysia is well known as halal-food benchmarking pioneer. The United Nations has recognized Malaysia as the best example of halal food benchmarking in the world in compliance with the Codex Alimentarius Commission adopted in Geneva 1997 the Codex General Guidelines for the Use of Halal. It is therefore because of the introduction of a single halal model throughout the country with the

results that the Malaysian standard has become the foundation for the creation of the world's halal food industries (SME Annual Report 2006, 2007), this demonstrates that the significance of halal food industries will determine the growth of global halal food industries.

The implementation of SCI in Halal Food Industries is very important in order to the future sustain. There were a lot of research has been done on the SCI and it show that level of SCI is currently low and it also influence the company performance that include operational performance (Rahman et al. 2011).

The problems with the Malaysian halal food industry need to do lot with the SCI such as a problem with halal produces and suppliers. First of all, is unprofessionalism. The producers in the halal food industry are noted for their slow follow-up responses, which indicate lack of seriousness in their attitude and short-term market perspective. The attractiveness of halal goods reflects a lack of professional knowledge and product development training;

Secondly, in the halal food industries, the firms lack of knowledge in the aspects of legal, social and cultural environment of the importing countries (Abdul Manaf Bohari, 2013). Some halal food firms are not able to identify consumer need accurately in term of taste and preference. Most of them also lack of Islamic mind set and entrepreneurial skills.

Next, most critical factor in the halal food industries, the halal food suppliers are not consistence in supplying the products (Abdul Manaf Bohari, 2013). Some of the firm were hampered by high production costs. It is because of the capital shortage of some firms are weak in market 'niche' research and R&D activities.

Accidently, many studies show SCI influence performance of company. Many researchers (Rahman et al. 2011) (Abdul Manaf Bohari, 2013) (Foo Li Leng, 2012) shows that SCI very important to the company to perform. However, insufficient literature has been done on SCI especially in Malaysia Halal Food Industry.

Many studies done in other state show the SCI impact on OP such as Pakistan (Shafique, Muhammad Noman), China (Shou, Y. Y.) and India (Subburaj, A.). In

Malaysia, a few studies have done in SCI impact on performance such as Sundram, V K and Sayuti, N M (2017) The impact of supply chain integration and firm characteristics towards performance. However, just Ali etc (2017) conduct research on SCI and performance among halal food industry. But, the studies only focus only on performance and not on OP. Furthermore, SCI on previous research only carried II (internal integration), SI (Supply Chain Integration), EI (external integration) and they not carried on information flow, financial flow and material flow

Thus, this is the reason why the researcher wants to conduct a study on SCI impact on OP in Halal Industry in Malaysia in hope that all the data being collect and being analyse can be share among Halal Food Industries and can be use by the industry to help them develop.

## **1.2 Research Objective**

This research being make by refers to the main objective of the research. This research contains three main objective that being make in order to see the outcomes of this research when the research being done.

The objectives of research as stated below:

1. To find the highest SCI among Halal Food Industry in Malaysia.
2. What is the relationship in supply chain integration with operational performance among Malaysia Halal Food Industry?
3. What is the influence of supply chain integration on operational performance?

### 1.3 Research Question

This research contains a few questions that being highlight by a researches in order to know exactly what are the things that need to find in this research. The central of research question is, what is the impact of supply chain integration on firm company performance?

Research sub-question for this research are:

1. What is the level of supply chain integration in the Halal Food Industry in Malaysia?
2. What is the relationship in supply chain integration with operational performance among Malaysia Halal Food Industry?
3. What is the influence of supply chain integration on operational performance?

### 1.4 Implication of Research

Integration of supply chain is a close organization and grammatical relationship within a supply chain, often with the use of mutual information management systems. Integration of the supply chain includes all parties involved in the fulfilment of an order, including raw materials, product production, transport of finished products and support services. Therefore, this research will make the research know more about how SCI impact on operational performance.

Supply chain integration also nowadays has been an important element in determine the company performance. Researcher conduct the research because of the interest in to see how the supply chain integration influence the company performance. The level of supply chain integration will lead to the level of operating performance, so to see the results of this study, the researcher will see the item required in the level of supply chain integration that influences the level of operating performance.

This research being done also in order to help the audience (H.F.I) in Malaysia to know what are the element their need in order to increase the level of supply chain integration that will affect their company performance level.

The researcher wants to conduct a study on SCI impact on OP in Halal Industry in Malaysia in hope that all the data being collect and being analyse can be share among Halal Food Industries and can be use by the industry to help them develop.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter provides the further explanation on impact supply chain integration on operational performance. It also will explain respectively independent variable and

dependent variable that consider about the factors that determine the impact of the supply chain integration on research are the information flow, material flow and financial flow. Dependent variable for this research will be operational performance. Furthermore, this chapter will be explaining more detail about the information flow, material flow and financial flow of supply chain integration that might affect the operational performance. The last part of this chapter is about the summary of the literature review of this research. (Adolfo Crespo Marquez, 2004)

### 2.1 Definition of Element in SCI (Table 1)

AUTHORS	Element in SCI			Operational Performance
	Information flow	Material flow	Financial Flow	
Pagell (2004)	√		√	
Julia Wolf (2011)	√		√	
(W.Seifert, 2010)			√	
(Adolfo Crespo Marquez, 2004)			√	
(Dimitros Chatzoudes, 2015)	√		√	