

**ADOPTION OF CASHLESS PAYMENT SYSTEM AMONG SMES IN THE
SERVICES SECTOR IN MELAKA**

SIM JIE MIN

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

SUPERVISOR'S APPROVAL

'I hereby declared that I had read through this thesis and in my opinion that this thesis is adequate in terms of scope and quality which fulfil the requirements for the award of Bachelor of Technopreneurship (BTEC)

SIGNATURE:

NAME OF SUPERVISOR: EN. ALBERT FEISAL@MUHD FEISAL ISMAIL

DATE:

SIGNATURE:

NAME OF PANEL: DR. NURULIZWA BINTI ABDUL RASHID

DATE:

ADOPTION OF CASHLESS PAYMENT SYSTEM AMONG SMES IN THE
SERVICES SECTOR IN MELAKA

SIM JIE MIN

The thesis is submitted in partial fulfilment of the requirements for the award of
Bachelor of Technopreneurship (BTEC)

Faculty of Technology Management and Technopreneurship
(BTEC)

Universiti Teknikal Malaysia Melaka

June 2018

DECLARATION OF ORIGINAL WORK

“I hereby declare that the work of this exercise is mine except for the quotations and summarize that have been duly acknowledge.

Signature :

Name : SIM JIE MIN

Date :

DEDICATION

For my beloved parents that always support me. A special thanks to my supervisor, panel and my friends for helping me in complete this research study.

ACKNOWLEDGEMENT

First of all, I would like to express gratitude and appreciation to my supervisor, Albert Feisal@Muhd Feisal Ismail for his guidance and support for me to complete this Final Year Project. Next, I would like to thank you my respectable panel, Dr. Nurulizwa Binti Abdul Rashid for being supportive by providing valuable comment to my research.

Furthermore, I would like to express my heartfelt thanks to my parents for their support, tolerance; cooperation as well as encouragement which had help me much in completing this project. I will not able to complete this project without my parents, hence, I would like to extent my appreciations for their moral and financial support.

Last but not least, I would like to thanks to my course mates and friends that had helped me during the period for my project work. I am appreciated all of their willingness in teaching me and sharing their knowledge in developing the project.

ABSTRACT

A heavily cash-based ecosystem impedes the growth of business and bustling of economy. Studies show that the cashless payment system is critical in advancing the business ecosystem of SMEs. The adoption of cashless payment system among SMEs in Malaysia is still lagging behind as compared to other developing countries. Hence, this research aims to investigate the factors that influence the adoption of cashless payment system among SMEs in the services sector. A thorough literature has been reviewed to identify the factors and based on it a model that influences the adoption of cashless payment system among Malaysian SMEs has been constructed. A sample of 105 SMEs in Melaka was used in this research. A structured questionnaire that employed a 7-point Likert scale was used for data collection. Both descriptive and inferential statistics were used in analyzing the data. The results of the research indicated that the perceived ease of use, perceived usefulness and perceived risk were significant factors in the adoption of the cashless payment system among the SMEs in the services sector. Results of the study further showed that perceived ease of use was the salient factor of the SMEs to apply the cashless payment system. This research suggests that cashless payment system is central in sustaining the growth of SMEs and the Malaysian SMEs must be seriously encouraged to adopt the cashless payment system.

Keywords: *cashless payment system, SME, service sector, perceived ease of use*

ABSTRAK

Ekosistem amat berasaskan tunai telah menghalang pertumbuhan perniagaan dan ekonomi. Kajian-kajian sebelumnya menunjukkan bahawa penggunaan sistem pembayaran tanpa tunai adalah penting dalam memajukan ekosistem ekonomi di kalangan Perusahaan Kecil dan Sederhana (PKS).Penerima pakai sistem pembayaran tanpa tunai di Malaysia masih ketinggalan jauh daripada negara-negara yang masih membangun. Oleh itu, kajian penyelidikan ini bertujuan untuk mengkaji faktor-faktor yang mempengaruhi penerima pakai sistem pembayaran tanpa tunai oleh Perusahaan Kecil dan Sederhana (PKS) di sektor servis di Melaka. Kesusasteraan telah dikaji semula untuk mengenal pasti faktor-faktor dan model berdasarkan faktor yang mempengaruhi penerima pakai sistem pembayaran tanpa tunai telah dibina. Sebanyak 105 sampel PKS di Melaka telah digunakan dalam kajian ini. Soal selidik yang mempunyai Skala Likert 7-mata telah digunakan dalam pengumpulan data. Data telah dianalisis menggunakan statistik seperti diskriptif statistik. Hasil kajian menunjukkan bahawa kesenangan penggunaan, fungsi penggunaan,dan risiko penggunaan adalah faktor-faktor dalam mempengaruhi penerima pakai sistem pembayaran tanpa tunai. Kajian juga menunjukkan bahawa kesenangan penggunaan adalah faktor yang paling penting dalam mempengaruhi penggunaan sistem pembayaran tanpa tunai. Kajian ini memcadangkan bahawa sistem pembayaran tanpa tunai adalah penting dalam mengekalkan pertumbuhan PKS dan PKS di Malaysia amat digalakkan untuk mengguna sistem pembayaran tanpa tunai.

Kata Kunci: *pakai sistem pembayaran tanpa tunai, PKS, sektor servis, kesenangan penggunaan*

TABLE OF CONTENT

CHAPTER	CONTENT	PAGES
	DECLARATION OF ORIGINAL WORK	ii
	DEDICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENT	vii
	LIST OF TABLES	xii
	LIST OF FIGURES	xiv
	LIST OF ABBREVIATIONS	xv
	LIST OF SYMBOLS	xvi
	LIST OF APPENDICES	xvii
 CHAPTER 1	 INTRODUCTION	
	1.1 Introduction	1
	1.2 Background of Study	1
	1.3 Problem Statement	3
	1.4 Research Questions	5
	1.5 Research Objectives	5
	1.6 Scope, limitation and key assumptions of the study	6

1.7	Significance of the study	7
1.8	Summary	8
CHAPTER 2	LITERATURE REVIEW	9
2.1	Introduction	9
2.2	Small and Medium Enterprise (SME)	10
2.2.1	Service Industry	11
2.3	Cashless Payment System in Malaysia	13
2.3.1	Type of Cashless Payment System	14
2.4	Prior Literature	16
2.5	Technology Acceptance Model (TAM)	19
2.6	Factors affect the adoption of cashless payment system	20
2.6.1	Perceived Ease of Use	20
2.6.2	Perceived Usefulness	21
2.6.3	Perceived Risk	22
2.6.4	Perceived Cost	23
2.6.5	Network Effects	23
2.7	Proposed Conceptual Framework	24
2.8	Hypotheses	25
2.9	Summary	27

CHAPTER 3	RESEARCH METHODOLOGY	28
3.1	Introduction	28
3.2	Research Design	29
3.3	Methodological Choice	30
	3.3.1 Quantitative Method	30
3.4	Research Strategy	31
	3.4.1 Pilot Test	32
	3.4.2 Questionnaire Development	33
3.5	Construct Measurement	34
	3.5.1 Operationalization of Construct	34
	3.5.2 Variables	35
3.6	Data Collection	38
	3.6.1 Primary Data	38
	3.6.2 Secondary Data	38
3.7	Location of Research	39
3.8	Sample and Sampling Technique	39
3.9	Data Analysis	40
3.10	Time Horizon	41
3.11	Reliability	41
3.12	Validity	42
	3.12.1 Face Validity	43
	3.12.2 Content Validity	43
	3.12.3 Construct Validity	43
3.13	Summary	44

CHAPTER 4	DATA ANALYSIS	45
4.1	Introduction	45
4.2	Pilot Test Data Analysis	46
4.3	Descriptive Analysis	47
4.3.1	Demographic Profile	47
4.3.1.1	Position	48
4.3.1.2	Industry	50
4.3.1.3	Average Annual Sales	51
4.3.1.4	Number of Full Time Employees	52
4.3.1.5	Year of Operation	54
4.3.1.6	The use of cashless payment system	55
4.3.1.7	Mode of Cashless Payment System	57
4.3.2	Mean Score Analysis for Variable	58
4.3.2.1	Perceived Ease of Use	59
4.3.2.2	Perceived Usefulness	60
4.3.2.3	Perceived Risk	62
4.3.2.4	Perceived Cost	63
4.3.2.5	Network Effects	65
4.3.2.6	Adoption of Cashless Payment System	66
4.4	Reliability Analysis	67
4.5	Validity Analysis	68
4.6	Inferential Statistics	69
4.6.1	Pearson Correlation Analysis	69

	4.6.2	Multiple Regression Analysis	73
	4.7	Hypotheses Test	77
	4.8	Summary	80
CHAPTER 5		CONCLUSION AND RECOMMENDATION	83
	5.1	Introduction	83
	5.2	Summary of Research Findings	84
	5.3	Discussion of Research Objectives	86
	5.3.1	Objective 1	86
	5.3.2	Objective 2	88
	5.3.3	Objective 3	89
	5.4	Implication of the Research	90
	5.4.1	Implication to the Study	90
	5.4.2	Implication to the Government	91
	5.5	Limitation of the Research	93
	5.6	Recommendation for Future Research	94
		REFERENCES	95
		APPENDIX A	103
		APPENDIX B	110
		APPENDIX C	112

LIST OF TABLES

TABLE	TITLE	PAGES
2.1	Definition of SME	10
2.2	Quantity of SME by Sector in Malaysia	12
2.3	Value Added by Kind of Economic Activity at Current Prices - RM Million	12
2.4	Key Performance Indicators in year 2020	15
2.5	Summarisation of concepts from prior research	19
3.1	Operationalization of Construct and Scale Measurement	35
3.2	Content of Variables	36
4.1	Reliability Statistics for Pilot Test	46
4.2	Rule of Thumb about Cronbach's Alpha	46
4.3	Statistical Analysis of Total Respondents	48
4.4	Respondents' Position in the Organisation	48
4.5	Industry of Respondents' Organisation	50
4.6	Average Annual Sales of respondent's organisation	51
4.7	Number of full time employees in respondent's organisation	52
4.8	Year of operation of respondents' organisation	54
4.9	Respondent that use the cashless payment system in their organisation	55
4.10	Mode of Cashless Payment System that Respondent used most frequently	57
4.11	Mean Score Analysis for Perceived Ease of Use	59

4.12	Mean Score Analysis for Perceived Usefulness	60
4.13	Mean Score Analysis for Perceived Risk	62
4.14	Mean Score Analysis for Perceived Cost	63
4.15	Mean Score Analysis for Network Effects	65
4.16	Mean Score Analysis for Adoption of Cashless Payment System	66
4.17	Cronbach's Alpha Reliability Coefficient	67
4.18	Validity Test	68
4.19	Rule of Thumb about Correlation Coefficient	70
4.20	Pearson's Correlations	71
4.21	Model Summary ^b	73
4.22	ANOVA ^a	74
4.23	Coefficients ^a	75
4.24	Hypotheses Test done through Regression Analysis on Coefficients	77
4.25	Research Objective, Research Questions, Research Hypotheses and Result	80

LIST OF FIGURES

FIGURES	TITLE	PAGES
2.1	Types of Payment Systems in Malaysia	14
2.2	M-payment ecosystem	18
2.3	Conceptual Framework of Factors that Influences in the Adoption of Cashless Payment System in Services Sector in Malacca	25
4.1	Respondents' Position	49
4.2	Industry of Respondents' Organisation	50
4.3	Average Annual Sales of respondent's organisation	51
4.4	Number of full time employees in respondent's organisation	53
4.5	Year of operation of respondents' organisation	54
4.6	Respondent that use the cashless payment system in their organisation	56
4.7	Mode of Cashless Payment System that Respondent used most frequently	57

LIST OF ABBREVIATIONS

AOC	=	Adoption of Cashless Payment System
PC	=	Perceived Cost
PEOU	=	Perceived Ease of Use
PR	=	Perceived Risk
PU	=	Perceived Usefulness
GDP	=	Gross Domestic Product
SME	=	Small and Medium Enterprise
SPSS	=	Statistical Package for the Social Sciences
TAM	=	Technology Acceptance Model
UNESCO	=	United Nations Educational, Scientific and Cultural Organization

LIST OF SYMBOLS

$\%$	=	Percent
\geq	=	More than or Equal to
$>$	=	More than
$=$	=	Equals

LIST OF APPENDICES

APPENDIX	TITLE	PAGES
A	Survey Questionnaire	103
B	Gantt Chart for FYP I (2017)	110
C	Gantt Chart for FYP II (2017/2018)	112

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter covers the background of this study, which discussed the SME and the trend of the adoption of the cashless payment system in Malaysia. Next, problem statement for this study is stated. It is then followed by three research questions and three research objectives. After that, the scope, limitations, key assumptions and the significance of the study will be discussed. Then, the last part of this chapter would be a brief summary of Chapter 1.

1.2 Background of the Study

In recent years, Malaysia had undergone a growth in the use of cashless payment instruments such as electronic fund transfers, credit or debit cards as well as mobile banking. Although these facilities had existed in Malaysia for sometimes,

however, the adoption of these instruments among small-medium enterprise (SME) in Malaysia is still lagging behind as compared with other developing countries.

SME had become the core of Malaysia's economic transformation since the year the 1990s and acts as an important driver for employment and growth. Based on the statistics in 2016, out of the 662,030 enterprises in Malaysia, 97.3% (645,136) are SMEs. (The Star, 2016). These businesses had contributed nearly 37% of the country's GDP, 65% of the country's employment, and nearly 18% of Malaysia's exports(The Star, 2017). Due to its significant potential to drive the economy, SME had formed the backbone of Malaysia's economy.

Government Malaysia had launched Malaysia's 2012-2020 SME Masterplan that includes a structured framework that seeks to advance SME development and increase their contributions to the economy due to its high growth potential. This is because Malaysia's transition to a high-income economy highly depends on SMEs' contribution to GDP growth. By 2020, Malaysia aims to push contribution of GDP and share of the country's exports from SMEs to 41% and 23% respectively. According to Minister in the Prime Minister's Department (2017) SME grew at an average annual rate of 6.7%, outperforming the overall average growth of the economy of 5.3% in between 2011 to 2015. Besides, he also mentioned that the target set in the SME Masterplan 2012-2020 could be achieved if Malaysia is able to maintain its SME development growth pace at 6.7%. This shows that Malaysia's government had pay high attention on SME growth with high investment and put a high expectation on the SME performance on the country economy. Besides, the SMEs act as employment providers, which once again highlighted the important role of SMEs in Malaysia.

Our Prime Minister had mentioned in TN50 Roundtable Dialogue that Industry 4.0 has been threatened the by the age-old business models today, especially in a cashless society(Malaysian Reserve, 2017). The focusing on innovation and technology adaptation is one of the key elements of Malaysia's Masterplan. Hence, the adoption of new innovated payment system seems played a crucial role in this Masterplan. To ensure the continued growth and contribution of SMEs to Malaysia

economy, Malaysia should encourage the private sector to adapt to the changes to be globally competitive(The World Bank, 2016)

As we can see from the successful countries such as China, more of half of their transaction is made via the cashless payment system. It can be clearly seen that the world is going cashless nowadays. Cashless payment such as debit/credit card as well as internet banking had been launched for a long time. The latest cashless payment system that had been adopted by China includes the use of Alipay which had improved the operational efficiency for the SME owners in China. China had made around US\$5.5 trillion (RM23.58 trillion) in e-payment transactions in the year 2016(T. M. Reserve, 2017).For instance, WeChat Pay allows users to make their electronic payments with a bank account and a smartphone only. This results in the growth of China`s WeChat`s mobile payments market from 3.3% in 2013 to 40% in 2017. There is a financial revolution that will occur globally. At the same time, other developing countries are starting to see the potential. Just like India, a developing country that has up to 98% of cash transactions in their economy, had noticed that the trend of the economy is going digital(Review et al., 2017)Hence, it is necessary for Malaysia to follow the trend to assure the continued growth of SME.

1.3 Problem Statement

Today, cashless payment had become a faster and better payment method as compared to the traditional way. By using the cashless payment system, the transaction can be made anywhere and anytime without limitation. It can highly improve the operational efficiency of a company as well as an industry. In order to promote the economic growth in Malaysia, the government is now promoting the SME growth by the SME Masterplan; the implementation of the cashless payment system in the SMEs becomes crucial as the global payment trend is going cashless nowadays.

According to the report from Bank Negara Malaysia, the usage of debit cards as an alternative payment to cash was not so successful in Malaysia (Bank Negara, 2017). Significant progress has been made in order to promote the use of cashless payment system such as debits cards in the transaction. However, the results are less successful as there is the only marginal increase from one to three debit card transactions per capita, and from seven to nine payment card terminals per 1,000 inhabitants(Bank Negara, 2017). This shows that Malaysian still highly depends on cash in making their transaction. Just like Nigeria, one of the developing countries is a country that becomes a heavily cash-based economy due to its high dependence on cash in their payment. (Yaqub et al., 2013). As referred to Yaqub et al. (2013)study, they stated that the prerequisite development for the national economy is to adopt a secure, convenient and affordable payment system in the business ecosystem.

Since SMEs had played an essential role in the economic growth in Malaysia, it is important for them to adopt this cashless payment system to their business as the payment trend adopted will also affecting the economic growth. However, there is big challenge such as behavioural constraints and lack of confident (Yaqub et al., 2013) for the SME owners to improve their businesses efficiency by adopting this payment system. Besides, the study on the adoption of the cashless payment system in supply sides such as organisation and company is very limited(Guo & Bouwman, 2016).

It is found that the whole ecosystem and building blocks should work in tandem to entrench cashless payment system among the communities, (The Star, 2016). Since the adoption of cashless payment system is less favourable in Malaysia, it is important to identify the adoption factor as the government may able to understand the factors that influence the adoption and encourage the SME to adopt the cashless payment system in a more effective way. Thus, this study is undertaken to determine the factors that affect the adoption of cashless payment system among SMEs in the services sector in Malacca.

1.4 Research Questions

There are three research questions for this study

1. What are the factors that influence the adoption of cashless payment system among SMEs in the services sector in Malacca?
2. What is the factor that has the greatest influence on adoption of the cashless payment system among SMEs in the services sector in Malacca?
3. Is there any relationship between factors influence and the adoption of cashless payment system among SMEs in the service sector in Malacca?

1.5 Research Objectives

There are three objectives for this study

1. To determine the factors that influences the adoption of cashless payment system among SMEs in the services sector in Malacca.
2. To identify the factor that has the greatest influence on the adoption of the cashless payment system among SMEs in the services sector in Malacca.
3. To investigate the relationship between factors influence and the adoption of cashless payment system among SMEs in the services sector in Malacca.