PHREVEENA A/P SANNASY

MBA

2020

THE DETERMINANTS OF SUPPLY
CHAIN PERFORMANCE IN
MALAYSIA'S COMMERCIAL BANKS

PHREVEENA A/P SANNASY

MASTER OF BUSINESS
ADMINISTRATION (SUPPLY CHAIN
AND LOGISTICS)
NATIONAL DEFENCE UNIVERSITY
OF MALAYSIA

2020

Project Submission Pro-Forma

Name: PHREVEENA A/P SANNASY

Student Matrix Number: 3181055

I wish the project paper to be considered for:

MASTER of BUSINESS ADMINISTRATION (SUPPLY CHAIN & LOGISTICS)

I have checked that my modules meet the requirements of the above award.

I confirm that I have included in my dissertation:

- An abstract of the work completed.

- A declaration of my contribution to the work and its suitability for the degree.

- A table of contents.

- A list of figures and tables (if applicable).

- A clear statement of my project objectives.

- A full reference list.

Signed: **PHREVEENA A/P SANNASY**   Date: **17th May 2020**

THE DETERMINANTS OF SUPPLY CHAIN PERFORMANCE IN MALAYSIA'S COMMERCIAL BANKS

PHREVEENA A/ P SANNASY

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

JULY 2020

ABSTRACT

The purpose of this study is to investigate the determinants of supply chain performance in Malaysia's commercial banks. The study was guided by the supply chain management theory, supply chain performance theory, and explained the relationship between supply chain management and supply chain performance in the banking industry. This study adopted a descriptive research methodology on 26 Commercial Banks that are authorised to operate in Malaysia by BNM (Bank Negara Malaysia). Data was collected using questionnaires presented to respondents who were employees of the middle management of the commercial banks which are consist of assistant managers, unit managers, and team managers. Data was analysed using SPSS version 23.0 in measuring the regression model. The mean and standard deviation were used to measure the central tendency and dispersion. The result of this study concluded that there is a positive strong relationship between performance and the independent variables, such as (ICT integration, knowledge and information sharing, trust, culture, and joint decision-making) as shown by the Pearson's co-efficient correlation, which is indicated by the P-value at 95% level of confidence. 79.2% variation of changes in the dependent variable, such as (supply chain performance) can be explained by variations in the independent variables, which are culture, ICT integration, trust joint planning and decision-making, knowledge, and information sharing. This study identified the determinants of supply chain management and supply chain performance that contribute to economical and effective management of supply chain in the organisation, namely ICT integration, knowledge and information sharing, trust, culture and joint decision-making. Finally, this study also found the most significant determinants of supply chain performance on ICT integration, culture, and information sharing.

ABSTRAK

Tujuan kajian ini adalah untuk mengkaji penentu prestasi rantaian bekalan di bank perdagangan Malaysia. Kajian ini dipandu oleh teori pengurusan rantaian bekalan dan teori prestasi rantaian bekalan dan menjelaskan hubungan antara pengurusan rantaian bekalan dan prestasi rantaian bekalan dalam industri perbankan. Kajian ini mengamalkan metodologi penyelidikan deskriptif mengenai dua puluh enam Bank Perdagangan yang diberi kuasa untuk beroperasi di Malaysia oleh BNM (Bank Negara Malaysia). Data dikumpul menggunakan soal selidik yang disampaikan kepada responden yang merupakan pekerja di dalam pengurusan pertengahan bank perdagangan yang merangkumi adalah timbalan pengurus, pengurus unit dan pengurus pasukan. Data dianalisis dengan menggunakan SPSS versi 23.0 dalam mengukur model regresi. Penyimpangan min dan standard digunakan untuk mengukur kecenderungan pusat dan penyebaran. Dapatan Kajian ini menyimpulkan terdapat hubungan positif yang kuat antara prestasi dan pembolehubah bebas seperti (Integrasi ICT, pengetahuan dan perkongsian maklumat, amanah, budaya dan membuat keputusan bersama) seperti yang ditunjukkan oleh korelasi Pearson yang cekap seperti yang ditunjukkan oleh P nilai pada tahap keyakinan 95%. Perubahan 79.2% perubahan dalam variabel bergantung seperti (prestasi rantaian bekalan) dapat dijelaskan oleh variasi pembolehubah bebas yang merupakan kebudayaan, integrasi ICT, perancangan bersama kepercayaan dan pengambilan keputusan, perkongsian pengetahuan dan maklumat. Kajian ini mengenal pasti penentu pengurusan rantaian bekalan dan prestasi rantaian bekalan yang menyumbang kepada pengurusan rantaian bekalan yang menjimatkan dan berkesan dalam organisasi iaitu integrasi ICT, pengetahuan dan perkongsian maklumat, kepercayaan, budaya dan keputusan bersama. Akhirnya kajian ini juga menemui penentu yang paling penting dalam prestasi rantaian bekalan mengenai integrasi ICT, budaya dan perkongsian maklumat.

ACKNOWLEDGEMENTS

This research paper would not have been possible without the encouragement, comments, advice, assistance and support from so many people. Among those I would like to record my gratitude and many thanks are as follows:

☐ Parents

Supervisor

☐ Dr. Nur Surraya Binti Mohd Saudi

MBA Supply Chain and Logistics Program Coordinator

☐ Mej Ts Wong Wai Loong

Many thanks to my family on encouragement along in MBA journey

I thank my family who has been patiently supporting and encouraging me for the final completion of this project paper. My most love and appreciation also goes to my parents. I hoped I have inspired them to work their best and reach out for their dreams. I also thank God the Almighty for his blessed and to humbly seek for forgiveness for any unintentional error in this paper.

DECLARATION OF FINAL PROJECT PAPER

I have read and understood the rules on cheating, plagiarism and appropriate referencing as outlined in my handbook and I declare that the work contained in this paper is my own, unless otherwise acknowledged. No substantial part of the work submitted here has also been submitted by me in other assessments for this or previous degree courses, and I acknowledge that if this has been done an appropriate reduction in the mark I might otherwise have received will be made.

Signed candidate: **PHREVEENA A/P SANNASY**

You are required to justify your submitted Project Paper against the degree definition for which you are registered.

<table>
<tr><td>

Project definition for my degree:

To find which determinants is strongly contribute to supply chain performance in commercial banks.

The project should normally be related to supply chain and logistics environment. It could address many different aspects such as business, administration and management issues. My project relates to this definition in the following way:

1.   The project is centred on Commercial banks in Malaysia.

2.   This project addresses the aspect of supply chain performance in commercial banks.

3.   The intention of the project is to assist on determinants which strongly contribute to banks.

4.   The recommended improvements in this project are based on more financial institution in different country.

</td></tr>
</table>

The above shows the relevance of the work to the degree for which it is submitted.

	Signed	Agree (√)	Disagree (√)
Supervisor: Dr.Nur Surayya Mohd Saudi			

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

AI-Artificial Intelligence

a-the S intercept when x is zero

BAFIA-Banking and Financial Institution Acts

BNM-Bank Negara Malaysia

CBM-Central Bank of Malaysia

ERP-Electronic Resource Planning

ICT-Information and Communication Technology

KPI-Key Performance Indicators

KMO-Kaiser Meyar Olkin

MoF-Ministry of Finance

'N': Population size

R&D –Research and Development

S-Performance

'S': Sample size

x1-ICT integration

x2-Knowleadge and Information Sharing

x3-Trust

x4-Culture

x5-Joint choice making

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Banks play an important function toward sustainability in economy progression. Financial organization triggers major acceleration of financial growth that facilitates on deposit cash, financing and investment activities. An efficient financial system shows a modern of banks in injecting the extent of budget to borrowers, which later will transform the output into bank's profitability. Profits earned by means of banks are generated by interest on lending to businesses and individuals.

Profit is measured over a long periodic cycle. Banks often perform competitive operation to enhance its characteristic to serve their clients with good services in every aspect of area. It is extraordinary for banks to earn extra profit to maintain its function in the industry, especially when there is unlikely event, such as poor economic situation or political changes.

The ability of banks in absorbing negative pressure on economic performance displays its financial balance and soundness to keep resilience in the monetary system. Political changes also affect the banking procedure from the new government in terms of Base Lending rate, housing loan and interest rate.

In the introduction of new technology, banks have embraced the use of huge data, artificial intelligence and sophisticated banking structures to overcome the challenges posed by technological inventions toward developing a high standard of financial system and being competitive in the market. High price is required in upgrading the management and banking system. In fact, online and mobile banking has become one of banking conveniences for everyone from worldwide in managing financial transaction.

Internet banking, customers can access their bank account and simply check their current balance, transfer funds and pay payments with a touch of their fingertips. Internet banking can be accessed thru smartphone by using downloading the software. The application is pleasant–user and flexible in making payment without barrier.

Sophisticated and development in facts technology had incurred huge amount of funding by banks. But, the risk is also big and equivalent with high profit earnings. Banks' profitability can be measured using loan growth as it serves as a key factor in boosting banks' revenue. an impressive loan growth indicates high quality of financial institution in serving borrowers with low fee, and accompanied by appropriate benchmark of credit standard.

1.1 Background of Study

In Malaysia, Banking & Financial Institutions Act, 1989 (BAFIA) provides laws and regulations for the licensing of institutions carrying on banking, discount house, and money–broker business. BAFIA was provided to supply a coordinate's supervision of the Malaysian monetary system conjointly to supply the central bank with the control to explore and prosecute, in case fundamental, any illegal exercises. On this way, they have got constant requirements, ideas, and operations. Banks function financial mediators that collect the demanders conjointly as carriers of fund by (Mulyati E., 2019).

Moreover, based on BAFIA, the primary financial institution of Malaysia, that is bank Negara Malaysia (BNM), has the right to control the entire float of coin below all and sundry financial institution and other coins foundations. Under BNM, there are 26 authorized banks strolling the coping with an account framework. Table 1 listed 26 business banks in Malaysia.

Table 1.1: List of commercial banks

No	Bank's name
1.	Affin Bank Berhad
2.	Alliance Bank Malaysia Berhad
3.	AmBank (M) Berhad
4.	BNP Paribas Malaysia Berhad
5.	Bangkok Bank Berhad
6.	Bank of America Malaysia Berhad
7.	Bank of China (Malaysia) Berhad
8.	CIMB Bank Berhad
9.	China Construction Bank (Malaysia) Berhad
10.	Citibank Berhad
11.	Deutsche Bank (Malaysia) Berhad
12.	HSBC Bank Malaysia Berhad
13.	Hong Leong Bank Berhad
14.	India International Bank (Malaysia) Berhad
15.	Industrial and Commercial Bank of China (Malaysia) Berhad
16.	J.P. Morgan Chase Bank Berhad
17.	MUFG Bank (Malaysia) Berhad
18.	Malayan Banking Berhad
19.	Mizuho Bank (Malaysia) Berhad
20.	OCBC Bank (Malaysia) Berhad
21.	Public Bank Berhad
22.	RHB Bank Berhad
23.	Standard Chartered Bank Malaysia Berhad
24.	Sumitomo Mitsui Banking Corporation Malaysia Berhad
25.	The Bank of Nova Scotia Berhad
26.	United Overseas Bank (Malaysia) Bhd

Source: Central Bank of Malaysia BNM (2019)

BNM (Bank Negara Malaysia) is a permitted bank that keep all the customers' personal records with private and confidential. Then again, BNM also targets to create a benchmark for all commercial banks to improve their supply chain overall performance (Gunasegaram et al., 2018). The supply chain's capacity is to meet the cease-client includes object accessibility and responsive, based totally on time conveyance.

Supply chain performance crosses both practical traces and organization obstacles. practical corporations; for example, engineering, research and development, production, and sales are all instrumental in designing, constructing, and promoting, maximum effectively for the supply chain.

Successive Corporation limits are frequently modified as companies become aware of new methodologies to gain the production network objective; the ability to attend to the benefactor faster than competitors that is vital to most businesses (Gunasegaram et al., 2018).The for Industrial banks need overall performance measures to enhance their supply chain overall performance. Performance measures must display how well an organization meets the needs of its clients and how it handles its customers in phrases of great and performance to feature value for goods and offerings respectively (Gunasegaram et al., 2018).

The move-practical nature of many deliver chain enhancements inside the overall performance measures of an organisation have to attempt to acquire and improve supply chain performance to growth the level of effectiveness in provider transport (Athukorala., 2018).

The role of performance measures within the success of an organisation can't be overstated because they have an effect on strategic and operational making plans and manipulate. Overall performance dimension has a crucial function to play in setting objectives, survey execution, and coming across destiny productions of sports. Various

estimations used in supply chain performance evaluation had been designed to degree operational overall performance, compare progressed effectiveness, and observe strategic alignment of the entire supply chain management (Michael et al., 2018).

Therefore, character measures of supply chain overall performance were classified into four categories: First-class, time, cost, and versatility. Further, they were excessively collected through great, fee and none value, operational operation, and keep community approach (Panayides et. al 2018).

Figure 1.1 suggests that the financial sectors are a part of the services area in supply chain overall performance. The following Figure 2 explains the services zone's contribution to the GDP (Gross domestic Product), which is 89.2%. This is followed through Figure 3, and is the reason that net records by using region also contributed 19.1%. The provider area as a consequence performs a greater sufficient position to growth the use of services. Therefore researcher conclude that service sector which are contribute or a backbone to the economy activity.
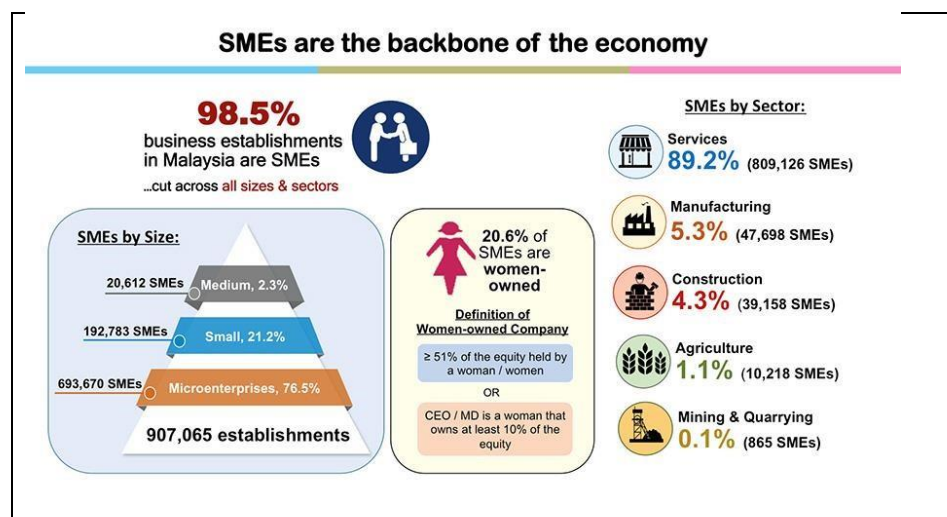

Figure 1.1: The contribution of 5 sectors on Small Medium Enterprise (SME)

Source: Website: enterpriseitnews.com.my (2019)
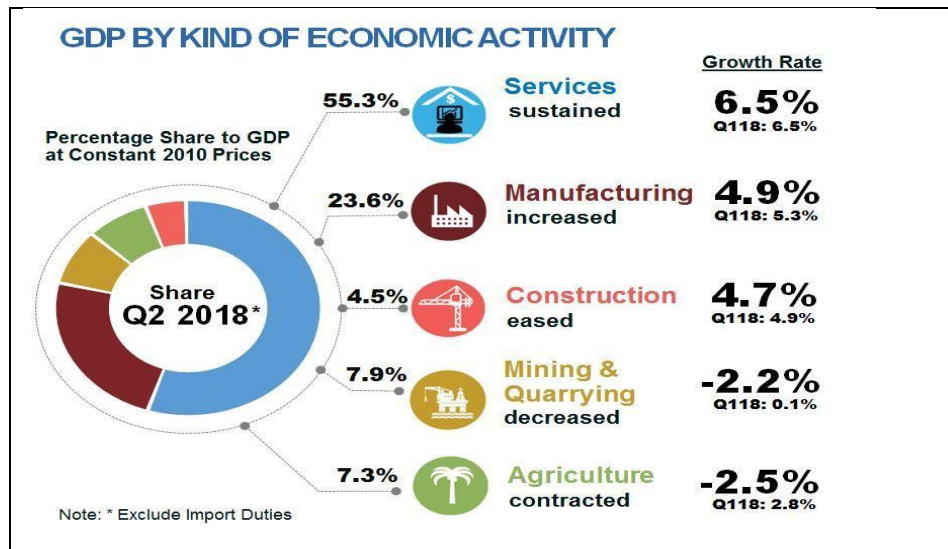
Figure 1.2: The contribution of 5 sectors of growth rate of Gross Domestic Product (GDP).

Source: Department of Statistic Malaysia (2018)
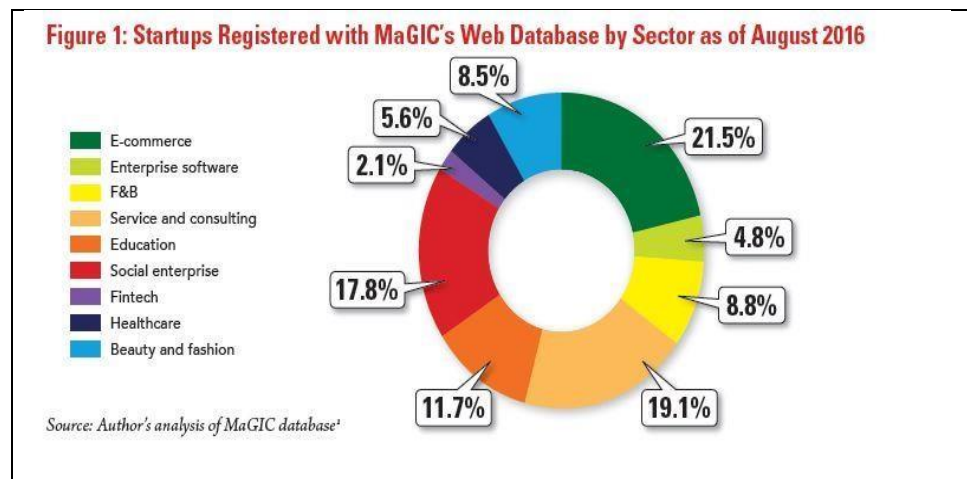
Figure 1.3: The Contribution of Nine Sectors of Web Database.

Source: Website: penangmonthly.com. (2016)

From Figure 1.1, Figure 1.2, and Figure 1.3 can conclude that the services sector has a significant role in Commercial Banks. This sector shows a significant number in contributing to GDP (Gross Domestic Product) for Malaysia. Hence, the study on the determinants of supply chain performance in Malaysia's commercial banks is vital.

1.2 Problem Statement

In the banking industry in Malaysia, most commercial banks have invested in information communication technology to coordinate their supply chain partners through enhanced information sharing. This form of system integration aims to meet customer needs through a process of forward and reverse integration.The implementation of SCM will help to reduce costs leading to quality service and improved customer satisfaction. For example, most commercial banks outsource security and cash on transit services from G4S. This highly contributes to information sharing, which is essential in reducing fraud and theft by distributing bank products like cards, cash, and hardware on time to mitigate fraudulent practices (CBM, 2018).

Conventional association limits are changing as organisations find different cooperation techniques to accomplish the store network objective and the capacity to take care of buyer. This enacted for execution measures or estimations for worldwide production network of organisation changes.

According to (Panayides., 2018), overall performance measures should display now not only how it is supplying for customers (service metrics), however also how an organisation is managing its business (speed, asset, inventory, and financial metrics). Given the cross-functional nature of many supply chain improvements, metrics must prevent behaviour that may prevent supply chain performance (Gunasekaran et al., 2018).

Some studies that concentrated on supply chain performance that determined that integration is highly influential on supply chain performance among business banks in Malaysia is (M Pakurar., 2019). In another study, (Ghadge., 2018) discovered the downstream supply chain performance measurement. These are considered too wide and subsequently did not address the issue of setting up the executives of inventory community employer among business banks in Malaysia. Hence, this study answers the determinants of supply chain performance in commercial banks in Malaysia and investigate the relationship among supply chain performances in commercial banks in Malaysia.

This study has shed the light to find the determinants of supply chain performance in commercial banks in Malaysia and to investigate the relationship among supply chain performances in commercial banks in Malaysia.

1.3 Research Objectives

The main objective is to determine which determinants contribute more in supply chain performance in commercial banks in Malaysia. This study specifically has three objectives which are:

1. To identify the main determinant of supply chain performances in commercial banks in Malaysia.

2. To examine a relationship between supply chain performance in commercial banks in Malaysia.

3. To provide a recommendation on n the application of supply chain performance in commercial banks in Malaysia.

1.4 Research Questions

From the related problem statements that has been discussed before, the research questions are meant to help the researcher to have main focus on what the researcher wanted to study and the questions are as follows:

1. What is the main determinant of supply chain performances in commercial banks in Malaysia?

2. What is a relationship between supply chain performances in commercial banks in Malaysia?

3. What is are the recommendation on the application of supply chain performance in commercial banks in Malaysia?

1.5 Significance of study

This study contributes to the body of knowledge on the implementation of Supply Chain Management (SCM) in Malaysia's Commercial Bank. The determinants of SCM on Commercial Banks will provide a reference on the implementation of SCM and performance in commercial banks. The findings of the study are important to commercial banks in Malaysia and enable policy maker to find out how measures of the performance impact the supply chain performance.

Further, other non-banking organisations will benefit from the discoveries of this study since it reveals more insights on the determinants of supply chain among business banks in Malaysia. Commercial banks will also gain advantage from this study by setting up the supply chain management in the operation that might benefited to the Bank's employees. This information can be used in setting up supply chain policies and practices that are imperative in improving bank performance in terms of accomplishing quality and efficiency in their supply chains.

1.6 The organization of the study

Chapter 1: Introduction

Introduction, background of study, problem statement, research question, significance of study, flowchart of study, and chapter summary.

⬇

Chapter 2: Literature Review

Introduction, determinants of supply chain performance, ICT integration, knowledge and information sharing, trust, culture, joint planning in decision-making, supply chain performance, measures of performance of supply chain performance, supply chain management theory, conceptual framework and chapter summary.

⬇

Chapter 3: Research Methodology

Introduction, research design, data collection, research sampling, population, sampling techniques, issues with sample selection, data access limitation, data analysis, instrument validity, instrument reliability, and chapter summary.

⬇

Chapter 4: Data Analysis and Discussion

Introduction, The Main determinants of supply chain performance among commercial banks in Malaysia, descriptive statistics, relationship between the determinants and supply chain performance, relationship between supply chain performance and profitability, regression analysis, model specification, and Chapter Summary.

⬇

Chapter 5: Conclusion and Recommendation

Introduction, summary of findings, conclusion, limitation of study, time constraints and recommendation of the study.