

EXAMINING THE FACTORS THAT INFLUENCE
MALAYSIA CITIZEN'S INTENTION AND ADOPTION OF
CASHLESS SYSTEM

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BY

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A research project submitted in partial fulfilment of the
requirement for the degree of

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DECLARATION

We hereby declare that:

- (1) This undergraduate research project is the end result of our own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.
- (2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.
- (3) Equal contribution has been made by each group member in completing the research project.
- (4) The word count of this research report is 16726

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Thank You.

DEDICATION

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LIST OF ABBREVIATIONS

ATM	Automated machine
BNM	Bank Negara Malaysia
EFE	Effort Expectancy
FAC	Facilitating Conditions
HB	Habit
HDM	Hedonic Motivation
IS	Information system
ITA	Intention to Adopt
LVPS	Large Value Payment System
PBC	Perceived Behavioural Control
PEX	Performance Expectancy
POS	Point of sales
RENTAS	Real Time Electronics Transfer of Funds and Securitas
SOI	Social Influence
SPSS	Statistical Package for Social Science
TAM	Technology Acceptance Model
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UTAUT	Unified Theory of Acceptance and Use of Technology Model
UTAUT2	Unified Theory of Acceptance and Use of Technology 2 Model

PREFACE

The purpose of conducting this study is to examine the factors that influence Malaysia citizen's intention and adoption of cashless system. The main purpose circulated from the problem statement can help to determine the feature that affecting the adoption and intention of cashless system in Malaysia. By identifying the determinants suggested by the Unified Theory of Acceptance and Use of Technology Model (UTAUT) and Unified Theory of Acceptance and Use of Technology 2 Model (UTAUT2), we can understand those factors that influence Malaysia citizen's intention and adoption of cashless system. We found that all of the six independent variables which is performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivations and habit have significant relationship with the dependent variable which is the intention to adopt cashless system. Therefore, it is crucial for us to identify the factors that influence Malaysia citizen's intention and adoption of cashless system. In addition, recommendation for policymaker will be suggested based on our findings and we hope this can provide the practical implications for policy makers and practitioners.

ABSTRACT

This study aims to examine the factors that influence Malaysia Citizen's intention and adoption of cashless system. The determinants that used in this study are Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation and Habit. IBM SPSS statistics²³ have been applied in this research study to perform the analysis on the data obtained for this research study in order to measure the relationship between the independent variables and dependent variables. The findings of this study show that all the six variables which is Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation and Habit have a significant influence on Malaysia Citizen's intention and adoption on cashless system.

Keywords: Cashless system, Malaysia, SPSS.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

The aims of this study is to determine the factors that influence Malaysia Citizen's intention and adoption of cashless system. This chapter involved the summary from chapter one to chapter five. All the section in this chapter will be explained in details which consist of problem statement, research question and objective, research background, hypotheses and significant of the research.

1.1 Research Background

Cashless system was facilitated by the advancement of information technology where traded of good or services without using physical cash. According to Tee and Ong (2016), the usage of cash as a medium of exchange goods has been eliminate due to emerging of cashless system. Unlike traditional cash transaction, cashless system brings some advantages such as reduce corruption, minimize crime, and reduce terrorism to a country. Olusola et al. (2013) said that cashless transaction also bring advantages to the cashless system user such as it is very convenience rather to bring large amount of physical cash, it is also time saving and easier for consumer to do any transactions and.

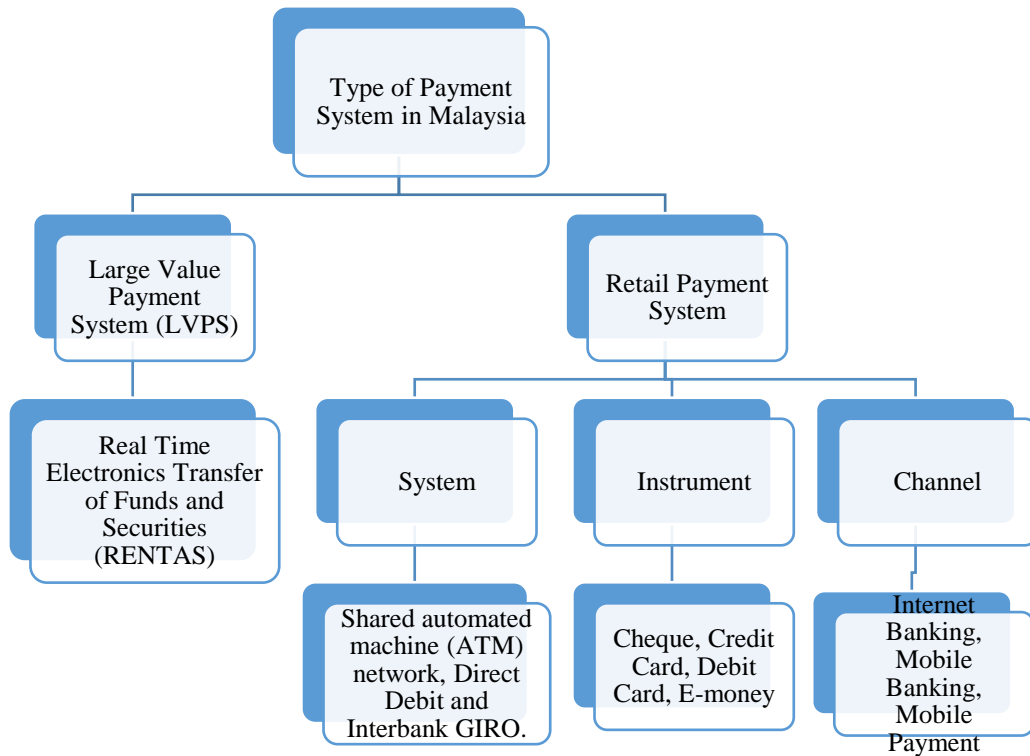
In line with Bindra (2017), a cashless system is not a transaction done mainly for in exchange for the actual cash. Cashless system can be known as an economy in which all type of transaction are carried out through digital. It involved e-banking (Mobile banking or banking through computers or Internet), debit or credit card, mobile payment and so on. It also can be defined as a circumstance where there is

little flow of cash in market or society and most of the transaction are done by electronic media. According to Paul and Friday (2012), a misconception that people have towards cashless system is there is totally absence or elimination of cash in the society, vice versa, it is just a minimum barest of cash in the society

In compliance with Omotunde, Sunday, and John-Dewole (2013), it is not important or relevant that how much cash in your wallet in cashless society. In developed countries of the world, it has been observed that they are moving toward to electronic payment from the traditional payment likes paper payment. The functioning of cashless system is enhanced by electronic transactions. These are all the payment and transaction methods that affect cashless system.

According to Bank Negara Malaysia, the type of payment system in Malaysia can be separate into two categories (Figure 1.1) which is Large Value Payment System (LVPS) and Retail Payment System. Under Large Value Payment System there is a categories known as Real Time Electronics Transfer of Funds and Securitas (RENTAS). There are three types of retail payment system that include shared automated machine (ATM) network, direct debit and Interbank GIRO. The second categories are type of retail payment instrument that involved cheque, debit and credit card. Type of retail payment channel will be the last categories which include Internet payment and mobile payment. According to a news report by The Star Online, the electronic fund transfers increased RM 263 million from RM66 million transaction in 2011 to an estimated of RM 329 million for 2017 (“Malaysia moving towards,” 2017).

Figure 1.1: Type of Payment System in Malaysia



Source: Bank Negara Malaysia

1.2 Problem Statement

To demonstrate the identification of the facts that affecting Malaysia Citizen’s intention and adoption of cashless system in the motive of this research.

According to the data analysis of Malaysia's Payment Statistics - Basic Payment Indicator by Bank Negara Malaysia, the e-payments in 2016 the transaction volume per capita of e-payments is 97.5 units, compare to 82.6 units in 2015 it raises 14.9. In 2017, it raises to 110.6, which is 13.1units difference compare to 2016.From this data, the increasing number indicate there is a great opportunity to become completely cashless society in Malaysia. Moreover, as reported by TechWire Asia, our central bank, Bank Negara Malaysia (BNM) will take several steps to encourage the use of cashless system and enhance the knowledge of cashless system. Thereby,

Malaysia are step by step moving to a completely cashless society (“Malaysia on Track,” 2017).

Despite, in line with Danial A (2017) there is also some obstacle that stop Malaysia to become a completely cashless society. “The most important criterial that Malaysia citizen concern to become cashless is the safety and can be found everywhere,” by our Youth and Sports Minister Khairy Jamaluddin, as stated in The Star Online. Besides that, Khairy also said that the older generations are the particular populations that will refuse and reject to accept cashless. Furthermore, “sense of security is one of the biggest barrier to convince people in Malaysia to transform from cash to cashless or contactless,” said Khairy.

A news reported by Samuel, A (2018) published in Borneo Post Online, on 2018 January 13, the first state in Malaysia to own e-payment system is Sarawak which is Sarawak Pay. Internet connectivity in rural areas is one of the challenge for Sarawak or even Malaysia to move forward to a completely cashless society. In order to make sure all the Sarawakians can experience the cashless or contactless system, build more telecommunications (telco) towers and others related infrastructure is the solution for the poor Internet connectivity.

Through the understanding and knowledge of the researcher, there are only a few or little study on the factors influencing Malaysia Citizen’s intention and adoption of cashless system. There is many news, data or studies indicate that Malaysia have great opportunity toward cashless system in coming few years but there is also some obstacle. This research is interesting in finding out the main factors that affect Malaysian intention and adoption of cashless system, vice versa. financial institutions or banking sector will take This research will benefit the financial institutions or banking sector to understand customers’ needs and concern when using any cashless system and therefore they can make some changes and improve

themselves to fulfil customer needs. Moreover, the advantages of handling the problem faced by cashless system users is of the advantages for cashless system's software developers. In this research, UTAUT model and UTAUT 2 model will be applied.

1.3 Research Objective

In order to determine the feature that affects the adoption and intention of cashless system in Malaysia, problem statement is identified.

1.3.1 General Objective

This section states the aims of conducting this study. In this virtual world, cashless system is getting more common, thus, in order to examining the factors that influence Malaysia Citizen's intention and adoption of cashless system is the core motivation of this research study, by identifying the determinants suggested by the Unified Theory of Acceptance and Use of Technology Model and Unified Theory of Acceptance and Use of Technology 2 Model.

1.3.2 Specific Objective

The specific objective is listed below:

1. To determine the relationship between performance expectancy and Malaysia citizen's intention and adoption of cashless system.

2. To analyse the relationship between effort expectancy and Malaysia citizen's intention and adoption of cashless system.
3. To identify the relationship between social influence and Malaysia citizen's intention and adoption of cashless system.
4. To investigate the relationship between facilitating condition and Malaysia citizen's intention and adoption of cashless system.
5. To test the relationship between hedonic motivation and Malaysia citizen's intention and adoption of cashless system.
6. To study the relationship between habit and Malaysia citizen's intention and adoption of cashless system.
7. To examine the relationship between actual usage and intention to adopt cashless system by Malaysia's citizen.

1.4 Research Questions

There are a set of question are recommended which can explain the research topic. Those questions listed support the research study on the variables that intention and adoption on cashless in Malaysia:

1. How does performance expectancy affect intention and adoption of cashless system?
2. How does effort expectancy influence intention and adoption of cashless system?
3. What is the relationship between social influence and adoption of cashless system?
4. How does facilitating condition influence intention and adoption of cashless system?
5. How does hedonic motivation affect intention and adoption of cashless system?

6. What is the relationship between habit and intention and adoption of cashless system?
7. How does intention to adopt affect actual usage of cashless system for Malaysia citizen?

1.5 Hypothesis of the Study

There are seven hypothesis developed based on the framework. The development of hypothesis and the detail discussion and explanation of the hypothesis of this research is present at chapter 2 in 2.4 hypothesis development.

1.6 Significant of the Study

This study examines factors that influence Malaysia citizen's intention and adoption of cashless system. The significant of this study can be classified into five perspectives, which include software developer perspective, practical perspective which involve banking or financial sector, theoretical perspective, academic perspective, user perspective.

This research is very important for the software developer. In compliance with Teoh and Chua. (2013), the software developer can study and clarify what is the basic need and want the cashless system user desire or the issue the user facing when using cashless system, from there they can make improvement to fulfil the require needs and want of the user, therefore, the user will be more reliable and trust on the cashless system, thus, the usage of cashless system will increase in Malaysia. It is very important for software developer to keep in mind of the significant requirement of user to enhance and improve the cashless system features.

Teoh et al (2013) said that, from practical perspective which is banking sector or financial institution will also benefit from this study because this research conduct critical information on how Malaysia citizen's behaviour or attitudes affect the intention to use and adoption of cashless system. The findings of this study will be helpful for banking sector and financial institution to analyse the most appropriate way to promote cashless system, attract or encourage Malaysian to use the cashless system.

From a theoretical perspective, this research is conducted in Asia. To be more precise, Malaysia. Moreover, this research adapted a western model which is UTAUT and UTAUT 2 model. This research aims to investigate whether a western culture can be applied to non-western culture. In line with Al-Qeisi (2009), the UTAUT2 model is an expansion of UTAUT model and the aims of this study is to analyse those character in cashless system that attract the intention to adopt and actual usage. From academic perspective, this research will also provide a foundation or base for future research for related topic to identify which model to build on or use in the research and its application to other context, as take this research as a reference or example.

This research also contributes to cashless system user in Malaysia. Nowadays, Malaysia are moving toward to cashless system, the aspiration of this study is also because there is only few research on factors that affecting Malaysia citizen intention and adoption of cashless system, therefore, according to Davies (2017), this study is to provide a reasonable set of perceptions that give a clarification or simplification of the factors that influence the use of cashless system. Moreover, there is also few advantages that cashless system user in Malaysia or other country can refer to encourage them to adopt cashless system.

1.7 Chapter Layout

Chapter 1 will bring out a brief introduction about the research topic, which include the general background of cashless system and will discuss the problem of cashless system facing by Malaysia citizen, the purpose of this research study, the query in this research, hypothesis and significant of this research.

Chapter 2 will describe literature review which interrelated to research topic and framework. There will be showcase of suggested conceptual framework in this chapter. Moreover, the hypotheses relating to the effects of independent variables towards the dependent variable will be formulated and examined in Chapter 2.

Chapter 3 consist of the research design, sampling design, data collection method, constructs measurements, research instrument, data processing and the method of data analysis.

Chapter 4 consist of analyzing the result collected and gain form the survey. SPSS software will be use to examine all the valuable data that collected from survey.

The last chapter is will be chapter 5, in this chapter consist of the discussion and summarization of the study result. It also involved recommendations for the future research, discussion and major findings, and implications of the research will be discussing in Chapter 5.

1.8 Conclusion

Chapter one had described the fundamental information for the research. Research background of the study will be discussed, indicating the problem statement that will be explained in the research project, the research project's general and specific objectives is stated in chapter one together with the hypotheses and research question of research. It represents as an introductory chapter.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Chapter 2 give a brief on cashless system and describe the theory and models which use to predict, determine, explain, analyse and understanding acceptance of individual and adoption of new technology.

According to Oyewole, Abba, Gambo, and Abam (2013), technology advance and innovation improved the traditional payment method to technology or Internet base payment system. As claimed by Simon Oyewole, Gambo, Abba, and Ezekiel Onuh (2013), the innovations of technology have transform the conventional payment system into a more efficient and effective system and cashless system reduce the “cash and carry” syndrome. According to Tee and Ong (2016), cashless system is a behavioural change where people preclude the usage of physical cash as a medium of exchange goods or services. In line with Kumari and Khanna (2017), cashless system is a safety, easy and convenient way to make payments. Cashless system is a society that transaction and payments are not generally done by physical cash, it is not also a traditional system that goods and services are exchange with goods and services which is the barter system.

A study conducted by Yadav (2016), investigate the factors influencing the usage of mobile money service in Ghana. In Kenya and Tanzania have been successful in applying mobile money. But, in Rwanda and Ghana still didn't meet the expectation of using mobile money as their counterpart in East Africa (Financial Inclusion Insights, 2015), (CGAP, 2015).

The model that used in this study is Unified Theory of Acceptance and Use of Technology (UTAUT) and Unified Theory of Acceptance and Use of Technology

2 (UTAUT2). The aim of using both of this model is to analyse the factors that influencing Malaysia Citizen's intention and adoption of cashless system. UTAUT Model is established by Venkatesh (2003), to predict the technology acceptance in organizational setting. There are four main elements in UTAUT model that affect intention and usage of information technology. These factors include performance expectancy, effort expectancy, social influence and facilitating condition. Venkatesh include three other constructs into UTAUT, which is hedonic motivation, habit and price value. This extent model name as Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). According to Chang (2012), UTAUT2 produced a substantial improvement in behavioural intention and technology use.

In this chapter consist of dependent and independent variables. The aims of this chapter is to show that the connection between the independent variables and dependent variables by conducting secondary data which is published and unpublished journal and article that have been studied and measured to enhance the validity of this research. In this chapter, the influence of dependent variables toward independent variable will be discussing. Suggested framework applied in this study will also be presented in this chapter.

2.1 Review of Literature Review

Literature review is a part which discuss those prior researcher's study and findings about the mention independent variables through the dependent variable.

2.1.1 Independent Variable: Performance Expectancy

According to Venkatesh, Thong, and Xu (2012), performance expectancy can be interpreting as the advantages or benefit the individual will gain when using a technology when carry out job or task that is important to them. In line with Venkatesh et al. (2003), this performance expectancy is similar or pertain to perceived usefulness, relative advantages that will reflects the perceived utilities because it can boost consumer living standard and job performance. According to Lin, Wang, and Hwang (2010), perceived usefulness known as individual believe that using a system or technology can help them to increase their job performance or gain benefits. This is one of the factor that determine how well it can affect the behaviour of information usage.

A study conducted by Yadav (2016), investigate the factors influencing the usage of mobile money service in Ghana. Kenya and Tanzania have been successful in applying mobile money. But, in Rwanda and Ghana still didn't meet the expectation of using mobile money as their counterpart in East Africa (Financial Inclusion Insights, 2015), (CGAP, 2015). Therefore, there is a need to conduct an investigation into the determinants that restrain the full adoption of mobile money platform and the attitude of Ghana consumer towards its adoption and find an effective way or method to solve the problem of limited usage of mobile money service in Ghana. Therefore, the intention to use mobile money in Ghana is affected by performance expectancy. In this study, author had conduct interview as a qualitative analysis to better understand the quantitative analysis. In the interview, there are some quote make clear that how customer is unhappy with the network failure of mobile money platform. This quote includes "Due to the poor network, it makes me feel embarrassing for access my own mobile money". Another interviewee expresses that, "I was promised that it will faster and better than joining queues in baking hall, yet I have still not been able to withdraw my money after two

days and this will be the last time I am using this service”. User of mobile money didn’t gain any benefit or advantages from the service but it brings troublesome for them, therefore, once the user feel that the technology or system is not reliable they will not continue using it or their negative worth-of-mouth will affect other user. The feedback of mobile money is so harsh which highlight that performance expectancy have significant relationship with the usage of mobile money in Ghana.

A study is conducted in Saudi Arabia by Rogers (1995), that related to the factor that hinder or enable the use of mobile banking from customer’s perspective. The diffusion of innovation theory (DIT) are applied in this study. Diffusion and innovation theory is about the factors that will affect individual to adopt an innovation technology. The greater the perceived relative advantages of an innovation, the more rapid it will be adapting. According to Al-jabri (2012), through mobile banking, customer can effectively and easy to manage their finances, moreover it is also time-saving, therefore, they will tend to adopt this mobile banking system. Bank in Saudi Arabia should focus on communicating information and update their facilities that emphasize and enhance the relative advantages of mobile banking. Another study that conducted by Odumeru (2013), which is also related to mobile banking in Nigeria. The purpose of Nigeria to implement cashless system is to reduce the volume of cash used in business transaction and reduce the cash handling cost by bank. Relative advantages are one of the dependent variables that have significant relationship with adoption of mobile banking. This explain that Nigeria bank should pay more attention to strengthen its relative advantages of mobile banking over other banking method. The first hypotheses of this study which is ‘relative advantage does not significantly affect adoption of mobile banking’ is rejected. Therefore, both study show that performance expectancy or relative advantages can significantly affect the adoption of mobile banking.

According to the study by Sigar (2016), the elements that may affect people perceived the cashless system as usefulness for them are payment process become faster, daily activities improved. This will result in increased the intention of consumer to use. The benefits that offered by cashless system will encouraged a person to use it. This reflect that perceived ease of use will influence the intention to use cashless system, the more the people perceived cashless system is easy to use, the degree of intention and willingness to adopt or use the system will increase.

2.1.2 Independent Variable: Effort Expectancy

In compliance with Venkatesh (2003), effort expectancy can describe how easy to use the technology. Perceived ease of use, complexity and ease of use construct the concept of effort expectancy. In another way, effort expectancy can be also known as perceived as the amount of effort that is needed to learn and adopt certain technology said by Chiemeke and Ewwiekpaefe (2011). According to Qingfei, Shaobo and Gang (2008), this effort expectancy is also similar to perceive ease of use in Technology Acceptance Model (TAM).

In line with Adeoti and Oshotimehin (2011), ease of use implies that when consumer perceived that it is easy to handle the technology, probability of adopting the particular technology will also increase. This can be explaining as when people find that it is easy to function or use the technology system or even cashless system, they will have trust and start to rely on it, therefore, the intention to adopt will also increase. Some study conduct that the major factors the affect customers' decision towards the use of technology system is ease of use.

As claimed by Davies (2017), “It is easier to use the cashless system, you just have to tap it and the payment is done”, “preferred to use credit card, debit card or contactless payment as a payment method”. It is because cashless is easier to use and it also highlighted that the primary method for payment but not physical cash, payment by physical cash will be avoid. According to Faniran and Odumeru (2015), for older user or consumer of cashless system might be need to spend time on promoting cashless system in the way that consumer can understand clearly, highlighted the benefits that consumer can gain in using such system. Once consumer perceived the ease of use or effect expectancy on cashless system they will use it continuously when doing payment or purchasing and the intention to adopt cashless system will also increase.

2.1.3 Independent Variable: Social Influence

Venkatesh et al. (2003) explain that social influence is the intensity to which an individual comprehend that others people that surrounding them believe he or she should apply the new system. Social influence is the direct determinant of behavioural intention and represented by subjective norm, social factors and image. The individual behaviour will be influence using the way in which they believe others will view them as a result of had used the technology. Social influence shows up that only important in the early stage experience of the individual with the technology. Social influence will become not so significant with its role eroding over time. The appearance of social influence in technology acceptance decisions is complex and dependent to a wide range of contingent influences. There have three mechanisms will have an impact on individual behaviour which is compliance, internalization and identification. According to the theory, women tend to be more sensitive to others opinion thus social influence will more conspicuous when forming an intention to use new technology.

In line with Oliveira et al. (2014) , the people around us that can impact the behaviour of an individual can understand as social influence. That individual will feel trendy by using a new technology service.(Oliveira, Faria, Thomas, and Popovič, 2014)

Social influence also can define as the information and encouragements provided by people around user and acts a vital role in contributing to the customers awareness as well as the intention toward technology as stated by Ali Abdallah Alalwan (2016).

2.1.4 Independent Variable: Facilitating Conditions

As claimed by Venkatesh et al. (2003), facilitating conditions are known as an individual confidence in there is technical infrastructure or facilities that can assist the use of the system. From the study of Venkatesh et al. (2003), If effort expectancy and performance expectancy exist, the influence of facilitating conditions on the behavioural intention will not be significant. The effect of facilitating conditions on behavioural intention is more likely to disappear if including both effort expectancy and performance expectancy as the key predictors of behavioural intention. According to the study of Alalwan et al.(2018), facilitating conditions were suggested to only have one direct influence on the actual usage behaviour. According to Oliveira et al. (2014), facilitating condition also refers to perception of consumers to the resources and support which individuals can receive when using information system. In line with Baptista and Oliveira (2015), facilitating conditions also can define as how the people perceive that the technical infrastructure can assist them to use the system and will influence use behaviour and usage intention.

2.1.5 Independent Variable: Hedonic Motivation

In line with Moon and Kim (2001), intrinsic motivation such as fun, enjoyment or pleasure can be well defined hedonic motivation when using a technology. It has

known as a vital construct in defining acceptance and use of technology. This hedonic motivation is similar to perceived enjoyment and perceived playfulness and fun when using the technology system. According to Zhang, Zhu, and Liu (2012), the greater the entertainment of the technology system the greater the customer intent to accept.

Consumer will feel interesting when they realize that the way of using it is fun and consumer also feel excited when using cashless system to make payment or purchase, moreover, consumer also felt enjoyable while using the system. The more the degree that people feels enjoy to use the cashless system, the more they will be motivated or preferred to use cashless system as a payment method rather than traditional payment method. A person might feel it is very enjoyable to use when they feel that it is enjoy, fun and motivated to use cashless system as stated by Sigar (2016).

According to Masa'deh, Tarhini, Bany Mohammed, and Maqableh (2016), system that user feel it is fun, enjoyable to use will be more appealing. Hedonic motivation can vary, as the consumer or user of the new technology are from different countries, different background and demographics.

2.1.6 Independent Variable: Habit

According to Moez Limayem, Hirt, and Christy M. K. Cheung (2007), habit can be explain as people will perform behaviour inadvertently. In line with Venkatesh et al. (2012), habit has direct influence on the technology use. It also can weaken or limits the relationship between technology use and behavioural intention. Moreover, stronger habit will lead to a stored intention that in turn will affect behaviour. The subsequent effect of habit on either behavioural intention or use is determined by the triggered process of habit. Both behavioural intention and use behaviour is directly affect by habit as stated by Slade, Williams, and Dwivdei (2013).

In compliance with Deningtyas and Ariyanti (2017), in order to increase consumer in using cashless system, continuously create dependency on use of cashless system as a payment tool is important, so that when users experience the advantages of using it from their experience, then the user will return continue to use it as a payment tool. On the other hand, this highlighted that the importance to build value of experience, so that both old and young generation have interest to continue use cashless system.

2.1.7. Dependent Variable: Intention to Adopt

In line with Deningtyas and Ariyanti (2017), intention to adopt can be define as degree of interest of a person to use a product. From the research result of Venkatesh et al. (2003), intention to adopt will have a significant positive influence on actual usage and adoption of new system. Furthermore, behavioural intention already been proved is the determinant of individual behaviour over the technology acceptance system. According to Oliveira, Faria, Thomas, and Popovič, (2014), gender and age will have a positive relationship on the behavioural intention because of their mediator effect on performance expectancy, effort expectancy, and social influence.

Thus, from the result of Oliveira et al (2014), performance expectancy will have a positive effect on the behavioural intention to use mobile banking.

2.1.8 Dependent Variable: Actual Usage

In line with Davis (1989), an individual’s behaviour, attitude and recognize the ease of use will influence that actual usage of the new technology. As stated by Y. Malhotra and Galletta (1999) Other than behaviour, attitude and perceive ease of use, other external factors will affect the actual usage of the new technology or new system How frequent or how many times the new system or technology is used and can evaluate actual usage. If the system shows the customers is satisfying, the sense of satisfy can then reflect into the actual usage of the technology claimed by Sulistyaningsih, Tambotih, and Tanaamah (2014). Besides, according to Alharbi and Drew (2014) the behaviour intention is the influence on the actual usage of the system.

2.1.9 Summary of Independent and Dependent Variables

Table 2.1: Summary of variables

Variables	Explanation	Source	Model
Independent Variables			
Performance Expectancy	Benefits bring to individual	Venkatesh, Thong, & Xu, 2012	Unified Theory of Acceptance and Use of
	Similar to perceived usefulness increase job performance	Lin, Wang, & Hwang, 2010	

	Advantages-boost consumer living standard and job performance	Venkatesh et al., 2003	Technology (UTAUT)
Effort Influence	Degree of ease to use the technology	Venkatesh, Morris, Davis, & Davis, 2003	
	Effort needed to learn and adopt certain technology	Chiemeke & Ewwiekpaefe, 2011	
	Easy to use, increase the degree of adopting technology	Adeoti & Oshotimehin, 2011	
Social Influence	Others believe that he or she should apply the new system.	Venkatesh et al., 2003	
	Influenced by the peers or family members.	Oliveira et al., 2014	
	Information and encouragement provide.	Ali Abdallah Alalwan, 2016	
Facilitating Condition	Organization and technical infrastructure exists to support	Venkatesh et al., 2003	
	Resources and support can receive	Oliveira et al., 2014	
	How people perceive that technical infrastructure exist to help	Baptista & Oliveira, 2015	
Hedonic Motivation	Fun, enjoyment or pleasure	Moon & Kim, 2001	Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)
	The greater the entertainment, the greater the intention to accept	Zhang, Zhu, & Liu, 2012	
	Feel enjoyable, when they feel enjoy, fun and motivated to use	Sigar, 2016	

Habit	Perform behaviour automatically	Moez Limayem, Hirt, & Christy M. K. Cheung, 2007	
	Stronger habit, stronger intention that in turn will affect usage	Venkatesh et al., 2012	
	Behavioural intention and use behaviour affect by habit	Slade, Williams, & Dwivdei, 2013	
Dependent Variables			
Intention to Adopt	Degree of interest of a person to use a product.	Deningtyas & Ariyanti, 2017	Unified Theory of Acceptance and Use of Technology (UTAUT)
	Have significant relationship with actual usage.	Oliveira, Faria, Thomas, & Popovič, 2014	
	Gender and age have positive effect.		
Actual Usage	Affected by behaviour intention, attitude and perceived ease of use.	Davis, 1989	
	How often and how much the system is used.	Y. Malhotra & Galletta, 1999	
	Customers is satisfied, can then reflect to actual usage of the technology.	Sulistiyaningsih, Tambotoh, & Tanaamah, 2014	

Source: Developed for the research

Table 2.1 summarized all the variables with the top three explanations and the source of the explanations.

2.2 Review of Relevant Theoretical Framework

2.2.1 Theory of Reasoned Action (TRA)

Theory of reasoned action is established by Fishbein and Ajzen in 1975. This theory is demonstrated to explain virtually any human behaviour. This theory make assumption of normally human are quite rational and can make logical evaluation of information that available for them. There are four general perceptions of TRA, which is attitude, subjective norm, behavioural intention and behaviour. The negative or positive personal evaluation that have with the individual and refers to attitude and the individual's insight of social pressure put on him or her are the two factors that affecting individual's intention.

2.2.2 Theory of Planned Behaviour (TPB)

In 1985, Ajzen (1991) has introduce the Theory of planned behaviour. TPB is encompasses and derived. According to Ya-Yueh and Fang (2004), both TRA and TPB theories explain that behaviour is direct function of behavioural intention.

There is some difference between TRA and TPB, Perceived Behavioural Control (PBC) is a new element in TPB which is not included in TRA. PBC has been taken into consideration where individuals have no restriction or control over their own behaviour. PBC can be defined as it expects to reflect past experience as well as foresee obstacles and difficulty and PBC is also known as perceived ease or struggle to perform the behaviour.

2.2.3 Technology Acceptance Model (TAM)

In order to describe the Information Technology (IT) or Information System (IS) adoption behaviour, the Technology Acceptance Model (TAM) is one of the most dominant and robust to interpret as stated by Marchewka, Kostiwa, and Marchewka Chang Liu (2007); Sargent, Hyland, and Sawang (2012); Mustonen-Ollila and Lyytinen (2003). In line with Davis, Bagozzi, and Warshaw (1989). TAM was initially developed by Davis, TAM is extension of Theory of Reasoned Action (TRA) and Theory of Planned Behaviour (TPB). The purpose of this model is to explain the determinants of technology acceptance. Moreover, the framework itself of this model is to provide an explanation on the influence of external variables towards behavioural, attitude, beliefs. According to Davis (1989), a number of factors might affect user decision about how and when they will use it when user is presented with a new technology. Notably, perceived usefulness (PU) and perceived ease of use (PEOU), Behaviour intention and their attitudes towards the use of the system.

2.2.4 The Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT model, is an extension of TAM model as stated by Davis (1989). Unified Theory of Acceptance and Use of Technology (UTAUT) developed by Venkatesh et al. (2003) have been use in this study. The eight established models that developed UTAUT Model are TAM, IDT, Motivational model (MM), Theory of planned behaviour (TPB), Model of PC utilization (MPCU), Social cognitive theory (SCT), and a model combining TAM and theory of planned behaviour (C-TAM-TPB). As claimed by Venkatesh et al. (2003), in order to explain user intention to use an Information System (IS) And Subsequent Usage Behaviour are the purpose of UTAUT model. Performance expectancy, effort expectancy, social

influence, facilitating condition are the four key elements in this theory which are direct determinants of usage of intention and behaviour.

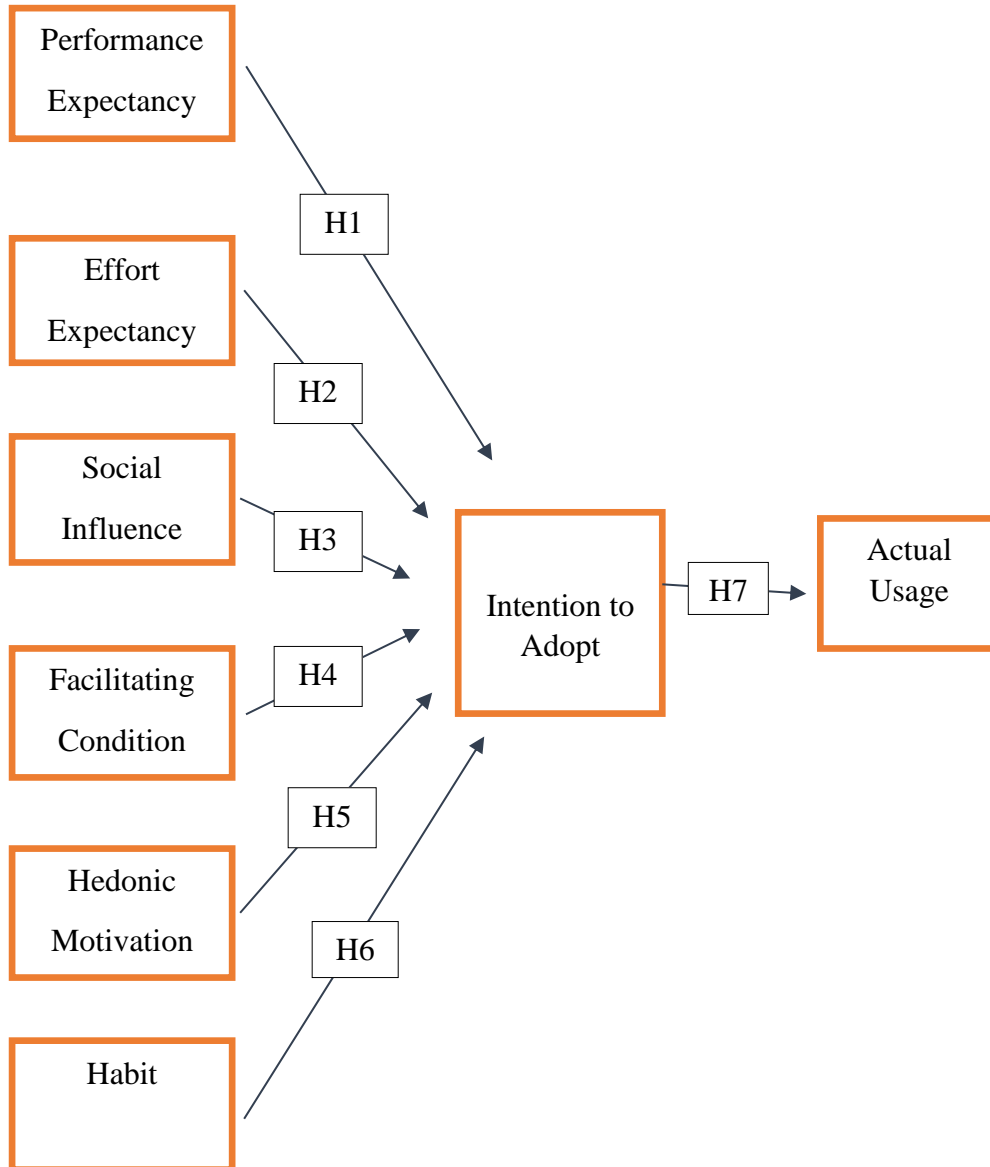
According to Venkatesh et al. (2003), performance expectancy and effort expectancy in UTAUT model were used to integrate perceived ease of use and usefulness in TAM model. Besides that, UTAT model try to give an explanation of how individual difference will affect technology use. As promised, UTAUT will enhance the understanding of technology acceptance, But the initial UTAUT model are new and it just focused on large organizations, and it integrate a number of prior scales. Therefore, the credible of the scales need to be improve and further tested.

2.2.5 The Unified Theory of Acceptance and Use of Technology 2 (UTAUT2)

As stated by Fidani and Idrizi (2012), the baseline framework that has been used in various studies or research to determine technology used and adoption are the Unified Theory of Acceptance and Use of Technology (UTAUT). The UTAUT model have some limitations, which is the UTAUT model did not take self-efficacy, attitude and anxiety in to consideration that might be direct influence intention. In order to overcome the limitations of UTAUT model, the UTAUT 2 model has been established. According to Venkatesh et al. (2012), there are seven key elements for UTAUT2 model, four of the elements are from the original UTAUT model which is performance expectancy, effort expectancy, social influence, facilitating conditions, whereas, the others three are element from UTAUT2 model which include hedonic motivation, price value and habit.

2.3 Proposed Theoretical Framework

Figure 2.1: Theoretical Framework of Malaysia Citizen’s Intention and Adoption of Cashless System.



Adapted from: Venkatesh, V., Thong, J. Y. L., Statistics, B., Xu, X., & Acceptance, T. (2016). Unified Theory of Acceptance and Use of Technology: A Synthesis and the Road Ahead. *Jais*, 17(5), 328–376

Figure 2.1 indicate that the theoretical framework which act as the base of the study. This model is adopted from UTAUT with extra elements which is “Hedonic Motivation” and “Habit” (derived from UTAUT2). There are seven hypotheses relationship was established in Figure 2.1. The purpose of developing a theoretical framework is to examine correlation between independent variable and dependent variables and identify the relationship between each other.

2.4 Hypotheses Development

H1: There is a positive relationship between Performance Expectancy and intention to adopt cashless system by Malaysia’s citizen.

In line with Venkatesh et al. (2003), performance expectancy is the user perceives that using cashless system will give them advantages. Individuals that will use the computing technology because they believe it will bring an advantages for them as claimed by C. A. Higgins and Compeau (1995). According to Sigar (2016), the benefits the offered by cashless system will encouraged a person to use it. Therefore, performance expectancy will become the most important factors that directly affect the acceptance intention as stated by Luo, Li, Zhang, and Shim (2010).

H2: There is a positive relationship between Effort Expectancy and intention to adopt cashless system by Malaysia’s citizen.

As mentioned by Venkatesh (2003), effort expectancy is the degree of ease or how easy to use the technology. Perceived ease of use, complexity and ease of use construct the concept of effort expectancy. In line with Adeoti and Oshotimehin (2011), ease of use implies that when consumer perceived that it is easy to use the technology, probability of adopting the particular technology will also increase.

Once consumer perceived the ease of use or effect expectancy on cashless system they will use it continuously when doing payment or purchasing and the intention to adopt cashless system will also increase as claimed by Faniran and Odumeru (2015).

H3: There is a positive relationship between Social Influence and intention to adopt cashless system by Malaysia's citizen.

According to Venkatesh et al. (2003), social influence explains as the intensity to which an individual comprehend that others people that surrounding them believe he or she should apply the new system. In line with Oliveira et al. (2014), social influence is a concept that an individual behaviour is affected by the people surrounding them and how they perceive the use of new technology services. As claimed by Ali Abdallah Alalwan (2016), social influence also can define as the information and encouragements provided by people around customers can play a vital role in contributing to the customer's awareness as well as the intention toward technology.

H4: There is a positive relationship between Facilitating Condition and intention to adopt cashless system by Malaysia's citizen.

According to Venkatesh et al. (2003), facilitating conditions are defined as an individual believes that an organization and technical infrastructure exists to assist use of the system. Facilitating condition also refers to perception of consumers to the resources and support which individuals can receive when using information system as mentioned by Oliveira et al. (2014). Facilitating conditions also can be defined as how people feel that technical infrastructure can help them to use the system whenever they need and facilitating conditions will influence use behaviour and usage intention explained by Baptista et al. (2015)

H5: There is a positive relationship between Hedonic Motivation and intention to adopt cashless system by Malaysia's citizen.

In compliance with Moon and Kim (2001), intrinsic motivation such as fun, enjoyment or pleasure can be well defined as hedonic motivation when using a technology. According to Zhang et al. (2012), the greater the entertainment of the technology system the greater the customer intent to accept. The more people feels enjoy to use the cashless system the more they are motivated or preferred to use cashless system as a payment method rather than traditional payment method. On the report of Sigar (2016), a person might feel it is very enjoyable to use when they feel that it is enjoyable, fun and motivated to use cashless system.

H6: There is a positive relationship between Habit and intention to adopt cashless system by Malaysia's citizen.

As mentioned by Moez Limayem et al. (2007), habit can be defined as people will conduct behaviour naturally because of learning behaviour. Habit can influence on the usage of technology. In line with Venkatesh (2012), the subsequent effect of habit on either behavioural intention or use is determined by the triggered process of habit. As claimed by Slade et al. (2013), both behavioural intention and use behaviour is directly affect by habit.

H7: There is a positive relationship between Actual Usage and intention to adopt cashless system by Malaysia's citizen.

The behaviour intention, attitude and recognize ease of use of the technology will influence the actual usage as mentioned by Davis (1989). In the study of Y. Malhotra et al. (1999), actual usage can be measured by how frequent and how many times the system being used. According to Sulistyaningsih et al. (2014), if the system make the users satisfy, the sense of satisfaction of the users can then reflect into the actual usage of the technology.

2.5 Conclusion

Chapter two outlined a review of literature on both independent and dependent variables for the research project. The UTAUT and UTAUT2 model is also explained in this chapter that applied in this study. Where the theoretical framework is adapted from both UTAUT and UTAUT2 model. This chapter describe the significant relation of independent variables (Performance expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation and Habit) towards dependent variables (Intention to Adopt and Actual Usage) on cashless system. According to the literature review, validity of the research is being

supported. Moreover, a theoretical framework is developed for this research for better understanding of both variables.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter will discuss about the methodology that applied to assemble data to test the hypothesis and the research questions will be explained. Besides that, this chapter will focus in design of the research, methods of data collection and sampling design. We also will describe the details of the research instruments, construct management, data processing, as well as analysis of data.

3.1 Research Design

On the report of De Vaus (2002), research design is the fundamental for the research process. Research design is for the researcher to ensure that the evidence gathered enable us to answer the ambiguous research questions. According to Donald R Cooper and Schindler (2014), research design is use to gain answer for the research questions. It also used for collect and analyse the information by the method and procedure. Research design provide a data collection process that is in order to avoid error occurred.

3.1.1 Quantitative Research

In compliance with D.R. Cooper and Schindler (2006), quantitative research is designed for focus in describe, explain and predict phenomena, uses probability sampling and relies on larger sample size as compared to qualitative research.

According to Aliaga and Gunderson (2000), quantitative research also applies mathematically based methods to understand the ambiguous situation by focus on collecting and study the numerical. Quantitative research consists of the collection of data which the information can be measure and the researcher tend to apply mathematical model for data analysis as claimed by Williams (2007). Moreover, in line with Babbie (2010), objective of quantitative research is to collect numerical data and information to answer a phenomenon. As stated by Zikmund (2003), quantitative research method suitable to use on those research that consist of large amount of respondents. Thus, quantitative research is used in this research and questionnaire has been distribute to 300 target respondents.

3.1.2 Descriptive Research

The research method of this research is descriptive research. As stated by Saunders, Lewis, and Thornhill (2012), descriptive research is very common to use on research design to collect the information about the present existing conditions by the use of questionnaire, personal interviews and observations. Descriptive research is chosen for using in this study because researcher can survey a representative sample to understand more on factors that influencing Malaysia Citizen's intention and adoption of cashless system. According to Burns and Grove (2001), descriptive research is designed to provide a picture of a situation as it naturally happens. In line with Burns and Bush (2000), it also suitable for large sample size study and it help verify current situation through developed hypothesis. In the opinion of Williams (2007), in descriptive method, observational and correlational studies, survey research and development design have been use. Descriptive research is an essential research method that investigate the situation and it include distinguish the attributes of a particular circumstance based on the observational basis or the exploration of correlation between two or more phenomena. As mentioned in Salaria (2012), descriptive research is used to the collecting of information about prevailing situations for the purpose of description and interpretation and it includes

proper interpretation, analysis, and identification of trends, comparison and relationships.

3.2 Data Collection Methods

According to Rouse (2016), data collection are so important for researcher because it can obtain accurate data and information from variety of sources, and it allow the researcher to evaluate the outcomes by the collected data and information.

Data collected are based on two categories that is primary data and secondary data. The research question and hypothesis can be explaining by using the collected primary and secondary data. In this study, both data collection methods will be used.

3.2.1 Primary Data

As mentioned by Khan (2011), primary data collection helps researchers to carry out efficient analysis of the research through collecting fresh information that related to the research study. In line with Malhotra (2006), primary data is the data gathered through a research study to solve a specific problem. According to “Primary Data Collection Methods” (2012), primary data are the data that researcher collects through various methods like survey, observation, experimentation and is a fresh collected data information.

In this research, a survey questionnaire will be used in order to collect information. The questionnaire that prepared is to ask a number of questions and collect answers

from the respondents that related to the research topic. Therefore, there are total number of 300 sets questionnaire will be distribute to the targeted respondents. Those questionnaire is distributing to the respondents by using softcopy method which is Google Form. The questionnaires are sending one by one to the respondents through, Facebook Messenger, WhatsApp, and LinkedIn and ensure them reply after they done the survey in order to control the responses.

3.2.2 Secondary Data

In the opinion of Sloboda (2016), secondary data is one type of quantitative data that exists and collected by other researchers for an objective other than the existing research. According to Sorenson, Sabroe, and Olsen (1996), the secondary data is data that are ready and available from variety of sources. The main advantage of using secondary data is they already exist and the time spent on the study will relatively less than the time spent on using primary data collection. Secondary data are collected quickly through sources like journals, articles, books, directories and periodicals.

In this research, secondary data obtained from variety of sources such as academic journals from UTAR digital library, Google Scholar and other sources. Besides that, various information such as article, reports, and statistical information from general website also will be used as references in the research.

3.3 Sampling Design

In a research study, sampling design is a very important process. Sampling design includes target population, sampling frame and sampling location, sampling elements, sampling technique and sampling size.

3.3.1 Target Population

In compliance with Zikmund (2003), group of specific population elements which related to the study can define as the target population. The target population of our research is Malaysia citizen because our research topic is about determining the factors that influencing Malaysia Citizen's intention and adoption of cashless system. Therefore, our questionnaires only distribute to the Malaysia Citizen.

3.3.2 Sampling Frame and Sampling Location

According to Zikmund (2003), sampling frame can be explained as the list or database from which a sample can be drawn. In line with Turner (2003), sampling frame also can define as the set of source materials from which the sample is selected. Sampling frame is purpose to provide a means for choosing the particular members of the target population that are to be interviewed in the survey.

In this research, 300 citizens from Malaysia will become our target respondents. Therefore, the questionnaires were distributed to 300 Malaysia Citizens by softcopy. Although this research is targeting Malaysia Citizens but will more focus on citizen in Kuala Lumpur and Selangor because there are the highest population in Malaysia if filter by city as reported in Malaysia population (2018).

The sampling location is in Malaysia but are more focusing in Kuala Lumpur and Selangor because both this city has highest population in Malaysia and Kuala Lumpur also is the capital.

3.3.3 Sampling Elements

All the respondents can be from various age level, cultural heritage, education level and within our sampling location will take part in our research. People that are students, unemployed, permanent employment or even retired person will participate in our research. The respondents must be a Malaysia's citizen.

3.3.4 Sampling Technique

Sampling technique can be categorized into probability sampling and non-probability sampling.

In proportion to Deshmukh (2017), non-probability sampling will be applied in this study. Non-probability is when all the individuals of the population is not given an equal opportunity of becoming a part of the sample. Because it is hard for us to target the whole Malaysia Population, therefore this research will choose to focus in the highest population city in Malaysia which is Kuala Lumpur and Selangor but also not forget to send the questionnaires to citizen in other states. Facebook Messenger, WhatsApp and LinkedIn are used to distribute the questionnaire.

This research using convenience sampling as the non-probability sampling technique. As claimed by Etikan (2016), convenience sampling is a type of non-probability sampling where members of the target population that easy accessibility or geographical proximity and availability at a given time. According to Palinkas,

Horwitz, Green, Wisdom and Hoagwood, K (2013), convenience sampling is affordable, easy and the subject is readily available and the main objective of this sampling is to gather information from respondents that easily accessible to the researcher. According to Explorable.com (2009), convenience sampling technique is applicable to both qualitative and quantitative study and it is the most frequent technique that used in quantitative study.

3.3.5 Sampling Size

One of the element of research design is sample size which researchers need to consider when they design their study. According to Bn and Rn (2012), the reason to get right sample size is to accurate calculate the required sample size and ensuring research resources are used efficiently. In line with Fridah (2002), Sample size is depending on the nature of the analysis to be performed and the number of variables that have to be examined simultaneously. An appropriate sample size can reduce sampling and measurement errors. According to Thompson (2004), it is advisable that more than 200 respondents must be sampled in order to obtain stability in factor analysis. Hair et al. (2010) claims that a sample size should be more than 100 in order to proceed to factor analysis.

In this research, the sample size is 300 respondents and they are required to participate in our questionnaire survey in order for us to evaluate the factors that influencing Malaysia Citizen's intention and adoption of cashless system.

3.4 Research Instrument

In order to achieve my research objective, the self-administered questionnaires are the instrument that applied in this research study. Self-administered questionnaires

can be mailed or send by softcopy or given in person to the respondents which will easier for the researcher when questioning large number of respondents as mentioned by “Questionnaire Design” (2017). Besides, in the opinion of Olckers (2011), self-administered questionnaires are which respondents can easily be reached via electronic communication regardless of their geographical position and they can be sent, completed and returned in the shortest time. The reason will choose self-administered questionnaires as the research instrument because it easier to reach the respondents and this surveys method is much more cost effective and efficiency as claimed by Wallace (2013).

In this research, questionnaires are distributed by electronic communication channel such as WhatsApp, Facebook Messenger and LinkedIn. This research has send the 300 questionnaires one by one to the respondent and ensure they give a reply after they completed it. In this research, all the 300 responses are managed to collected in two-month time.

Pilot test is a vital elements in the data collection process and it explained as a trial test of all the procedures planned for use in the main study (Monette, 2002).

According to Baker (1994), pilot test is frequent used to pre-test a research instrument and Baker (1994) suggest that 10-20% of the sample size is an acceptable figure of respondents to consider for enrol in a pilot test. Therefore, in this research study, 30 respondents have been chosen to conduct the pilot test. After collect 30 sets of questionnaires, a reliability test need to be conduct through the SPSS software. In order to examine the reliability of the pilot test, Cronbach’s alpha was used. According to Nunnally (1978), a common acceptable range of Cronbach’s alpha value is 0.70 or above.

3.5 Constructs Measurement (Scale and Operational Definitions)

The questionnaire used in this study were adapted from Venkatesh et al. (2003), Venkatesh, Thong, and Xu (2012) and Martins, C., Oliveira, T. and Popovič (2014). Table 3.1 showed all the questions will be asking in each variables:

Table 3.1: Questionnaire Items

Construct / Code	Corresponding Items	Item Sources
Performance Expectancy		
PEX1	I found cashless system useful in daily life	(Venkatesh et al., 2003) (Venkatesh et al., 2012)
PEX2	Using cashless system increases my productivity	
PEX3	Using cashless system help me complete things more quickly	
PEX4	Using cashless system increases the chance of achieving thing that are more important to me	
Effort Expectancy		
EFE1	Learn how to use cashless system is simple for me	(Venkatesh et al., 2003) (Venkatesh et al., 2012)
EFE2	My relation with cashless system is clear	
EFE3	I found cashless system is easy to use	
EFE4	It easier for me to become skilful at using cashless system	
Social Influence		
SOI1	People who are important to me think I should use cashless system	(Venkatesh et al., 2003) (Venkatesh et al., 2012)
SOI2	People who influence my behaviour think that I should use cashless system	
SOI3	Using cashless system is a status symbol in my environment	
Facilitating Conditions		

FAC1	I have the resources necessary to use cashless system	(Venkatesh et al., 2003) (Venkatesh et al., 2012)
FAC	I have the knowledge necessary to use cashless system	
FAC3	cashless system is compatible with other technologies I use	
FAC4	I can get help from others when I have difficulties using cashless system	
Hedonic Motivation		
HDM1	Using cashless system is fun	(Venkatesh et al., 2012)
HDM2	Using cashless system is enjoyable	
HDM3	Using cashless system is entertaining	
Habit		
HB1	The use of cashless system has become a habit for me	(Venkatesh et al., 2012)
HB2	I am addicted to using cashless system	
HB3	I must use cashless system	
HB4	Using cashless system has become natural to me	
Intention to Adopt		
ITA1	I intend to continue using cashless system in the future	(Venkatesh et al., 2003) (Venkatesh et al., 2012)
ITA2	I will always try to use cashless system in my daily life	
ITA3	I plan to continue to use cashless system frequently	
Actual Usage	<p>What is your actual frequency of use of cashless system?</p> <ul style="list-style-type: none"> - Have not used - Once a year - Once in six month - Once in three months - Once a month - Once a week - Once in 4-5 days - Once in 2-3 days 	(Martins, C., Oliveira, T. and Popovič, 2014)

	<ul style="list-style-type: none"> - Almost every day - Every Day - Several times a day 	
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Source: Developed for the research

Questionnaires in this study includes three parts which is Part A is the General Information on Cashless System, Part B is the variable that need to be study and Part C is the demographic profile.

For the demographic profile section, this research using nominal scale as scale measurements. A nominal scale of measurements deals with variables that are non-numeric or where the numbers have no value. Nominal scale is using to represent different group of categories such as Gender, Age, Cultural Heritage, Work Status and others. However, for the second part of the questionnaire, questions are designed by using Likert scale. Likert scale is a survey question scale which uses two extreme polarities to measure respondent attitude toward a statements. In line with Bertram (2007), respondents are asked to indicate their level of agreement with a given statement by way of an ordinal scale. 5 point Likert scale are using in this research study which is range from “Strongly Disagree” to “Strongly Agree”.

3.6 Data Processing

The data processing included of data preparation process such as checking, editing, coding, transcribing and it also can said as convert the data into a usable and desired form.

3.6.1 Data Checking

According to Malhotra (2006), those data that have entered need to be checked carefully, this checking is important because need to confirm that the data have been entered accurately. Any error that occur during entering the data will affect the end result.

3.6.2 Data Editing

As claimed by Ferguson (1994), the review and adjustment of collected survey data known as data editing. The reason of editing data is to enhance the accuracy, precision and the standard of the data that collected.

3.6.3 Data Coding

According to Miles (1994) “Tag or label that can represent the information during a study”. Code is a shorthand designator, such as letters, numbers, and words or in other forms. For example, in this study “Performance Expectancy” assign as PEX, “Effort Expectancy” assign as EFE and others. Code is used because it is time saving and easier when doing data entry.

3.6.4 Data Transcribing

In this research study, 300 responses data will download from the Google Form and it will save as Excel file. It easy to analyse and easy to key into the SPSS.

3.7 Data Analysis

Data analysis is an activity for the researchers to evaluate their obtained information and data to form finding or conclusion. Descriptive analysis, reliability test and inferential analysis are applied to examine the data in this research.

3.7.1 Descriptive Analysis

In line with Zikmund (2003), the process that transform the collected data into a form that will make the data easier to understand and interpret is called descriptive analysis. It can explain the basic trait of the data in a research and give summary about the sample. In the opinion of Trochim (2006), descriptive analysis provides simple graphics analysis.

3.7.2 Reliability Test

As claimed by Hair, Bush, and Ortinau (2003), the consistency of the outcomes that related to multi item scales are explained by using reliability test. According to Datt (2015), Cronbach Alpha is a reliability test conducted with SPSS in order to measure the internal consistency and is commonly used for those questionnaire that designed using Likert-scale. The higher the value of Cronbach's alpha, the test result will be more reliable. In line with Nunnally (1978), a common acceptable range of Cronbach's alpha value is 0.70 and above.

3.7.3 Inferential Analysis

As stated in Kern (2013), the purpose of inferential analysis is to create conclusions that reach beyond the data observed. In this research study, SPSS Statistics 23 is applied in this study to run the analysis by using the data that obtained.

3.7.3.1 Multiple Regression Analysis

According to J. Higgins (2005), multiple regression analysis is use to examine how multiple independent variables are associated to one dependent variables and it used to measure the correlation between the dependent and independent variables In line with Hair et al. (2003), multiple regression analysis determined by estimating the coefficients for the equation.

The Multiple Regression equation that developed this research can be formed as belows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6$$

Y = Dependent Variable

B = Regression Coefficients

X = Independent Variable

Multiple regression equation allows researchers to come out with an ideal forecast on which independent variables will have more effect on the dependent variable.

3.7.3.2 Pearson Correlation Coefficient

Pearson correlation coefficient is mainly used to measure the correlation between two variables as claimed by Zikmund (2003). In compliance with Ratner (2009), the degree of change in another variable are measuring using Pearson Correlation analysis. The coefficient is range from -1 to +1. Thus, this test can measure the relationship between dependent variable and independent variables. If the value is 0, means no significant relationship between two variables whereas if the values is positive, there is a positive relationship.

The table below (Table 3.2) shows the strength of the correlation between two variables:

Table 3.2: Rules of Thumb of Pearson’s Correlation

Coefficient Range	Strength of Association
0.91 - 1.00 / -1.00 ~ -0.91	Very Strong
0.71 - 0.90 / -0.90 ~ -0.71	High
0.41 - 0.70 / -0.70 ~ -0.41	Moderate
0.21 - 0.40 / -0.40 ~ -0.21	Small but define relationship
0.01 - 0.20 / -0.20 ~ -0.01	Slight, almost negligible

Adapted: Hair, Money, Samouel, & Page. (2006). *Research Methods for Business. Education and Training*, 49(4), 336–337

3.7.3.3 Point-Biserial Correlation

According to Ken (2014), a point-biserial correlation will be used to investigate the correlation between a continuous variable and a dichotomous variable.

3.8 Conclusion

This chapter described the research methodology that applied for this research. The ways to carry out the research have been details explained in this chapter. The next chapter will explain more on the outcomes of the analysis that conducted through the methodology which discussed in this chapter.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

Chapter 4 explains the outcome of analysis and data which relevant to this study. This chapter consist of descriptive analysis, inferential analysis and scale measurement.

4.1 Descriptive Analysis

This research received 300 respondents from different platform and none of the responses are being rejected or not adequate to the research. All the 300 responses will be tested and analyse.

4.1.1 Respondent Demographic Profile

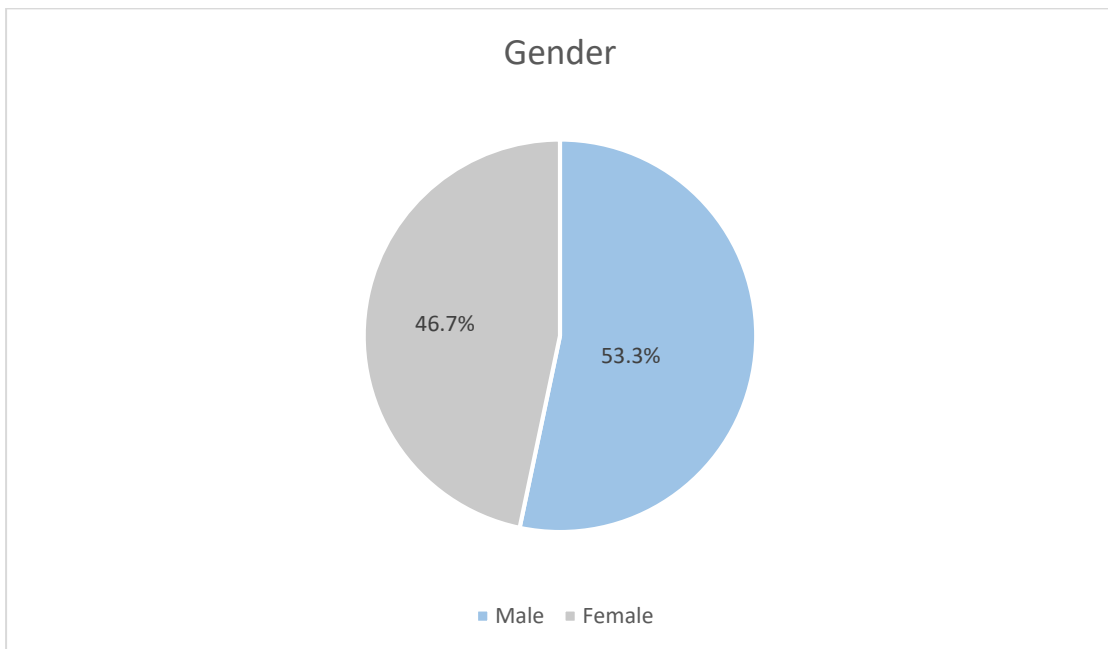
In this study, seven question is designed under demographic profile section. This seven question include gender, age, cultural heritage, work status, education level, monthly income and states. Respondent are required to answer all the question and all the response are strictly private and confidential as stated at the questionnaire cover.

Table 4.1: Respondent's Gender

Gender	Frequency	Percentage (%)
Male	160	53.3
Female	140	46.7

Source: Developed for the research

Figure 4.1: Respondents' Gender



Source: Developed for the research

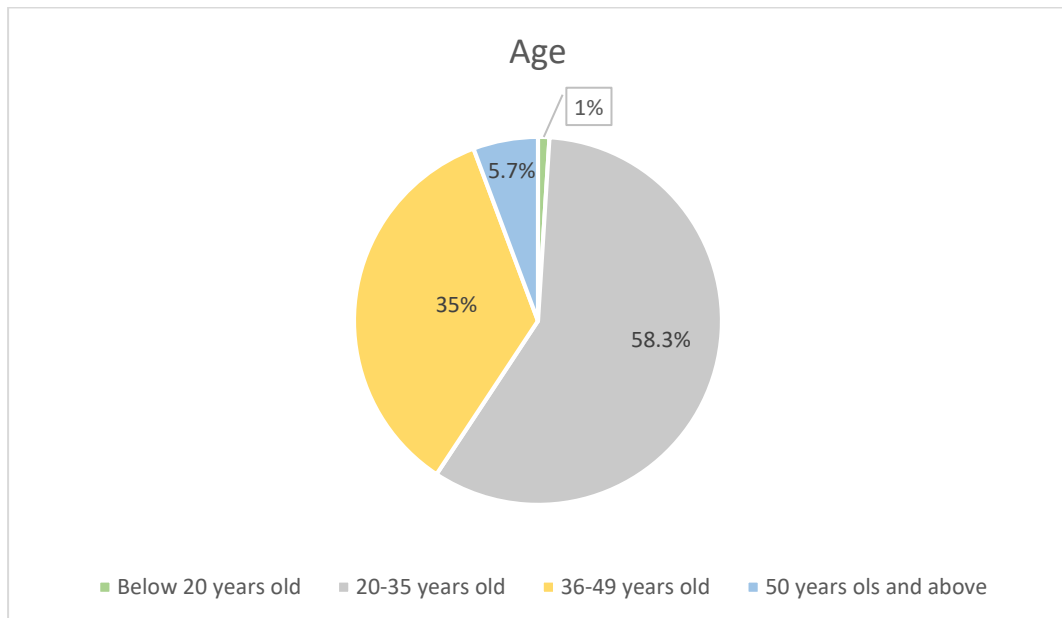
The above data Table 4.1 and Figure 4.1 was collected through questionnaire indicate that biggest portion of the respondents are male which consists of 53.3% out of 300 respondents whereas 46.7% are female.

Table 4.2: Respondent's Age

Age	Frequency	Percentage (%)
Below 20 years old	3	1.0
20-35 years old	175	58.3
36-49 years old	105	35
50 years old and above	17	5.7

Source: Developed for the research

Figure 4.2: Respondent's Age



Source: Developed for the research

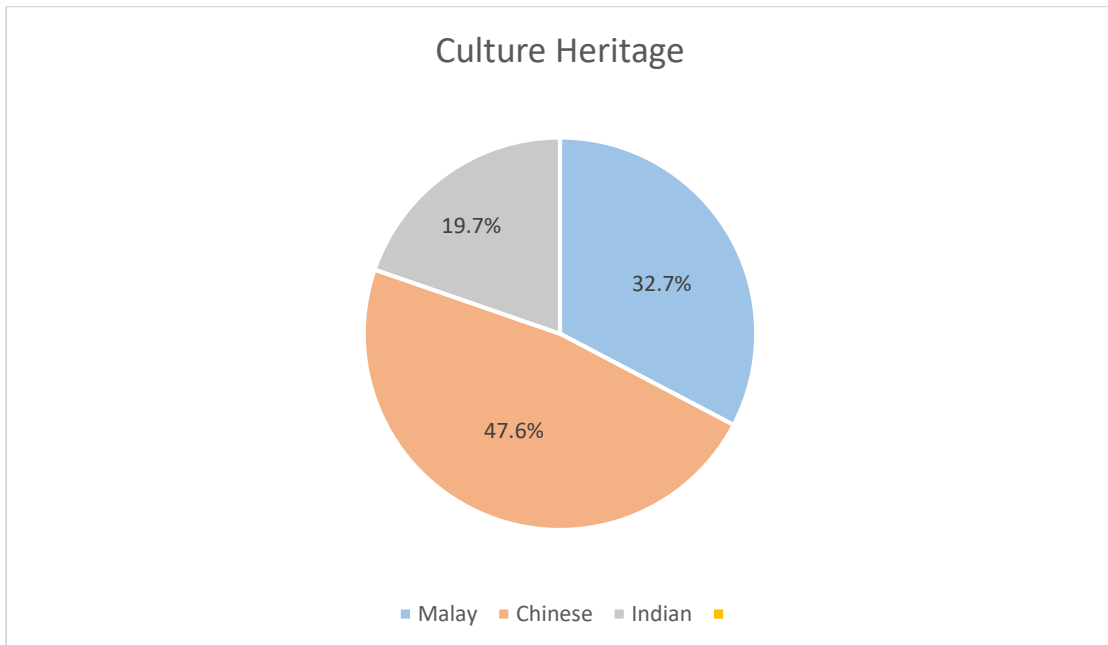
For the Age group (Table 4,2 and Figure 4.2), most respondents are from 20-35 years' old group which is 58.3% or 175 out of 300 respondents. 36-49 years old group which have 105 respondents that are 35%. There are only 17 respondents out of 300 respondents which is 5.7% but the most less are 3 respondents from below 20 years' old which only consists of 1% out of 300 respondents.

Table 4.3: Respondent’s Culture Heritage

Culture Heritage	Frequency	Percentage (%)
Malay	98	32.7
Chinese	143	47.6
Indian	59	19.7

Source: Developed for the research

Figure 4.3: Respondent’s Culture Heritage



Source: Developed for the research

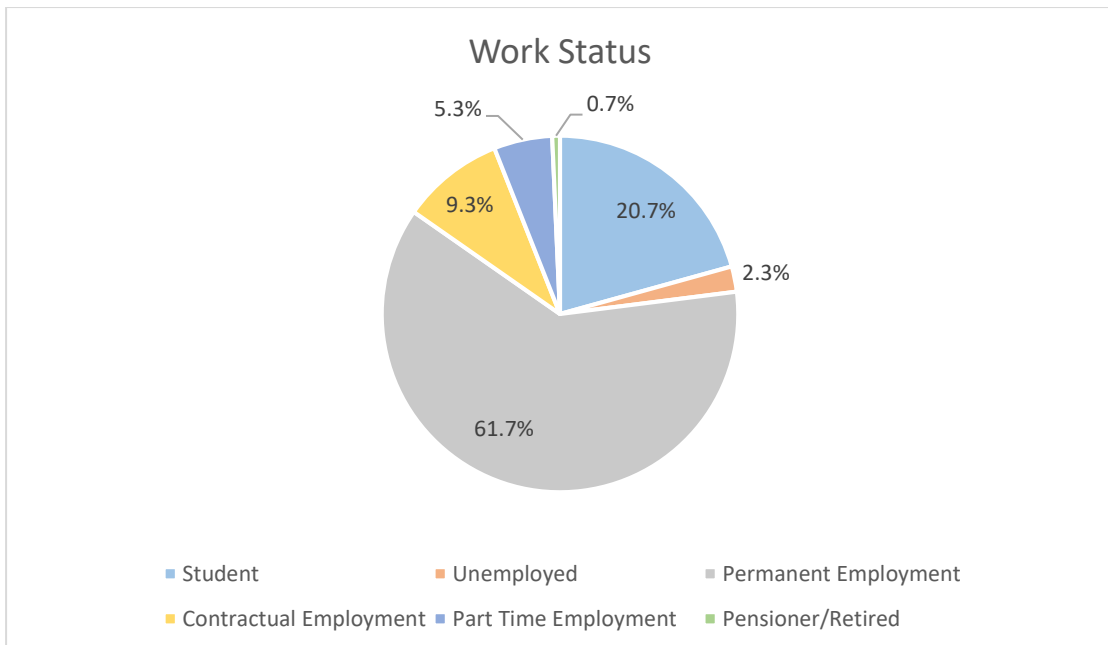
Besides, for the cultural heritage (Table 4.3 and Figure 4.3), the biggest populations were Chinese which is 143 respondents out of 300 and its percentage is 47.6. There are 98 Malays out of 300 respondents which is 32.7% whereas Indian only have 59 out of 300 respondents and it is only 19.7%.

Table 4.4: Respondent's Work Status

Work Status	Frequency	Percentage (%)
Students	62	20.7
Unemployed	7	2.3
Permanent Employment	185	61.7
Contractual Employment	28	9.3
Part Time Employment	16	5.3
Pensioner/ Retired	2	0.7

Source: Developed for the research

Figure 4.4: Respondent's Work Status



Source: Developed for the research

There are 6 segments in our work status characteristics according to Table 4.4 and Figure 4.4. In this study, 185 respondents that are permanent employment and their percentage are 61.7 and it the biggest respondents.20.7 percent of the respondents are represented by 62 peoples that consist of students. 9.3 percent of the respondents are represented by 28 peoples that consist of contractual employment. 5.3 percent of the respondents are represented by 16 peoples that consist of part time employment. The last two is unemployed and pensioner/retired which both also less

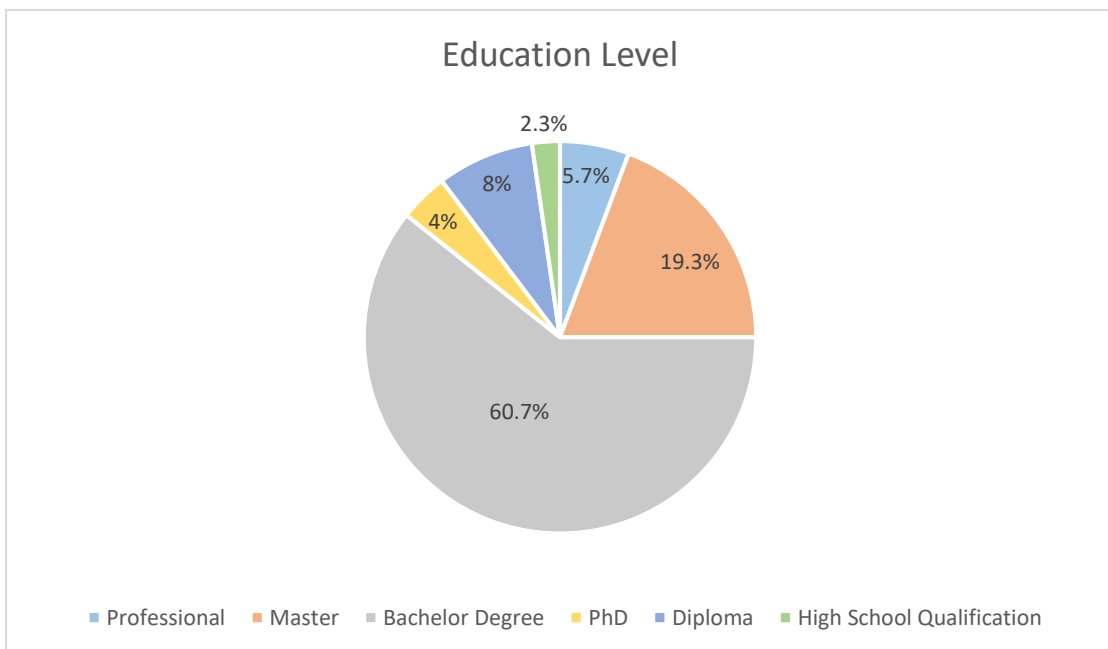
than 10 respondents and there only have 7 and 2 respectively which total up only have 3% out of 300 respondents.

Table 4.5: Respondent’s Education Level

Education Level	Frequency	Percentage (%)
Professional	17	5.7
Master	58	19.3
Bachelor Degree	182	60.7
PhD	12	4
Diploma	24	8
High school qualification	7	2.3

Source: Developed for the research

Figure 4.5: Respondent’s Education Level



Source: Developed for the research

From the data that collected from our respondents (Table 4.5 and Figure 4.5), most of them are have Bachelor Degree education level which are 182 respondents and 60.7% out of 300 respondents. The following is having Master education level which has 19.3% and 58 respondents. Respondents that holding Diploma education

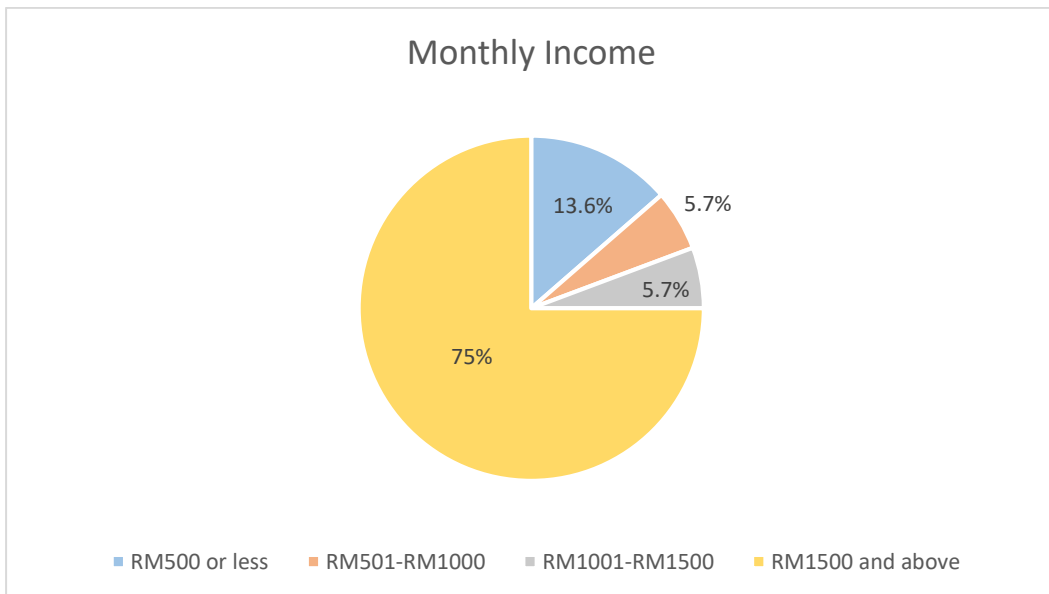
level consists of 24 people and 8%. Respondents that have Professional and PhD education level has 17 and 12 respondents respectively and consists a total of 9.7%. Lastly is those have high school qualification and it only have 7 respondents and 2.3% out of 300 respondents.

Table 4.6: Respondent’s Monthly Income

Monthly Income	Frequency	Percentage (%)
RM500 or less	41	13.6
RM501-RM1000	17	5.7
RM1001-RM1500	17	5.7
RM1500 and above	225	75

Source: Developed for the research

Figure 4.6: Respondent’s Monthly Income



Source: Developed for the research

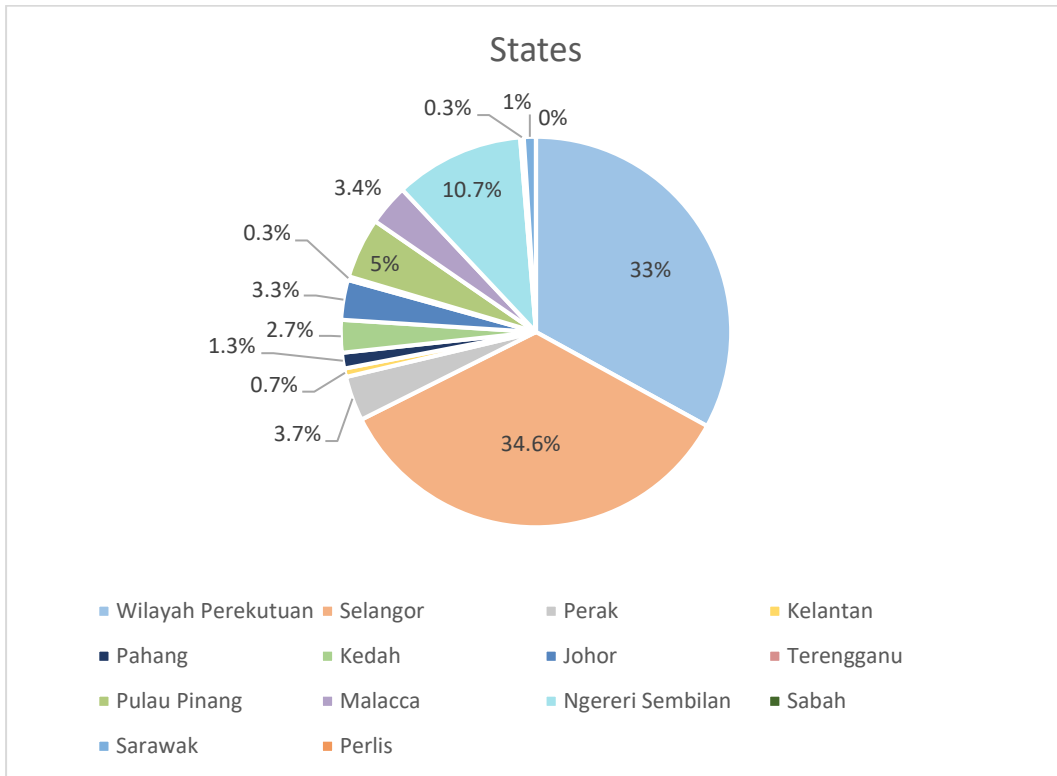
For Monthly Income (Table 4.6 and Figure 4.6), most of the respondents have RM1500 and above which have 225 peoples and 75% out of 300 respondents. 41 of the respondents have RM500 or less monthly income and it consists of 13.6%. Both RM501-RM1000 and RM1001-RM1500 have 17 people respectively and consists of total 11.4% out of 300 respondents.

Table 4.7: Respondent's State

States	Frequency	Percentage (%)
Wilayah Persekutuan	99	33
Selangor	104	34.6
Perak	11	3.7
Kelantan	2	0.7
Perlis	0	0
Pahang	4	1.3
Kedah	8	2.7
Johor	10	3.3
Terengganu	1	0.3
Pulau Pinang	15	5
Malacca	10	3.4
Negeri Sembilan	32	10.7
Sabah	1	0.3
Sarawak	3	1

Source: Developed for the research

Figure 4.7: Respondent's State



Source: Developed for the research

Based on Table 4.7 and Figure 4.7, most of the respondents came from Selangor which have 104 people and followed by from Wilayah Persekutuan that have 99 peoples. The third highest number of respondents are coming from Negeri Sembilan which have 32 people and 10.7% out of 300 respondents and followed by 15 respondents from Pulau Pinang. There are 11 respondents came from Perak based on our data collection and both Johor and Malacca have 10 respondents respectively. There are only 8 respondents from Kedah and followed by 4 respondents from Pahang. There are only 3 respondents from Sarawak and 2 from Kelantan. Lastly, both Terengganu and Sabah have only 1 respondent respectively and no one from Perlis.

4.1.2 Central Tendencies Measurement of Constructs

Table 4.8: Descriptive Statistic

	N	Sum	Mean	Std. Deviation
PEX	300	1301.50	4.3383	.52300
EFE	300	1283.50	4.2783	.55284
SOI	300	1093.00	3.6433	.82904
FAC	300	1239.00	4.1300	.59205
HDM	300	1087.33	3.6244	.94580
HB	300	1149.00	3.8300	.79915
ITA	300	1292.33	4.3078	.62383

Source: Developed for the research study.

From Table 4.8, Performance expectancy has highest value of mean among all the other constructs which is 4.3383 and this shows the average level of agreement on Performance Expectancy are more towards “Strongly Agree”. Besides, the lowest mean among all the constructs is Hedonic Motivation at 3.6244 which means the average responses on Hedonic Motivation are also more towards “Agree”. On the other hand, other constructs have similar level of agreement which the mean score is towards “Agree”. In conclusion, all constructs are more toward “Agree” which mean average respondents agree on our variables.

4.2 Scale Measurement

According to Datt (2015), Cronbach Alpha is a reliability test conducted with SPSS in order to measure the internal consistency and is commonly used for those questionnaire that designed using Likert-scale. The higher the value of Cronbach’s alpha, the test result will be more reliable. As claimed by Nunnally (1978), a common acceptable range of Cronbach’s alpha value is 0.70 and above.

Table 4.9: Reliability Test for 30 Respondents (Pilot test)

Variables	Cronbach's Alpha	Number of items
PEX	0.716	4
EFE	0.878	4
SOI	0.863	3
FAC	0.720	4
HDM	0.918	3
HB	0.766	4
ITA	0.780	3

Source: Developed for the research study.

The Cronbach's alpha was first test using 30 respondents for the pilot test. The result for pilot test is stated at table above (Table 4.9). Based on the results above, all variables are considered variable as alpha value are more than 0.7.

The independent variable, Hedonic Motivation have the highest alpha value of 0.918 with 3 items so mean this benefits is the most reliable variable and followed by Effort Expectancy which have the Alpha value of 0.878 with 4 items. The following is Social Influence and Intention to Adopt which have 0.863 with 3 items and 0.780 with 3 items respectively. The Habit has an alpha value of 0.766 with 4 items whereas Facilitating Conditions has Alpha values of 0.720 with 4 items. Lastly, Performance Expectancy have the lowest Alpha value among all the variables which is 0.716 with 4 items.

Table 4.10: Reliability Test for 300 Respondents

Variables	Cronbach's Alpha	Number of items
PEX	0.794	4
EFE	0.837	4
SOI	0.833	3
FAC	0.774	4
HDM	0.926	3
HB	0.841	4
ITA	0.807	3

Source: Developed for the research study.

The Cronbach's alpha was then examining on the 300 respondents. The result for reliability test is stated at table above (Table 4.10). Based on the results above, all variables are considered variable as alpha value are more than 0.7.

The independent variable, Hedonic Motivation have the highest alpha value of 0.926 with 3 items so mean this benefits is the most reliable variable and followed by Habit which has the value of alpha of 0.841 with 4 items. The following is Effort Expectancy and Social Influence which have 0.837 with 4 items and 0.833 with items respectively. The intention to adopt has the value of alpha of 0.807 with 3 items whereas Performance Expectancy has Alpha values of 0.794 with 4 items. Lastly, Facilitating Condition has the lowest value of alpha among all the variables which is 0.774 with 4 items.

4.3 Inferential Analyses

In this study, H1, H2, H3, H4, H5 and H6 are tested using Multiple Regression Analysis while H7 is tested using Point-Biserial Correlation.

4.3.1 Multiple Regression Analysis

H1: There is a positive relationship between Performance Expectancy and intention to adopt cashless system by Malaysia’s citizen.

H2: There is a positive relationship between Effort Expectancy and intention to adopt cashless system by Malaysia’s citizen.

H3: There is a positive relationship between Social Influence and intention to adopt cashless system by Malaysia’s citizen.

H4: There is a positive relationship between Facilitating Condition and intention to adopt cashless system by Malaysia’s citizen.

H5: There is a positive relationship between Hedonic Motivation and intention to adopt cashless system by Malaysia’s citizen.

H6: There is a positive relationship between Habit and intention to adopt cashless system by Malaysia’s citizen.

H7: There is a positive relationship between Actual Usage and intention to adopt cashless system by Malaysia’s citizen.

H1, H2, H3, H4, H5 and H6 were tested using Multiple Regression Analysis and Pearson Correlation Coefficient whereas H7 were tested using Point-Biserial Correlation because of its dichotomous variable.

Table 4.11: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.735 ^a	.540	.531	.42733

a. Predictors: (Constant), Habit, Effort Expectancy, Social Influence, Hedonic Motivation, Performance Expectancy, Facilitating Condition

Source: Developed for the research study.

The table upon is about the descriptive statistics and analysis outcome. R Square (R^2) is the coefficient of determination. In line with Jim (2017), R-square is a goodness of fit measure for linear regression models and this statistic measures the strengths between the relationship of the model and dependent variable on a convenient 0-100% scale. The R-square value obtained is 0.540 which mean the independent variable, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation and Habit explains 54% of the dependent variable, intention to adopt cashless system. The larger the R square value, the better the regression model suit the observations.

Standard Error of the Estimate is the standard deviation of the residuals. The Standard Error of the Estimate that obtained is 0.42733. When the R-square increase, the Standard error of the Estimate will decrease and it can be explained by a better suit model will have a lower error of estimation.

Table 4.12: ANOVA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.854	6	10.476	57.365	.000 ^b
	Residual	53.506	293	.183		
	Total	116.360	299			

a. Dependent Variable: Intention to adopt

b. Predictors: (Constant), Habit, Effort Expectancy, Social Influence, Hedonic Motivation, Performance Expectancy, Facilitating Condition

Source: Developed for the research study.

The F value is 57.365 with 0.000b significance level. The P value is 0.000 and mean it is significant because P less than 0.05. According to J.Rumsey (2018), when P-value is less than 0.05, the hypothesis is accepted. Thus, the overall model is significance and the fitness of the model is high.

Table 4.13: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.722	.234		3.092	.002
PEX	.362	.064	.304	5.631	.000
EFE	.076	.062	.068	1.240	.216
SOI	-.039	.038	-.052	-1.043	.298
FAC	.146	.060	.138	2.441	.015
HDM	-.056	.033	-.084	-1.669	.096
HB	.374	.040	.479	9.461	.000

Source: Developed for the research study.

From the coefficient table, a linear equation can be form using the 6 independent variable and the dependent variable.

$$\text{Intention to Adopt} = 0.722 + 0.362 \text{ Performance Expectancy} + 0.076 \text{ Effort Expectancy} - 0.039 \text{ Social Influence} + 0.146 \text{ Facilitating Condition} - 0.056 \text{ Hedonic Motivation} + 0.374 \text{ Habit}$$

4.3.2 Pearson Correlation Coefficient

Pearson correlation is applied in this study, according to Zikmund (2003), pearson correlation coefficient can test the correlation between two variables with the linear association that relationship. The degree of change of one another variable is measuring by using correlation analysis. Ratner (2009) stated that the coefficient is range from -1 to +1. Thus, this test is used to measure the relationship between dependent variable and independent variable.

Table 4.14: Correlations

Correlations							
	PEX	EFE	SOI	FAC	HDM	HB	ITA
ITA Pearson Correlation	.584**	.476**	.293**	.493**	.346**	.641**	1
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
N	300	300	300	300	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for the research study.

Table 4.15: Rules of Thumb of Pearson’s Correlation

Range of Correlation	Strength of Relationship
0.91 - 1.00 / -1.00 ~ -0.91	Very Strong
0.71 - 0.90 / -0.90 ~ -0.71	High
0.41 - 0.70 / -0.70 ~ -0.41	Moderate
0.21 - 0.40 / -0.40 ~ -0.21	Small but define relationship
0.01 - 0.20 / -0.20 ~ -0.01	Slight but almost insignificant

Adapted: Hair, Money, Samouel, & Page. (2006). *Research Methods for Business. Education and Training*, 49(4), 336–337

Table 4.16: Summarize of the Results of Pearson’s Correlation

Variables	Correlation Coefficients	P-value
Intention VS Performance Expectancy	0.584	0.000<0.05
Intention VS Effort Expectancy	0.476	0.000<0.05
Intention VS Social Influence	0.293	0.000<0.05
Intention VS Facilitating Condition	0.493	0.000<0.05
Intention VS Hedonic Motivation	0.346	0.000<0.05
Intention VS Habit	0.641	0.000<0.05

Source: Developed for the research study.

Correlation coefficient can help us to choose the best independent variables. When the value of correlation coefficient is higher, the relationship with correlated variables will be stronger. There have only two variables that have small but define positive relationship which is Social Influence and Hedonic Motivation. The other 4 variables are within the range of 0.41 – 0.70 which have moderate positive relationship and those variables were Performance Expectancy, Effort Expectancy, Habit and Facilitating Condition.

Therefore, all the variables have positive relationship with the dependent variable. All the P-value is less than 0.05 and mean they have positive correlation with the dependent variable, thus, all hypothesis is accepted.

In conclusion, the H1, H2, H3, H4, H5 and H6 is accepted.

4.3.3 Point-Biserial Correlation

A point-biserial correlation were applied in this study and according to Ken (2014), this test is to examine the correlation between a continuous variable and a dichotomous variable. H7 were tested using Point-Biserial Correlation because of its dichotomous variable.

Table 4.17: Point-Biserial Correlations

		Correlations	
		ITA	Usage
ITA	Pearson Correlation	1	.220**
	Sig. (2-tailed)		.000
	N	300	300
Usage	Pearson Correlation	.220**	1
	Sig. (2-tailed)	.000	
	N	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for the research study.

In order to examine the actual usage of cashless system, the respondents will be asking how frequent they use cashless system. Those obtained responses are categories into a 2-point scale which is 0 means never used and 1 means used. The test was performed with actual usage of cashless system which is the dichotomous variable and intention to adopt cashless system that is continuous variable. Point Biserial Correlation were conducted by using the Pearson Correlation Coefficient. The result was shown in the table above.

The correlation coefficient value is 0.220 which is a weak positive correlation between the actual usage of cashless system and intention to adopt cashless system. The P-value is 0.000 which less than 0.05 and it show significant positive relationship between both variables. Thus, as the intention to adopt cashless system increases, the actual usage of cashless system will increase also. Therefore, H7 is accepted.

H1: There is a positive relationship between Performance Expectancy and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Performance Expectancy and intention to adopt cashless system by Malaysia's citizen. According to Odumeru (2013), performance expectancy or relative advantages can significantly affect the adoption of mobile banking.

H2: There is a positive relationship between Effort Expectancy and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Effort Expectancy and intention to adopt cashless system by Malaysia's citizen. According to Faniran and Odumeru (2015), once consumer perceived the ease of use or effect expectancy on cashless system they will use it continuously when doing payment or purchasing and the intention to adopt cashless system will also increase.

H3: There is a positive relationship between Social Influence and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Social influence and intention to adopt cashless system by Malaysia's citizen. Based on the findings of Ali Abdallah Alalwan (2016), social influence also can define as the information and encouragements provided by people around customers can play a vital role in contributing to the customers awareness as well as the intention toward technology.

H4: There is a positive relationship between Facilitating Condition and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Facilitating Condition and intention to adopt cashless system by Malaysia's citizen. According to Baptista and Oliveira (2015), facilitating conditions also can define as how people perceive that technical infrastructure exist to help them to use the system whenever necessary and facilitating conditions will influence use behaviour and usage intention.

H5: There is a positive relationship between Hedonic Motivation and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Hedonic Motivation and intention to adopt cashless system by Malaysia's citizen. Based on the findings of Zhang, Zhu, and Liu (2012), the greater the entertainment of the technology system the greater the customer intent to accept.

H6: There is a positive relationship between Habit and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Habit and intention to adopt cashless system by Malaysia's citizen. According to Slade, Williams, and Dwivdei (2013), both behavioural intention and use behaviour is directly affect by habit

H7: There is a positive relationship between Actual Usage and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Actual Usage and intention to adopt cashless system by Malaysia's citizen. According to Davis (1989), the behaviour intention, attitude and recognize ease of use of an individual can influence the actual usage.

4.4 Conclusion

This chapter providing the summary of the outcomes of the results that are related to hypothesis of this research study

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICANTIONS

5.0 Introduction

In this particular chapter will discuss the research method which use to evaluate the correlation between the independent variable and dependent variable. Besides, discussions of major findings, summary of the statistical analyses, implications of the study, limitations of the study and recommendations for future research will also be described.

5.1 Summary of Statistical Analyses

In this part will discuss the summary description of the descriptive and inferential analysis tested in Chapter 4.

5.1.1 Descriptive Analysis

In this research, the questionnaires are participated by 300 respondents. The sample of the research study covers the majority of Male (53.3%) and Chinese (47.6%). Besides, most of the responses are from 20-35 years' old that is 58.3% and their work status is mainly permanent employees (61.7%). Most of our respondents own a Bachelor Degree which is 60.7% and the monthly income of our respondents mostly is range from RM1500 and above. Lastly, majority of the respondents is from Selangor which is 34.6% out of 300 respondents

In general information, Performance expectancy has the highest mean among all the other constructs which is 4.3383 and this shows the average level of agreement on Performance Expectancy are more towards “Strongly Agree”. Besides, the lowest mean among all the constructs is Hedonic Motivation at 3.6244 which means the average responses on Hedonic Motivation are also more towards “Agree”.

5.1.2 Scale Measurement

The scale measurements of the 6 construct are measured based on the reliability test. Hedonic Motivation has the highest value of alpha of 0.926 with 3 items so mean this benefits is the most reliable variable Lastly, Facilitating Condition has the lowest Alpha value which is 0.774 with 4 items. Thus, all of our constructs have Cronbach Alpha value that more than 0.7.

5.1.3 Inferential Analysis

In this part will provide a summary of multiple regression analysis, pearson correlation coefficient and point-biserial correlation that used to test the data.

5.1.3.1 Multiple Regression Analysis

Multiple linear regression between the independent variable and the dependent variable has a R-square value of 0.540 which mean the independent variable, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation and Habit explains 54% of the dependent variable, intention to adopt cashless system.

5.1.3.2 Pearson Correlation Coefficient

This results can help us to define the best independent variables. Therefore, there are only two variables that have small but define relationship which is Social Influence and Hedonic Motivation. The other 4 variables are within the range of 0.41 – 0.70 which have moderate relationship and those variables are Performance Expectancy, Effort Expectancy, Habit and Facilitating Condition.

Therefore, all the variables have relationship with the intention to adopt cashless system. All the P-value is <0.05 which mean they have positive relationship with the dependent variable of this study.

5.1.3.3 Point-Biserial Correlation

The Point-Biserial Correlation help us examine the correlation between a continuous variable and a dichotomous variable. The correlation coefficient value is 0.220 which is a weak positive relationship between the actual usage of cashless system and intention to adopt cashless system. But, the P-value is 0.000 which is <0.05 and it show significant positive relationship between both variables. Thus, as

the intention to adopt cashless system increases, the actual usage of cashless system will increase also.

5.2 Discussion and Major Findings

H1: There is a positive relationship between Performance Expectancy and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Performance Expectancy and intention to adopt cashless system by Malaysia's citizen. It shows that consumers believe that using cashless system can bring positive outcome for them. The benefits that offered by cashless system will encouraged a person to use it. According to Odumeru (2013), performance expectancy or relative advantages can significantly affect the adoption of mobile banking. This results is consistent with previous research study that done by Zhou (2012) which show performance expectancy is a significant factor that influencing behavioural intention of the consumers. This result also supported by the findings from Alalwan et al. (2017) which the intention to adopt cashless system can be affected by performance expectancy. This outcome also supported by prior study done by Venkatesh et al. (2003) which there is a strong relationship between performance expectancy and intention to adopt cashless system.

H2: There is a positive relationship between Effort Expectancy and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Effort Expectancy and intention to adopt cashless system by Malaysia's citizen.

This variable explains the ease of use of cashless system can increase the intention of consumers to use cashless system. According to Faniran and Odumeru (2015), once consumer perceived the ease of use or effect expectancy on cashless system they will use it continuously when doing payment or purchasing and the intention to adopt cashless system will also increase. Thus, from the results of Luarn and Lin (2005), it show effort expectancy can significantly have an effect on the intention of users to adopt cashless system. This result also in line with what has been proven by prior studies done by Venkatesh et al. (2003) and Venkatesh et al. (2012) which addressing that effort expectancy play an important role in influencing the intention to adopt cashless system.

H3: There is a positive relationship between Social Influence and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Social influence and intention to adopt cashless system by Malaysia's citizen.

Based on our findings, the behaviour of an individual can affect by the way the people surrounding them value the use of new technology. It shows social influence can act a vital part in determining the intention of using cashless system. According to Ali Abdallah Alalwan (2016), social influence also can define as the information and encouragements provided by people around customers can play a vital role in contributing to the customers awareness as well as the intention toward technology. According to the findings of Yu (2012) and Zhou, Lu, and Wang (2010), both have results support social influence can influence the behavioural intention on mobile banking. Based on the prior study done by Cheah, Teo, Ooi, and Wong (2013), it proven that there is a strong positive relationship between social influence and intention to adopt cashless system.

H4: There is a positive relationship between Facilitating Condition and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Facilitating Condition and intention to adopt cashless system by Malaysia's citizen.

Facilitating condition also refers to perception of consumers to the resources and support which individuals can receive when using information system (Oliveira et al., 2014). According to Baptista and Oliveira (2015), facilitating conditions also can define as how people perceive that technical infrastructure exist to help them and facilitating conditions will influence use behaviour and usage intention. Our result is parallel with findings of prior studies such as from Alalwan, Dwivedi, and Williams, (2016) and Yu (2012), both have examined that facilitating condition can have significant relationship on the intention to adopt cashless system. This result also supported by Oliveira et al. (2014) which facilitating condition can have a significant influence on intention to adopt cashless system..

H5: There is a positive relationship between Hedonic Motivation and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Hedonic Motivation and intention to adopt cashless system by Malaysia's citizen.

It shows that the users will want to use the cashless system if cashless system can bring the feeling of entertainment to them. The users will motivate to continue use the cashless system if they feel enjoy when using the cashless system. Based on the findings of Zhang, Zhu, and Liu (2012), the greater the entertainment of the

technology system the greater the customer intent to accept. This result is significant with study done by Deningtyas and Ariyanti (2017) that the hedonic motivation will influence the intention of users to adopt cashless system. The result also supported by Susanto, Liza, Iskandar, Rela, and Wardi (2017) which their study also showed that hedonic motivation can have significant effect on behavioural intention of cashless system.

H6: There is a positive relationship between Habit and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Habit and intention to adopt cashless system by Malaysia's citizen.

Thus, it shows habit will have an influence on the usage of technology. According to Slade, Williams, and Dwivdei (2013), habit can directly affect the behavioural intention and use behaviour. The subsequent effect of habit on either behavioural intention or use is determined by the triggered process of habit (Venkatesh et al., 2012). This result is supported by the findings that done by Alalwan et al (2018) that habit can significantly affect the intention of the users to use cashless system. This result is significant with Susanto et al. (2017) that the intention to adopt cashless system can influences by habit of the individual. The result is consistent with the study done by Deningtyas and Ariyanti (2017), it prove that habit is the factors that affect most on the intention to adopt cashless system.

H7: There is a positive relationship between Actual Usage and intention to adopt cashless system by Malaysia's citizen.

The P-value is 0.000 and it less than 0.05 and therefore it has a positive relationship between Actual Usage and intention to adopt cashless system by Malaysia's citizen.

This explains that the chance of consumer to use the actual system will affect by the intention to use the system. The behaviour intention and recognize ease of use of an individual can affect the actual usage (Davis,1989). Therefore, the result is consistent with prior research that done by Sulistyaningsih et al. (2014) and it show there have a positive relationship between intention to adopt cashless system and actual usage of it. Based on the findings of Alalwan et al., (2017), intention to adopt were supported to be significant factor predicting the actual usage of cashless system. This result is supported with the findings done by Susanto et al. (2017) that there is a positive relationship between intention to adopt cashless system and the actual usage of it.

Therefore, all of the hypothesis above is accepted because all of them has a P-value than lower than 0.05.

Table 5.1: Summary of Hypothesis testing

Hypothesis	Supported ($p < 0.05$)	Not supported ($p > 0.05$)
H1: There is a positive relationship between Performance Expectancy and intention to adopt cashless system by Malaysia's citizen.	✓	
H2: There is a positive relationship between Effort Expectancy and intention to adopt cashless system by Malaysia's citizen.	✓	
H3: There is a positive relationship between Social Influence and intention to adopt cashless system by Malaysia's citizen.	✓	
H4: There is a positive relationship between Facilitating Condition and intention to adopt cashless system by Malaysia's citizen.	✓	
H5: There is a positive relationship between Hedonic Motivation and intention to adopt cashless system by Malaysia's citizen.	✓	
H6: There is a positive relationship between Habit and intention to adopt cashless system by Malaysia's citizen.	✓	
H7: There is a positive relationship between Actual Usage and intention to adopt cashless system by Malaysia's citizen.	✓	

Source: Developed for the research study.

5.3 Implications of the Study

This study provides regulatory implications for those policy makers and practitioners. Our results show that all the variables have an influence on the dependent variables which is the intention to adopt and usage of cashless system.

5.3.1 Managerial Implications

This study examines the factors that influence Malaysia citizen's intention and adoption of cashless system. The cashless system provides a lot of benefits to the citizen or even economy of a country.

This study offers a better understanding on consumer intention to adopt cashless system. Therefore, the data findings have ensured all of the six factors investigated, thus, this allows the practical implications from the perspective of strategies to recommend in order to increase the use of cashless system. It also shows that all of the six variables can affect and influence the intention and adoption of Malaysia's citizen in using cashless system.

There is some impact of cashless system on the banking industry of Malaysia. The cashless system can reduce the cost of the bank thus also can reduce their charges on consumer and lead to lower service charges for the consumers. This reduce the operation cost of the bank and also make the process of banking easier for both banker and customers. It also can help to make transaction become more transparency and accountability. The flow of money of every transaction being recorded by the bank and it can reduce money laundering. The clearly record of every transaction will easier for the government to check the black money circulation in the country. It also can reduce the financial scams in our country. According to (TheStarOnline, 2015), the banks can save RM1,800,000 a year by transforming to cashless operation. The cost of handling cash includes transporting

the physical notes and cashless system is more efficient compared to cash transaction.

Besides, it allows the government easier to track the taxation because with lesser availability of cash that can hide in home thus can reduce hiding income and evading of taxation. When the availability of cash is less, the illegal activities will relatively reduce also. People will not carry too much cash with them thus can reduce robbing case happen. Cashless system also has an impact on the country's economy.

Malaysia government is continuously encouraging citizen to adopt cashless system. According to Bank Negara Malaysia (TheStarOnline, 2017), 1 July 2018 onwards, the instant transfer fee of RM0.50 will be waived for up to RM5000 per transaction by individuals and small medium enterprise. The cheque fee will also increase from RM0.50 to RM1.00 and it will begin on 2 January 2021.

5.4 Limitation of the Study

There are few limitations in this study that restraint researcher to collect or acquire the complete and important information.

Geographical bias and age bias is the first constraint for researcher in this research. As mentioned before, this research is examining on Malaysia citizen, which is the whole Malaysia. The result is more focus on Kuala Lumpur and Selangor, even though both of this state is the main city of Malaysia, but the finding in this research may not represent the whole view or perception of Malaysia citizen intention and adoption of cashless system. Besides that, researcher found that the age range from the respondent are tend side, which is some age range there are only few respondents was involved in the age range such as below 20 years old and above 50years old. Therefore, the result cannot represent the whole Malaysia and other nationalities.

Secondly, this study is focus on cashless system. Cashless system includes many transaction or payment method such as debit card, credit card, mobile payment and mobile banking and so on. Some respondent involved in more than one cashless system, therefore, respondents might be having different perspective or experience on different cashless payment or transaction method and they might be ambiguous on which cashless transaction or payment methods they should refer when conducting the questionnaire.

Third, this research is only conducted from a quantitative perspective. Therefore, individual will change their perspective toward cashless system from time to time due to environment factors and technology advancement. Therefore, the result and findings for this research cannot be use for long term or in future.

The limitation sources of information such as journal, article for the particular topic conducted in this research to refer are also one of the limitations. There are limited journals are being published in Asia and lack of information that are related to this research topic. Moreover, the information is slightly same with each other from different journal which researcher faced difficulties to search for useful information to support the study in literature review.

In this research, although some limitations have been face but it does not affect the significance of findings and this research can provide insight for the future research.

5.5 Recommendations for Future Research

Researcher come out with some opinion or suggestions that can overcome the limitations for this research that mentioned. The first suggestion is narrow down the geographical area for the research. As the limitation mentioned that the findings is only focus in Kuala Lumpur and Selangor, so future researcher should narrow down the research to examine the intention and adoption of cashless system in Klang Valley Moreover, in order to represent the whole Malaysia, future researcher must

draw from different races and age on the percentage of each races and age in Malaysia populations or future researcher can examine on Generation X or Generation Y, which will make the research or result more accurate and no bias.

The second advice for future researcher who want to conduct research in the similar are of this research. They should shrink their research on a particular cashless system method. For example, they can examine only on mobile banking or mobile payment or Internet banking and others. By drawn down the research area, it can provide a better understanding on the particular cashless system and respondent also clear which cashless system they need to refer to when conducting questionnaire. Therefore, researcher could obtain specific respond that provide better information.

For future researcher who wish to have a precise or accurate result or findings for their research. Qualitative research method is valuable and use longitudinal research to collect data is required to fulfil the need of accurate result. It is very important to study the intention and adoption of cashless system in different point of time, because the perception or insight of one person will change from time to time.

Due to the lack of information can be obtain in Internet that related to this topic in this research which cause difficulty for the researcher to have accurate information. Therefore, not only research on particular topic of cashless system method should be done, more research or study on cashless system should be done especially in Malaysia, the more information related to the study the easier for future researcher to conduct the research with adequate or accurate result or findings.

5.6 Conclusion

In this research, it has proof that support the six independent variables have positive relationship with the dependent variable. Moreover, the intention to adopt is also significant to the usage of cashless system. All variables are positively related

according to coefficient value. The conclusions, implications of the study, limitation and recommendation for future research have been provide and explain in this chapter.

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APPENDICES

Appendix 3.1: Questionnaire

Questionnaire

**Examining the Factors that Influence Malaysia Citizen's
Intention and Adoption of Cashless System
Survey on Malaysia Citizen's Intention and Adoption
of Cashless System**

Dear Respondents,

We are undergraduate students from University Tunku Abdul Rahman (UTAR), Faculty of Accountancy and Management (FAM), pursuing Bachelor of International Business (Hons).

We are currently conducting a research project on the topic of "Examining the Factors that Influencing Malaysia Citizen's Intention and Adoption of Cashless System". The objective of this study is to understand the relationship between the five variables which are Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, Hedonic Motivation and Habit towards Malaysia Citizen's intention and adoption of Cashless System.

Cashless system can be known as an economy in which all type of transaction are carried out through digital and there is only little flow of cash in market or society. It involved e-banking (Mobile banking or banking through computers or internet), debit or credit cards and digital wallets.

This questionnaire consist of three part and it will takes approximately 10 to 15 minutes to complete. Please be informed that all the information, answer and identity of respondent will be kept strictly PRIVATE AND CONFIDENTIAL.

We appreciate your cooperation and time to complete this questionnaires.
Thank you for your participation.

Research Members:

NAME	STUDENT ID
CHOW KUN JIAN	1504180
TAN SIOK HIAN	1502377

Part A: General Information on Cashless System

In this section, we would like to know your basic information about cashless system.

1. 1. Do you use cashless system? *

Mark only one oval.

- Yes
 No

2. 2. Which cashless system do you use?(Choose all applicable options) *

Tick all that apply.

- Debit card/ Credit Card
 Mobile banking
 Mobile payment (Paypal, Alipay, Samsung pay, Apple pay, etc)
 Internet banking
 Other: _____

3. 3. How long have you been doing cashless transaction? *

Mark only one oval.

- 1 year
- 2 years
- More than 2 years

Part B: Evaluate the Factors that Influencing Malaysia Citizen’s Intention and Adoption of Cashless System

In this section, we seek for your opinion regarding the factors use cashless system. Please indicate the extent to which you agreed or disagreed with each statement using 5 points Likert scale.

(1) = Strongly Disagree (2) = Disagree (3) = Neither agree nor disagree; (4) = Agree (5) = Strongly Agree

1. Performance Expectancy

Degree to which when individual using a technology will provide advantages or benefits to them when performing certain activities.

4. a.) I find cashless system useful in my daily life *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

5. b.) Using cashless system increases my productivity *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

6. c.) Using cashless system helps me accomplish things more quickly *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

7. d.) Using cashless system increases my chances of achieving things that are important to me *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

2. Effort Expectancy

Degree of ease or how easy to use the technology.

8. a.) Learning how to use cashless system is easy for me *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

9. b.) My interaction with cashless system is clear and understandable *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

10. c.) I find cashless system easy to use *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

11. d.) It is easy for me to become skillful at using cashless system *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

3. Social Influence

The intensity to which an individual perceives that important others believe he or she should apply the new system

12. a.) People who are important to me think that I should use cashless system *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

13. b.) People who influence my behaviour think that I should use cashless system *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

14. c.) Cashless system use is a status symbol in my environment *

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

4. Facilitating Conditions

Defined an individual believes that an organization and technical infrastructure exists to support use of the system.

15. a.) I have the resources necessary to use cashless system *

Mark only one oval.

1	2	3	4	5		
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

16. b.) I have the knowledge necessary to use cashless system *

Mark only one oval.

1	2	3	4	5		
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

17. c.) Cashless system is compatible with other technologies I use *

Mark only one oval.

1	2	3	4	5		
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

18. d.) I can get help from others when I have difficulties using cashless system *

Mark only one oval.

1	2	3	4	5		
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

5. Hedonic Motivation

Fun, enjoyment or pleasure can be well defined hedonic motivation when using a technology.

19. a.) Using cashless system is fun *

Mark only one oval.

1	2	3	4	5		
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

20. b.) Using cashless system is enjoyable *

Mark only one oval.

1	2	3	4	5		
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

21. **c.) Using cashless system is entertaining ***

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

6. Habit

People tend to perform behaviour automatically because of learning.

22. **a.) The use of cashless system has become a habit for me ***

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

23. **b.) I am addicted to using cashless system ***

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

24. **c.) I must use cashless system ***

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

25. **d.) Using cashless system has become natural to me ***

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

7. Intention to Adopt

Degree of interest of a person to use a product.

26. **a.) I intend to continue using cashless system in the future ***

Mark only one oval.

	1	2	3	4	5	
Strongly Disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Strongly Agree

27. **b.) I will always try to use cashless system in my daily life ***

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

28. **c.) I plan to continue to use cashless system frequently ***

Mark only one oval.

1 2 3 4 5

Strongly Disagree Strongly Agree

8. Actual Usage

29. **What is your actual frequency of use of cashless system? ***

Mark only one oval.

- Have not use
- Once in six month
- Once in three months
- Once a month
- Once a week
- Once in 4-5 days
- Once in 2-3 days
- Almost every day
- Every Day
- Several times a day

Part C: Demographic Profile

In this section, we are interested in your background in brief. Your answer will be kept strictly confidential.

30. **1. Gender ***

Mark only one oval.

- Male
- Female

31. **2. Age ***

Mark only one oval.

- Below 20 years old
- 20-35 years old
- 36-49 years old
- 50 years old and above

32. 3. Cultural Heritage *

Mark only one oval.

- Malay
- Chinese
- Indian
- Other: _____

33. 4. Please describe your work status (Choose all applicable options) *

Tick all that apply.

- Students
- Unemployed
- Permanent Employment
- Contractual Employment
- Part Time Employment
- Pensioner/ Retired

34. 5. Education Level *

Mark only one oval.

- Professional
- Master
- Bachelor Degree
- PhD
- Diploma
- High school qualification

35. 6. How much is your monthly income? *

Mark only one oval.

- RM500 or less
- RM501-RM1,000
- RM1,001-RM1,500
- RM 1,500 and above

36. 7. Which state are you from? *

Mark only one oval.

- Wilayah Persekutuan
- Selangor
- Perak
- Kelantan
- Perlis
- Pahang
- Kedah
- Johor
- Terengganu
- Pulau Pinang
- Malacca
- Negeri Sembilan
- Sabah
- Sarawak

Adapted from: Martins, C., Oliveira, T. and Popovič, A. (2014). Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application. *International Journal of Information Management*, 34(1), 1–13.

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Appendix 4.1: SPSS Output

Reliability: Performance Expectancy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.794	.798	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PE1	13.03	2.812	.581	.369	.754
PE2	13.01	2.488	.660	.440	.713
PE3	12.87	2.780	.612	.380	.741
PE4	13.14	2.444	.579	.357	.761

Reliability: Effort Expectancy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.837	.840	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
EE1	12.81	3.069	.653	.439	.801
EE2	12.87	2.872	.701	.494	.779
EE3	12.77	2.994	.675	.456	.792
EE4	12.89	2.667	.659	.441	.803

Reliability: Social Influence

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.833	.840	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SI1	7.17	3.078	.731	.571	.735
SI2	7.25	3.071	.733	.572	.733
SI3	7.44	2.789	.633	.400	.844

Reliability: Facilitating Condition

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.774	.785	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
FC1	12.43	3.210	.635	.446	.687
FC2	12.26	3.718	.580	.374	.723
FC3	12.34	3.376	.657	.441	.680
FC4	12.53	3.267	.475	.238	.788

Reliability: Hedonic Motivation

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.926	.926	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
HM1	7.25	3.755	.847	.718	.895
HM2	7.17	3.705	.857	.735	.886
HM3	7.33	3.672	.842	.710	.898

Reliability: Habit

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.841	.844	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
H1	11.24	7.231	.551	.330	.849
H2	11.64	5.643	.733	.564	.772
H3	11.76	5.019	.742	.597	.775
H4	11.33	6.314	.716	.519	.785

Reliability: Intention to Adopt

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.807	.811	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ITA1	8.54	1.975	.601	.401	.792
ITA2	8.70	1.550	.635	.442	.769
ITA3	8.61	1.596	.750	.562	.635

Multiple Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.735 ^a	.540	.531	.42733

a. Predictors: (Constant), Habit, Effort Expectancy, Social Influence, Hedonic Motivation, Performance Expectancy, Facilitating Condition

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	62.854	6	10.476	57.365	.000 ^b
	Residual	53.506	293	.183		
	Total	116.360	299			

a. Dependent Variable: Intention to adopt

b. Predictors: (Constant), Habit, Effort Expectancy, Social Influence, Hedonic Motivation, Performance Expectancy, Facilitating Condition

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
1 (Constant)	.722	.234		3.092	.002	.262	1.182
PE	.362	.064	.304	5.631	.000	.236	.489
EE	.076	.062	.068	1.240	.216	-.045	.197
SI	-.039	.038	-.052	1.043	.298	-.113	.035
FC	.146	.060	.138	2.441	.015	.028	.263
HM	-.056	.033	-.084	1.669	.096	-.121	.010
HB	.374	.040	.479	9.461	.000	.296	.452

a. Dependent Variable: Intention To Adopt

Pearson Correlation Coefficient

		Correlations						
		PE	EE	SI	FC	HM	H	ITA
PE	Pearson Correlation	1	.592**	.202*	.543*	.406**	.440**	.584**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	300	300	300	300	300	300	300
EE	Pearson Correlation	.592**	1	.355*	.571*	.480**	.435**	.476**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	300	300	300	300	300	300	300
SI	Pearson Correlation	.202**	.355**	1	.493*	.437**	.477**	.293**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	300	300	300	300	300	300	300
FC	Pearson Correlation	.543**	.571**	.493*	1	.517**	.462**	.493**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	300	300	300	300	300	300	300
HM	Pearson Correlation	.406**	.480**	.437*	.517*	1	.472**	.346**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	300	300	300	300	300	300	300
HB	Pearson Correlation	.440**	.435**	.477*	.462*	.472**	1	.641**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	300	300	300	300	300	300	300
ITA	Pearson Correlation	.584**	.476**	.293*	.493*	.346**	.641**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	300	300	300	300	300	300	300

** . Correlation is significant at the 0.01 level (2-tailed).

Point-Biserial Correlation

Correlations

		ITA	Usage
ITA	Pearson Correlation	1	.220**
	Sig. (2-tailed)		.000
	N	300	300
Usage	Pearson Correlation	.220**	1
	Sig. (2-tailed)	.000	
	N	300	300

** . Correlation is significant at the 0.01 level (2-tailed).