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A STUDY ON USER ACCEPTANCE TOWARDS THE USE OF ONLINE  
PAYMENT SERVICES

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## DECLARATION

I hereby declare that the report has been prepared by my own self except the summaries and citation that I have been clarify the resources.

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## DEDICATION

To both of my amazing father and mother, Abd Samad bin Hashim and Nik Rohana binti Nik Ahmad. Thank you.

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## ABSTRACT

This research is a study of user acceptance towards the use of online payment services. The research also seeks to gain an understanding on the factors that influence the user acceptance towards new technology such as online payment technology which will help make online business transactions easier through the use of the Technology Acceptance Model (TAM). The responses from a structured, self-administered questionnaire were used as a survey for Generation Y population in order to develop an understanding of the roles of perceived ease of use, perceived usefulness, perceived enjoyment, safety and privacy on their acceptance towards online payment technology. Questionnaires are given to a total of 300 respondents and every valid response were considered for further statistical analysis. The questionnaires were rated by using Likert 1-5 scale. The appropriate question will be asked and data collected will be shown as figure to make the result more clear. The data were analyzed by using Cronbach's Alpha and Pearson Correlation.







## ABSTRAK

Kajian ini adalah satu kajian penerimaan pengguna terhadap penggunaan perkhidmatan pembayaran dalam talian. Kajian ini juga bertujuan untuk memahami faktor-faktor yang mempengaruhi penerimaan pengguna terhadap teknologi baru seperti teknologi pembayaran dalam talian yang akan membantu membuat transaksi perniagaan dalam talian lebih mudah melalui penggunaan Teknologi Acceptance Model (TAM). Maklum balas daripada, soal selidik yang ditadbir sendiri secara berstruktur telah digunakan sebagai kajian untuk penduduk Generasi Y dalam usaha untuk membangunkan pemahaman peranan dilihat mudah digunakan, kegunaan dilihat, keseronokan dilihat, keselamatan dan privasi pada penerimaan mereka terhadap teknologi pembayaran dalam talian . Borang soal selidik diberikan kepada seramai 300 responden dan setiap tindak balas yang sah telah dipertimbangkan untuk analisis statistik lanjut. Soal selidik telah dinilai dengan menggunakan skala Likert 1-5. Persoalan yang sesuai akan ditanya dan data yang dikumpul akan ditunjukkan sebagai angka untuk membuat keputusan yang lebih jelas. Data dianalisis dengan menggunakan Cronbach's Alpha dan Pearson Correlation.

## TABLE OF CONTENTS

<b>CHAPTER</b>	<b>CONTENTS</b>	<b>PAGES</b>
	<b>DECLARATION</b>	i
	<b>DEDICATION</b>	ii
	<b>ACKNOWLEDGEMENT</b>	iii
	<b>ABSTRACT</b>	iv
	<b>ABSTRAK</b>	v
	<b>TABLE OF CONTENTS</b>	vi
	<b>LIST OF TABLES</b>	ix
	<b>LIST OF FIGURES</b>	x
 <b>CHAPTER 1</b>	 <b>INTRODUCTION</b>	
	1.1 Background of Study	1
	1.2 Problem Statement	2
	1.3 Research Question	3
	1.4 Research Objective	3
	1.5 Significance of the Study	3
	1.6 Scope and Limitation of Study	4
	1.7 Summary	5
 <b>CHAPTER 2</b>	 <b>LITERATURE REVIEW</b>	
	2.1 Introduction	6
	2.1 Online Payment	6
	2.3 Theoretical Framework	7

	2.4 Hypothesis Development	11
	2.5 Summary	11
<b>CHAPTER 3</b>	<b>RESEARCH METHODOLOGY</b>	
	3.1 Introduction	12
	3.2 Research Design	12
	3.3 Methodological Choices	13
	3.4 Primary and Secondary Data Source	14
	3.5 Data Collection	14
	3.6 Location of Research	14
	3.7 Research Strategy	15
	3.8 Time Horizon	17
	3.9 Summary	18
<b>CHAPTER 4</b>	<b>DATA ANALYSIS</b>	
	4.1 Introduction	19
	4.2 Pilot Study	20
	4.2.1 Perceived Usefulness	21
	4.2.2 Perceived Ease of Use	21
	4.2.3 Perceived Enjoyment	22
	4.2.4 Safety and Privacy	23
	4.2.5 Online Payment Acceptance	23
	4.3 Reliability Test	24
	4.4 Descriptive Analysis on Demographic	26
	4.4.1 Gender	26
	4.4.2 Race	28
	4.4.3 Age	29
	4.4.4 Education	30

4.4.5 Online Payment Acceptance	31
4.4.6 Types of Online Payment	33
4.5 Descriptive Analysis	34
4.6 Result of Measurement	36
4.6.1 Correlation Analysis	36
4.7 Hypotheses Testing	38
4.7.1 Hypotheses Test Analysis	39
4.8 Summary	41
<b>CHAPTER 5</b>	<b>DISCUSSION AND CONCLUSION</b>
5.1 Introduction	42
5.2 Summary of Descriptive Analysis	43
5.3 Scale Measurement	44
5.3.1 Validity	44
5.3.2 Reliability	44
5.4 Discussion of Objectives and Hypothesis Test	45
5.4.1 Research Objective 1	45
5.4.2 Research Objective 2	46
5.5 Implications	46
5.6 Recommendation for Future Study	48
5.7 Conclusion	49
REFERENCES	50
APPENDIX	53

## LIST OF TABLES

NO. OF TABLE	TITLE	PAGES
4.2.1	Cronbach's Alpha Perceived Usefulness	21
4.2.2	Cronbach's Alpha Perceived Ease of Use	21
4.2.3	Cronbach's Alpha Perceived Enjoyment	22
4.2.4	Cronbach's Alpha Safety and Privacy	23
4.2.5	Cronbach's Alpha Online Payment Acceptance	23
4.3.1	Cronbach's Alpha Coefficient range	24
4.3.2	Reliability Test	25
4.4.1	Descriptive Analysis on Gender for Demographic Analysis	26
4.4.2	Descriptive Analysis on Race for Demographic Analysis	28
4.4.3	Descriptive Analysis on Age for Demographic Analysis	29
4.4.4	Descriptive Analysis on Education for Demographic Analysis	30
4.4.5	Descriptive Analysis on Online Payment Experience for Demographic Analysis	31
4.4.6	Descriptive Analysis on Types of Online Payment for Demographic Analysis	33
4.5	Descriptive Analysis	34
4.6.1	Correlation Analysis	36
4.6.2	Rule of Thumb Pearson Correlation	38
4.7.1	Summary of Hypothesis Testing	40

## LIST OF FIGURES

<b>NO. OF FIGURES</b>	<b>TITLE</b>	<b>PAGES</b>
2.3.1	Online Payment Acceptance Framework	8
4.4.1	Gender	27
4.4.2	Race	28
4.4.3	Age	29
4.4.4	Education	30
4.4.5	Online Payment Experience	32
4.4.6	Types of Online Payment	33

## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of Study

Online payment (e-payment) has become a popular means today for paying for online purchases made. It seems that the growth of internet has facilitated the popularity of this payment instrument as electronic commerce (e-commerce) has created new financial needs that in many cases cannot be effectively fulfilled by traditional payment systems (Sumanjeet, 2009). As stated by Saffu, K., Walker, J.H. and Hinson, R. (2008) there is an increase in applications of e-commerce such as online payment services in businesses in the past ten years. Some of the benefits of e-commerce includes reduction in cost, increasing business opportunities, reducing lead time and providing a more personalized service to the consumers according to Turban, E., King, D., Lee, J., Warkentin, M. and Chung, M.H. (2008).

As time goes by, different e-payment systems and vendors have since emerged, growing gradually along with the sophistication of online payment transactions. Furthermore, online payment services are designed to benefit consumers mainly in terms of convenience and lower the transaction cost. The web-based user interface allows customers to access and manage their transactions remotely. As a result, these developments have enabled the provision of internet and mobile banking services by telecommunications companies and banking institutions. According to Wendy Ming-



Yen Teoh, Siong Choy Chong, Binshan Lin, Jiat Wei Chua, (2013) this is supported by the strong buildup of broadband services and penetration rate in Malaysia.

## **1.2 Problem Statement**

This research was conducted to find out the factors of user acceptance towards the use of online payment services. This research could be useful in order to understand the effect of a new technology such as online payment and how it could help assist in consumer's daily life. As online payment technology is relatively new and even if people are aware of it, not many are fully understand of its concept and use it in their daily life. With this research, it would be a great sources to understand the reasons for peoples that are using online payment services and looking in their perspective to show the advantage and benefits that online payment services has to offer.

Besides that, this research is important because online payment technology has grown rapidly and has becoming very popular nowadays. Out of the 28 million Malaysian population, more than half (14.9 million) are internet users, with 17.5, 44, and 93.9 percent of broadband, personal computer (PC), and mobile penetration rates, respectively (Wendy Ming-Yen Teoh, 2013). Hence, given the importance of this new technology, this research will focus mainly on the acceptance of consumers towards the use of online payment services.

### **1.3 Research Questions:**

1. What are the factors that impact user acceptance towards online payment services?
2. What are the factors that influence user acceptance towards online payment services the most?

### **1.4 Research Objectives:**

1. To identify the factors that impact user acceptance towards online payment services.
2. To identify the factors that influence user acceptance towards online payment services the most.

### **1.5 Significance of the Study**

In this study, this paper will be a significant endeavor in providing the information of acceptance of online payment services to the consumers and also for University Teknikal Malaysia Melaka future reference. The reason for why this topic is chosen is because online payment services is a new technology and are an essential part of the infrastructure for e-business and e-commerce. Most consumers may have concerns about the security on online transactions so this paper will also help them to understand and acknowledge the opportunity and benefit of online payment. This research paper will also help to understand the advancement of online payment technology and various methods available now and in the future. The possibilities if online payments are fully accepted by consumers are also a huge benefit in the economy of Malaysia as it will improve e-commerce platform. It will also help to understand the

consumer's perception and opinions as well as creating a new platform for business owner to expand their businesses through online payments and help them to understand consumer's needs. Online payment has become very popular nowadays due to the increasing of various e-commerce sites in Malaysia so this will help to give new perspective towards the use of online payment services.

### **1.6 Scope and Limitation of Study**

The scope of this research is to find out the factors of user acceptance towards the use of online payment services. This paper will provide an important aspect and fresh perspective from consumer's perceptions towards a new technology. The study include in this scope will be focusing mainly in Melaka as its e-commerce technologies is growing rapidly. For instance, there's a lot of potential in Malaysia as popular online payment methods have emerge such as credit cards and Paypal. The respondents from this study are the Gen Y users that are born between 1977 until 1994 that are aware of online payment services and are new in using the services. These respondents must be knowledgeable in new technologies, specifically online payment services.

The limitations of this research are the researcher assumes that the respondent provide an honest answer. In addition, the researcher assumes that the respondent has more experience in handling this topic where he or she can provide justifiable answer. Besides that, the researcher assumes that all the respondents have adequate knowledge in order to be part of researcher's primary data collection.

## 1.7 Summary

This chapter established the foundation of this research and cover all the basic information which are background of the study, problem statement, research question, research objective, scope and limitation of the study. The next section presents the literature review related to the topic of study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter will discuss about the factors that influence user acceptance towards the use of online payment is of interest both to researchers in a variety of fields as well as benefits large organizations. Moreover, the researcher will investigate the effectiveness of online payment services compared to traditional payment services. Additionally, this research will also study about the impacts of new technology such as online payment services. The present chapter also reviews literature which demonstrates the nature of technological acceptance by using Technology Acceptance Model (TAM) to investigate the factors that influence the acceptance towards online payment services.

#### 2.2 Online Payment

According to Shon and Swatman (1998), they define online payment or e-payment as any exchange of funds initiated via an electronic communication channel, while Gans and Scheelings (1999) define online payment as payments made through electronic signals linked directly to deposit or credit accounts. Moreover as online payment requires internet connection to work, it is quite similar to other e-environments such as e-shopping, e-learning or e-banking. Since e-payment refers to financial

exchange (Kalakota and Whinston, 1997; Zhang and Jasimuddin, 2012), it is considered to be one of the major functions of online payments services, specifically e-banking. Hence, this study adopts these definitions and refers e-payment to the transfer of an electronic value of payment from a payer to payee through an e-payment mechanism which allows customers to remotely access and manage their bank accounts and transactions, executed through an electronic network (Sumanjeet, 2009).

## **2.3 Theoretical Framework**

### **2.3.1 Technology Acceptance Model (TAM)**

In 1986, Fred Davis launches the establishment of technology acceptance model (TAM) in an attempt to explain the usage behavior of computer technology (Davis et al., 1989). The goal of TAM is to predict information system acceptance and diagnose design problems before users have experience with a system. Besides that, TAM predicts user acceptance of any technology is determined by two factors: perceived usefulness and perceived ease of use. According to (Koufaris, 2002), several of studies have empirically tested TAM to investigate the acceptance of user of different technologies such as: word processors, spreadsheets, e-mail, voice mail, and also telemedicine technology. Since TAM existed, it has been adopted and extended by plentiful of empirical studies which have support the validity of TAM in explaining a broader range of issues related to the acceptance technology by users (Chen et al., 2002; Johnson and Hignite, 2000; Lin and Lu, 2000; Mohd Suki et al., 2006; Ramayah et al., 2003).

The researcher has been using Technology Acceptance Model (TAM) (Davis et al, 1989) as a tool to identify and predict user acceptance attributes towards online

payment services before they actually experience it. According to Davis (1989), he assumed that user acceptance of technology depends on perceived usefulness (PU) and perceived ease of use (PEOU). Hence, the key factors of this model – PU and PEOU were considered to be influential in the capacity of providing perceived advantage to the user's to influence them to switch to online payments.

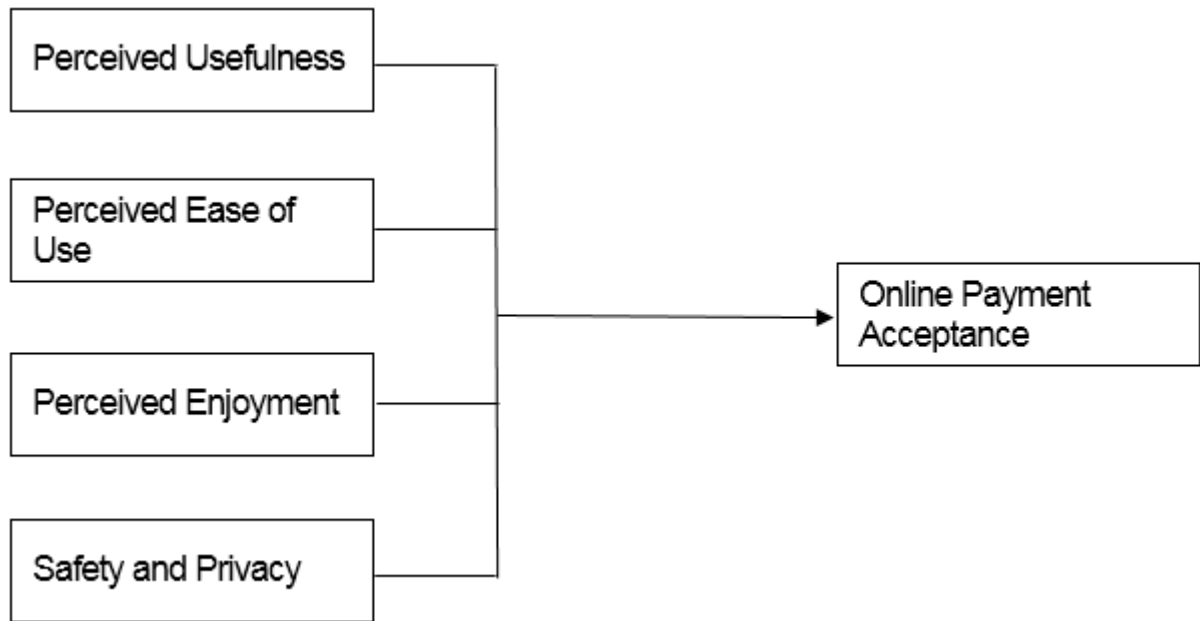


Figure 2.3.1 Online Payment Acceptance Framework

### 2.3.2 Perceived Usefulness

Perceived usefulness is defined by Davis as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989). In terms of online payment technology, a potential user believes that online payment services can improve his/her performance in terms of availability, speed, concurrency and recoverability. Potential users prefer faster and accurate systems such as online payment services in order to increase their performances.

Furthermore, many researchers have empirically proven that perceived usefulness exert a significant and positive effect on attitude towards using IT or associated systems (Venkatesh and Bala, 2008; Davis, 1989; Venkatesh and Davis, 2000). In this case, the system is online payment system. So, the researcher hypothesized that perceived usefulness has a significant impact on user acceptance towards the use of online payment:

### **2.3.3 Perceived Ease of Use**

According to (Wang and Li, 2011) numerous studies have confirmed that a technology will be perceived as more useful when it is easier to use. Thus, PEOU states that the perception that using a specific technology will not require additional effort (Davis, 1989). In this case, online payment system will be perceived as more useful if it is easy to use and does not require additional effort. Thus, given that users do not have face-to-face interaction in an internet environment, user friendliness and the ease of use of the web sites will lessen the threat to use online payment by the customers.

It seems that an application perceived to be easier to learn and easier to use than another is more likely to be accepted by users (Pikkarainen et al., 2004). That is what new technology like online payment services has to offer. As a result, characteristics such as content, design, easy to use interface, and speed are leading to perceived ease of use and subsequently influence consumers' perception of e-payment systems. From a customer's point of view, the major benefits of paying online include not only cost savings but also convenient shopping and time savings.