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## MASTER OF BUSINESS ADMINISTRATION

The factors that influencing the intention of customers to  
use E-payment in Kuala Lumpur, Malaysia

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## **ABSTRACT**

With the development of the technology, there is a rapid development of the electronic payment system which make the payment become more and more convenient and effective. There is an increasing trend that more and more people are willing to use e-payment in their lives especially in China. However, the e-payment system in Malaysia is not widely used. This study is to research the factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia. Moreover, the framework of this research is based on the theory of reasoned action (TRA), and the data are collected through the questionnaires which received 384 valid questionnaires. In addition, data analysis of this study uses the SPSS and then it uses factor analysis and multiple regression to find out the critical factors that influence customers' intentions to e-payment. Finally, this study provides the recommendations to e-payment management institution in Malaysia to attract more people use the e-payment.

Keywords: E-payment, perceived security, effort expectancy, social influence.

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## **DECLARATION**

I hereby declare that this this is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been duly acknowledged.

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## **Chapter 1 Overview**

The essence of chapter one is to introduce the perspective of the research. In this chapter, it will major introduce the research background. And then it explains the problem statement and the objective of the research. The research questions will be introduced after that. Then, the study population of the research will be introduced in the content of the scope of study part. Subsequently, the significance part will introduce the importance and the contribution of the study. There will be some limitations in this study and they will be explained at the limitation part. Finally, this chapter will state the operational definitions and end up with the introduction of the organization of chapters.

## 1.1 Background

Electronic payment (e-payment) is a subset of an electronic commerce transaction that includes electronic payment for buying and selling goods or services whether or not they are offered through the Internet. (Hartmann, 2016). There is a rapid development of the e-payment especially in the forms and types of e-payment.

The advent of the Internet has greatly changed today's world especially in business. Internet was widely used in business which promote the development of the electronic commerce and electronic business. (Thomas, 2016). Today, e-commerce is one of the most important type of business which can be seen almost everywhere, and it is widely used in product design, business operations, business transactions, and even to the services delivery. (Tsai & Wang, 2015). With the development of the online-business, e-payment plays a significant role to expedite the transaction. Online or e-payment system is offered to profit oriented organization and non-profit oriented organization. (Ramli, 2013). It has been widely known that e-payment method makes the processing of the payment can be far cheaper than the dead-tree method of mailing out paper invoices. (Schneider and Perry, 2012). And they reckon that e-payment method is a win-win situation for customers and company as it makes the processing of the payment more convenient for customers and reduce the cost to the company in manage the money.

In Malaysia, e-payment is beginning with the form of the e-money which is implemented in Malaysia in 1999 with the introduction of MEPS cash in the Klang Valley. There is an encouraging response at the beginning. There are limited facilities to reload the cards with cash and only few number of outlets accept the MEPS cash. However, there is a huge difference in current

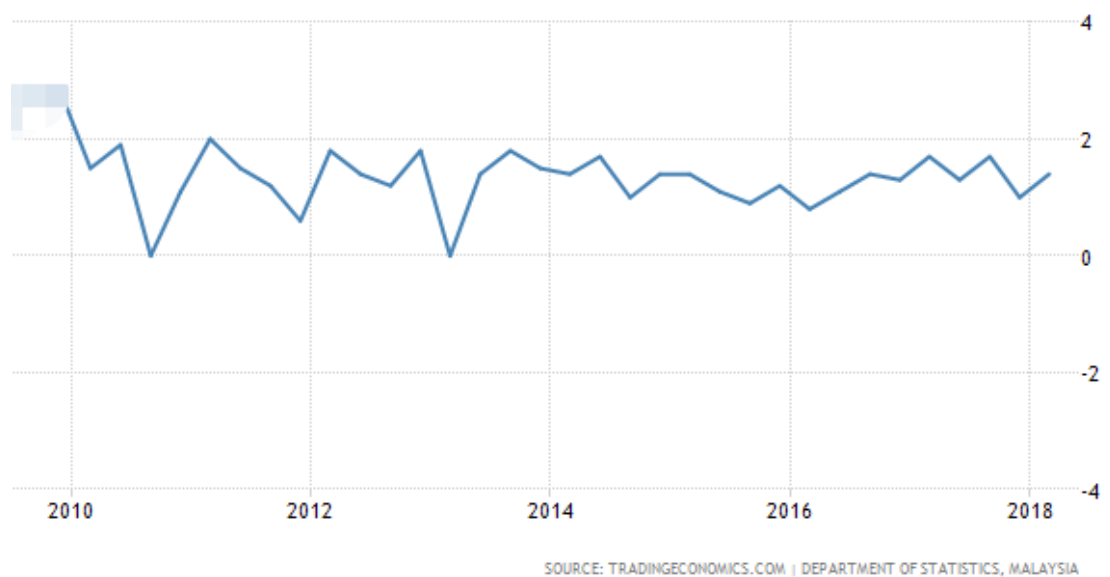


situation. Almost every ATM machine in is equipped with the ability to reload MEPS cash in Malaysia. (Vaithilingam,2013).

Malaysia's payment system has been changing in recent years. The emergence of the electronic payment systems is one of the most notable change. The central bank has been actively promoting the development of the payment system, especially with the gradual adoption of electronic payment methods as they believe that it is helpful to improve the efficiency of the entire economy (Basir, 2013). In recent years, there is a great increase of using of the e-payment tools and transaction volume and transaction volume of e-payment tools in Malaysia although chequeens remain the principal means of payment (Merican, 2012). Small and medium-sized enterprises can get a lot of benefits from the using of e- payment as it can bring more efficient business operations, lower costs and enhanced security and provides a wider choice of payment channels (Adnan, 2013). The development of the domestic payment system has become increasingly important for the development of an in-depth and active domestic financial market, the stability of the financial market and the reinvestment of savings (Basir, 2013).

## 1.2 Problem statement

The development of the E-commerce and e-business promote the development of the e-payment all over the world including Malaysia. (Zaky, 2016). There is a greatly increasing rate in usage of e-payment all over the world especially in China. But for Malaysia, there is only a slow increasing rate of usage of the e-payment from 2010 to 2018. The economic development of Malaysia had the similar trend with the development of e-payment. It had a growth rate which is between 0 to 2% from 2010 to 2018.



*Figure 3. GDP growth rate in Malaysia*

E-payment had about 20 years development in Malaysia since 1999, but there is a low speed of its growth rate. In other words, there are limited people use the e-payment in Malaysia. This research will study the factors that influencing the intention of customers to use e-payment in Malaysia. The development of e-payment has significant influence on the economic growth in Malaysia. So, it is significant to attach importance to the e-payment in Malaysia.

## **1.3 Research objective**

Research objective is the statement that identify and describe the variables and concepts and the relationship between them of the research.

### **1.3.1 Broad objective**

The broad objective of this study is to study the factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia.

### **1.3.2 Specific objectives**

There are major 3 specific research objectives which based on the broad research objective as follow.

RO1: to study the relationship between perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

RO2: to study the relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

RO3: to study the relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

## **1.4 Research questions**

Based on the work of Meltzoff and Easterbrook et al (2012), the research question is set out in research which the research will provide the answer. These questions are very significant as they are focuses of the research and the answer are related to the objective of the research.

There are many types of research questions and they can separate two major types based on the focus. The focus can separate to creating solutions and creating knowledge. (Robert Feldt, 2013). Of course, all types of research questions are related to the objective of the research.

In this study, there are 3 specific questions related to the research objective about the factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia.

RQ1: Is there any relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

RQ2: Is there any relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

RQ3: Is there any relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

## **1.5 Scope of study**

This research particularizes in the factors that influencing the intention of customers to use e-payment in Malaysia. Moreover, it is to ascertain the relationship between the perceived security, culture and the effort expectancy and the intention of customers to use e-payment in Malaysia.

The data are collected from the targeted participants answers to the questionnaires. And the all the participants are from Malaysia.

## **1.6 Significance of study**

### **1.6.1 Academic significance**

This research is significant to the academic area as it provides the insight into customers' intension towards the e-payment. The findings of this study are helpful to improve the availability of literature in the market. (Tobak, 2014).

### **1.6.2 Managerial significance**

With the development of the technology, e-commerce plays more and more important role in the development of the economy. E-payment system is also become one of significant payment method and the development of e-payment can promote the growth of the economy. And meanwhile, the customers' intention to use the e-payment has significant influence on development of the e-payment. In Malaysia, it is significant to attach importance to the customers' intention to use the e-payment as it has the vital influence on development of the e-payment so that influence the growth of economy in Malaysia. This study is helpful to know about more information about the factors influencing the customers' intention to use the e-payment in Malaysia so that have the targeted improvement to attract more customers to use the e-payment.

## **1.7 Limitations of study**

### **1.7.1 Limitation of population sample**

It is no possible to reserve all customers' intention but choose some of them as the sample to have the research. The first limitation is the sample size is not enough. It is necessary to choose 10% of population size as the sample size and the maximum sample size is 1000. (Raosoft, 2012). There are about 1.67 million people in Kuala Lumpur, Malaysia in 2016 and the sample size should be 1000. It is very difficult to invite over 1000 participates and not all the customers are willing to accept to complete the questionnaires which leads the lack of the sample size. Besides, it is difficult to choose the participants all over the Malaysia but only choose some of place in Malaysia. It may lead the general assumptions to them are not very accurate.

### **1.7.2 Limitation of the quantitative method**

The objective of quantitative method is the quantification of data. It allows the researcher to summarize provides his opinions based on the data. (Saunders et al, 2012). This method inclusive two phases which are planning and execution, and therefore there are some limitations in the process that out of our control. (Simon, 2014). Firstly, the limited outcomes in a quantitative research. The structured questionnaires in quantitative research lead to limited outcomes which is unhelpful to the research to have an in-depth exploration about the factors that influence the customers' intentions to use e-payment in Kuala Lumpur, Malaysia. (Sudeshna, 2016). Secondly, difficulty in data analysis. Quantitative study needs the extensive

statistical analysis, the effective response needs to relate to the research problem which involve social sciences, education, anthropology and psychology aspects. The simple questionnaire which only answer yes or no is difficult to have a detailed data analysis

### **1.7.3 Limitation of time**

The time is not enough the make the research in- depth. There is limited time to find enough participates.



## **1.8 Operational definitions**

### **1.8.1 Customer intention**

Customers' satisfaction is a customer's commitment, plan, or decision to carry out an action or achieve a goal (Eagly and Chaiken, 2013). And it is always replaced by some synonyms such as choice, decision, and plan.

### **1.8.2 E-payment**

E-payments can be defined as the process of payment made without the use of paper instruments. (Junadi, 2015).

### **1.8.3 E-commerce**

E-commerce is a business model which involves transactions taking place on the internet which covers a range of different types of businesses. It can be consumer-based retail sites and the business exchanges trading goods and services between corporations. (Ferreira, 2017).

### **1.8.4 Commercial banks**

A commercial bank is a profit-making financial institution which major provides the loans for investment and accepting deposits from the public to make profits. (Paul F. Smith, 2014).

## **1.9 Organization of chapters**

Chapter 1 provides a briefly introduction of the background, objectives, significance of the research. And overall, the importance of the customers' intention to use e-payment in Kuala Lumpur, Malaysia and the limited researches in this topic is the most important meaning of this study.

Chapter 2 will focus on the literature review of previous studies about the factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia.

Chapter 3 will provide the research methodological approach to analyze the topic. It major discuss the research design, procedures of population, sample and sampling, data analysis method, variables and measurement.

Chapter 4 will explain the result based on the analysis of the data of the research by the SPSS software.

Chapter 5 will summarize and concludes the present studies and findings and have a further analysis about the limitations, suitable recommendations to the research.

## **Chapter 2 Literature review**

### **2.0 Overview**

In order to make it better to understand the research, this research referred some content that relevant to the topic in books and journals. In this chapter, it will review the theory of customers' intention in Malaysia perspective and the influencing factors which includes the perceived security, social influence and effort expectancy. And then, this chapter will illustrate the relationship between the customers' intention and the factors. Besides, this chapter will review the theory of each factor. Finally, it will use the framework and set the hypotheses to make the idea clearer in this research.

## 2.1 E-payment

The concept of electronic payment can be interpreted as the transfer of money from a payer to a payee through an electronic medium. Electronic payments involve the exchange of funds initiated through electronic communication channels (Shon & Swatman, 2012). It can also be defined as a process of payment that does not require the using of paper instruments (Junadi, 2015). An electronic signal is a prerequisite which must exist in order to be able to connect directly to the depositor or creditor bank's account (Gans & Schering, 1999). Typically, electronic payments are made when you buy online. When you buy online, verification, validity, and approval exist. Most of the transactions apply to Internet/online banking and credit cards. However, electronic payments are not limited to credit cards, debit cards, electronic money, and internet banking. Payments via ATM or bank counters are also considered electronic payments, as long as the customer transfers money using electronic devices.

Payment is a pulse of business, especially for business-to-consumer models. Money flows are considered to be one of the key success factors for e-commerce and the flow of information and products (Tsiakis, 2013). For online transactions, credit cards, credit cards, checks, debit cards, and electronic wallets are the major available payment instruments. However, credit card is the most common payment method for online transactions (Xie and Wong, 2013). In fact, purchasing through e-commerce does not mean that buyers must pay online fees directly during the transaction. In addition, they can use ATMs to make payments and digitally transmit payment information.

## **2.2 Customer's intention**

Customers' intention is a kind of decision-making that studies the reason that why the customer choose the product or the service instead of another one. (Shah et al., 2012). Morinez et al. (2013) define customer's intention as a situation where consumer tends to choose a certain product in certain condition. In fact, Customer's intention is a complex process. Customers' intentions are usually related to customers' behaviors, attitudes and perceptions. Customer's behavior is one of the most important factor to consumers accessing and evaluating specific products and services so that make decision (Hamid Akbariyeh, 2013). Ghosh (2015) pointed out that customer intention is an effective tool to predict the customers' decision-making process. There are some factors that has significant influence on customers' intentions such as perceived quality and value of the products and services. In addition, consumers' intention is affected by internal or external motivations during the decision-making process (Gogoi, 2013). Researchers have proposed six stages before they decide to choose the product and service which includes awareness, knowledge, interest, preference, persuasion, and purchase (Kotler & Armstrong, 2013). Customers are always worried about the product and service if they have less knowledge and understanding about the product and service as they think that it is not reliable and there is a high risk to choose the product or service (Gogoi, 2013).

### 2.3 Perspective of customers intention to e-payment in Malaysia

It can be divided into three major periods from the 1970s to the mid-2000s of the development of electronic payment systems in Malaysia, as shown in Figure 1. In the early stages of the late 1970s, payment systems began with the deployment of credit cards. Then in the late 1990s, a network-based and Internet-based payment system was applied. The latest mobile-based payment system appeared in the mid-2000s.

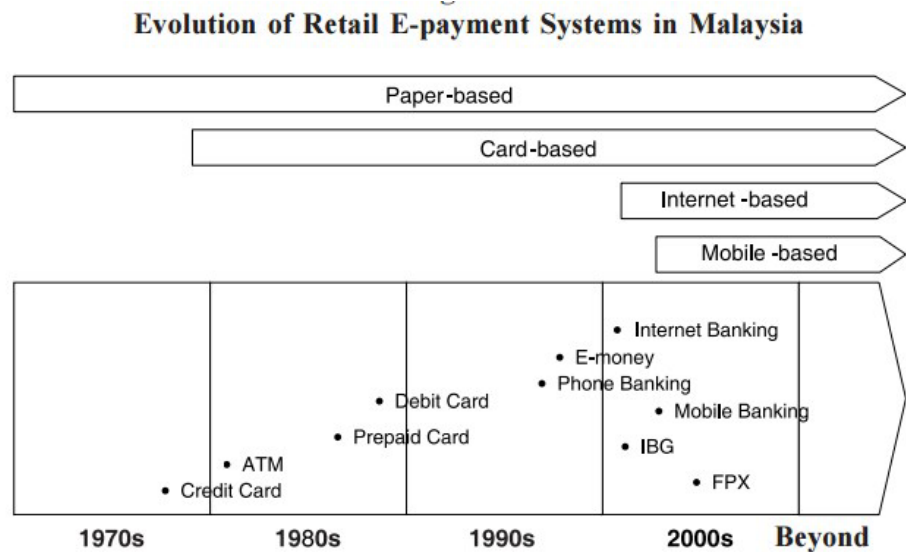


Figure 1: Evolution of the Retail E-Payment System in Malaysia

In Malaysia, with the invasion of information technology and major retail electronic payment systems (FPX) and interbank GIRO (IBG), payment systems are growing rapidly (Mohammad, 2013). Based on Basir (2012), the electronic payment systems are highly used in credit cards, online banking and interbank GIRO (IBG) by Malaysians, while credit cards, debit cards and electronic money are used at lower levels. Abdullah (2012) supported it who claimed that 90% of e-commerce transactions are paid by credit card which means that Malaysians are more familiar with credit cards than other methods, although there are other payment methods.

In recent years, Malaysia's payment system has been changing. One of the

notable changes is the emergence of electronic payment systems. The central bank has been driving the development of payment systems, especially in the gradual introduction of electronic payment schemes, because they believe that these systems have the potential to increase the efficiency of the overall economy (Basir, 2013). In recent years, the active introduction of electronic payment tools has increased the per-transaction value and transaction volume of electronic payment instruments. However, checks are still the main payment tool. With more efficient business operations, lower costs, enhanced security, and broader choice of payment channels, SMBs can benefit from the use of electronic payment programs.

In Malaysia, electronic payment systems are increasingly recognized by consumers. The increase in non-cash retail transactions in recent years is an evidence of it. As Figure 2 shows, the number of non-cash transactions in Malaysia increased from 13.8 to 32.5 (from 2003 to 2007). In terms of value, in the duration of 2003 to 2007, the share of electronic payments in total non-cash retail sales increased from 3% to 7% (Bank of Malaysia 2007). The increasing of cost is one of most significant reason of increasing use of electronic payment instruments, which may save on safety and insurance premiums, as well as safety, as holding cash reduces the risk of theft, robbery and human error. In addition, customers have more confidence of the security measures of electronic payment instruments. For example, bank card security features that require personal identification numbers which prevents theft and fraud. And it is helpful to increase the willingness of consumers to use electronic payments. Among the electronic payment tools, the main tools used in Malaysia are credit cards, internet banking and IBG. Credit and debit cards is also used by customers but less important. Electronic money is a term commonly used for settlement, neither using cash nor paper which refers to those prepaid instruments that contain the value of money that can be used to buy when the merchants accept it as a payment and it will be automatically

deducted from the electronic money balance. Currently, there are two types of electronic money: card-based electronic money, such as prepaid cards; and web-based, such as Internet accounts that can be accessed via mobile phones. Both methods are secondary to electronic payment instruments. Mobile banking is still not widely used.

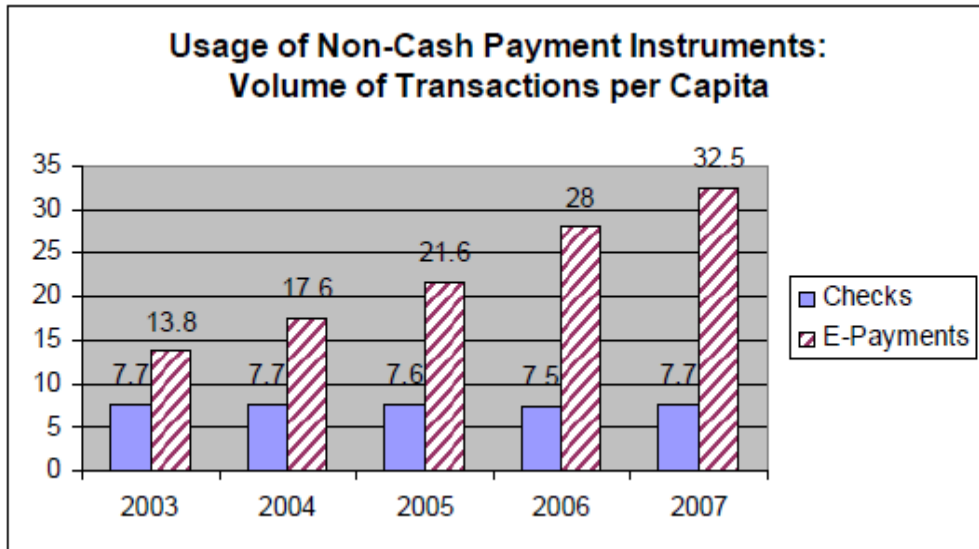


Figure 2: Usage of Non-Cash Payment Instruments



## **2.4 Factors influence the customers' intention to e-payment.**

Customer's intention to e-payment is that customers are willing to choose the e-payment as the payment method. It is convenient to customers to use the e-payment as they do not need to bring too many cash. And it is also better to company to accept the e-payment as it is more accurate and efficient to them to record and calculate the transaction information.

It is significant to research that how to influence customers' intentions to choose e-payment. To research the influence factors to customers intention to e-payment is to research what they need and expect to e-payment. In this study, it major analyze major 3 factors which includes customers' perceived security, social influence and customers' effort expectancy to e-payment.

#### **2.4.1 Perceived security.**

Perceived security is a critical part effecting on whether customers make a payment online. Some researchers mentioned that the lack of online payment channel and policies supporting limited purchasing power of customers in in the past decade. More and more Third-party e-commerce payments found and tried to promote the new channels. However, did not rise the intention of customer online payment. They would not like to trust online transaction and care about money refund. According to relevant researches, articles pointed out two main reasons why development of E-payment slowing down in Malaysia are more likely caused by privacy disclosure and payment insecurity.

The scale of investigation could narrow down in three questions that are Technical protection, security statements and Government and central bank regulations based on two reasons as above. The growth of E-commerce increased rapidly in the past decade. At the same time, the Technical protection keeps getting to be more secured and reliable with time. Noteworthy, majority of researchers believed perceived security has a positive effect on intention of customers to use E-payment system. Perceived security was defined by the “customers’ perception of the degree of protection against these threats (Yousafzai, Pallister & Foxall, 2013). Other scholar remained the different point that he considered Perceived security could be the extent an individual believes a mobile device will be free of risk to conduct C2C e-commerce (Lori N. K. Leonard, 2010). Customer willing to pay the bill relaying on powerful e-payment system. On the other word, there is positive correlation which was proved between intention of online payment and level of technological protection.

#### **2.4.2 Social influence.**

Social influence is a popular method as a call to attention. Everything could be main factors impacting on sense of people in the Digital Era such as emotions, opinions or behaviors. Many scholars proved that positive correlation in between which means positive effect on intention to use e-payment system. According to research of University of British Columbia, both sociological activities and psychological behavior could change others' mind and determine whether transaction happened. For example, retail sales often persuade customers to consume much of time on shop or products. Festinger's social comparison theory mentioned the role of social influence in consumption. It says aspects of social influence consists of Compliance, Identification, and Internalization from a free-thinking society.

Social influence also impacts on marketing nowadays. Majority of people love to share their opinion, feeling and belief for getting recognition of consumption. And this ability is strong enough result in purchasing experience. Customer usually are suspicious of reliability of online payment and hesitate which channel is the safest. Noteworthy, customer would listen advise of online users because their comments are only criteria to judge whether e-payment secured to buy products. As the active use of all major social networking sites continues to grow, engaging with influential people has become a key component of the marketing equation.

Well-known influencers are promoters, vibrators, and people who can make things happen. They inspire culture, shape trends, and put forward opinions of the people's trust and attention. Their thoughts

and the use of their portraits are also high-paying. Of course, not everyone has access to elite athletes, superstar performing artists, widely read journalists or other celebrities, not to mention budget contacts with them.

### **2.4.3 Effort expectancy.**

Customers' Effort expectancy is the level of ease related to the use of electronic payment (Venkatesh, 2013). There is a high similarity between effort expectancy and the performance expectations, Venkatesh (2013) captured three structures from other models that were considered to be perceived ease to use, complexity, and easy to use. Ease to use is the first concept which is based on the Davis' technology acceptance model and it means that people can use new technologies effortlessly. The second concept is complexity of the MPCU (Thompson, 2012) which is integrated into the expected expectations. The complexity in this model is considered as the difficulty of using the system, as the user perceives. The ease of use as the last concept is the core construct of IDT (Rogers, 2015), which is defined as in addition to the same differences in complexity. The definition of complexity involves a general system, while ease of use is about innovation (Venkatesh, 2013). Plouffe (2012) and Thompson (2012) confirmed the similarities between these concepts.

Arman and Hartati (2015) stated in previous studies that expected expectations have a positive impact on behavioral intentions and practical use of technology or technology. Zhang, Huang, Hong, Li, 2007;). And it is supported by Most researchers such as Phichitchaisopa and Naenna (2013). However, Arman and Hartati

(2015) have concluded that there is no significant effect of effort expectancy to customers' intentions. Of course. Arman and Hartati (2015) argue that there is a possibility that the characteristics of the sample has influence on the outcomes. There are almost 70% of the participants are advanced age people (50-70 years old) and they have rich experience, the age and experience of them make the effort expectancy to them moderated.

## **2.5 Theory of reasoned action.**

TRA theory is one of the most common models which is used to analyze the individual behavior. (Fishbein and Ajzen, 2012). The model stems from the learning theory and assumes that the behavior of a particular object is performed by the intention. It is intended to represent a person's conscious plan in an effort to perform an act (Eagly and Chaiken, 2012). The theory of rational behavior (Fishbein and Ajzen, 1975) was first introduced in the field of social psychology and is widely used to explain individual behavior. This hypothesis argues that behavior is predicated on the individual's willingness to participate in a particular activity. On the contrary, intention is predicted by two factors, the individual's attitude toward the result of the behavior and the perspective of the individual's social environment, which is called subjective norms (Fishbein and Ajzen, 2012).

It is difficult to measure the similarities between people all over the world so that it is also difficult to recommend and create rules that explain how all people make buying decisions (Abdulrahman, 2012). However, experienced scholars came up with a useful "outline" and a set of guidelines to analyze how the consumers make purchasing decisions. The validation of TRA theory is very significant before adopting consumer behavior in the Kingdom of Saudi Arabia. In addition, Bang. (2012) contended that, the TRA model contains cultural biases of west. Researchers support the viewpoint and state that "TRA should be revised, or extended" (Javalgi, Khare, & Gross, 2012). Ticehurst and Veal (2012) also agreed this viewpoint and stated that the outcomes of the research can be influence by the culture.

Theory of Reasoned Action (TRA) was adopted in several studies which predict the actual behavior in different locations and theory includes all types of actual behaviors (Shappard, 2012). Shappard, Randolph, Wolff and Sherran use the meta-analysis studies to support the TRA which includes the

intentions, attitude and subjective norm among the TRA. Intention is the “probability, as stated by the respondent, that he/she will perform the stated action”. (Ajzen & Fishbein, 2012). The attitudes and subjective norms constitute the intention. Fishbein (2012) has proposed that behavior is the additional variables which has influence on the intention and could be included in model of the TRA. Behavioral intentions "capture the motivational factors that influence a behavior; they try their best to perform themselves. (Ajzen, 2012, p. 181). Attitude is a stand about the person’s feeling of favorableness or unfavorableness toward a concept. (Fishbein and Ajzen, 2012). Based on TRA, attitude is the first determinant of individual intention to act. According to Ajzen and Fishbein, attitude towards behavior is the estimation to a certain behavior which could be positive or negative which depends on the evaluation construct. It is “determined by a total set of accessible behavioral beliefs linking behavior to various outcomes and other attributes” (Ajzen and Fishbein, 2012). Thus, attitude is an important belief that a person is positive or negative about the result of his or her own behavior. Therefore, when the consumer has a positive and significant belief in his behavior, his attitude toward such behavior is positive. On the contrary, when he has a negative and obvious belief in a result of his purchase, he will be considered a negative attitude. Ajzen and Fishbein mentioned, “Subjective norms are a person’s own estimate of the social pressure to perform or not perform the intended behavior” (Ajzen and Fishbein, 2012). It refers to a people’s perception of other people’s such as his or her friends and families’ perception to his or her behaviors and the outcome of these behaviors. In other words, whether the individual’s opinion is positive or negative, normative belief and motivation to comply will create the subjective norm. The consumer's perception is that the importance of the people around, and how they think about him or her actions will determine the outcome of the action. (Ajzen and Fishbein, 2012).

There are some researchers studied the factors that influence the customers' intentions to the e-payment as the table shows.

Reserches	Study	Purposes	Approaches
Huang, Encho & Chang <sup>13</sup>	Online Security Cues and E-Payment Continuance Intention	Examine the relationship between perceived benefits, legal protection, risk avoidance, and satisfaction of the e-payment, continuance intention	Perceived risk, perceived legal protection, confirmation, perceived benefits, satisfaction and continuance intention
Gholami et al. <sup>11</sup>	Factors Affecting e-Payment Adoption in Nigeria	Examine the factors that influence the adoption of e-payment in Nigeria, using extended UTAUT model	Awareness, trust, performance expectancy, effort expectancy, social influence, facilitating condition and e-payment adoption intention
He & Mykytyn, 2007 <sup>12</sup>	Decision Factors for the Adoption of an Online Payment System by Customers	Examine the influence of perceived risk, perceived benefits, the vendor's and customer's system features characteristic of the intention in using online payment system	Perceived characteristics of the online payment system, system characteristics, customer's characteristics and adoption of online payment system
Tella & Olasina <sup>14</sup>	Predicting User's Continuance Intention Toward E-payment System : An Extension of the Technology Acceptance Model	Predicting user's intention in the use of e-payment systems in a sustainable manner by using synthesis theory of technology acceptance model (TAM)	Perceived usefulness, perceived easy of use, enjoyment, speed, perceived benefits, attitude, perceived satisfaction, actual use and continuance intention

Table 1 Summary of approaches and purposes by researchers in e-payment



In this study, it major based on Gholami's viewpoint which uses the UTAUT model.

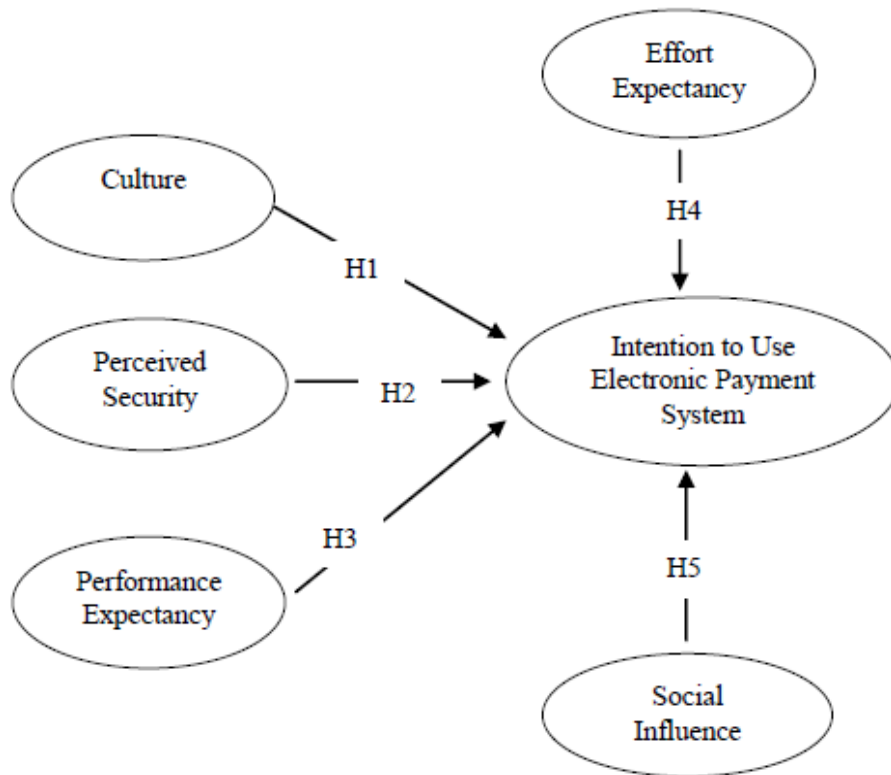
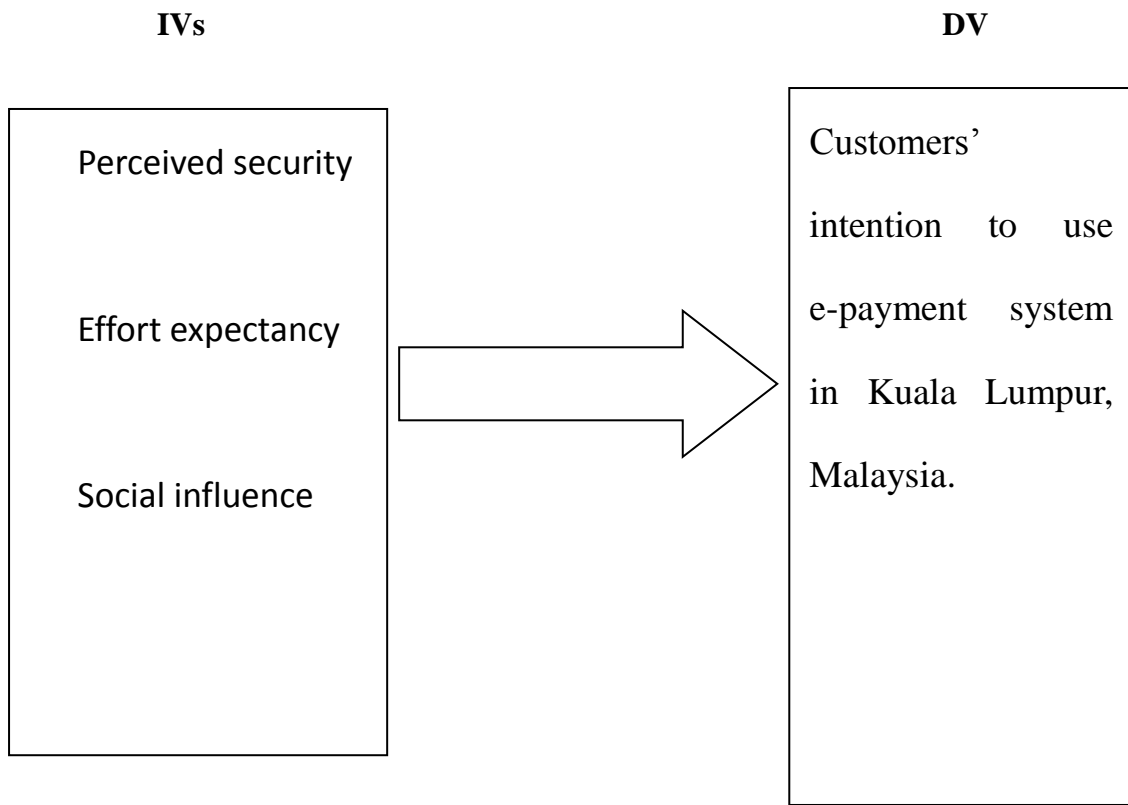


Figure 3. UTAUT model of factors influencing consumer's intention to use e-payment system

Based on the UTAUT model, this study summaries three of them which includes perceived security, effort expectancy and social influence as the independent variables.

## 2.6 Conceptual Framework.



## **2.7 Research hypothesis**

H1: There is any relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

H2: There is any relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

H3: There is any relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

## **2.8 Conclusion**

To conclude, this chapter reviewed the previous researchers' literature about factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia. And then it analyzed the 3 IVs which includes perceived security, effort expectancy and social influence and the relationship between the customers' intention to e-payment and the 3 IVs. Subsequently, it analyzed the theory of reasoned action and provides the framework to clearer display the relationship between customers' intention to e-payment and the 3 IVs. Finally, it suggested the hypothesis for each factor.

### **Chapter 3 Research Methodology**

This chapter will discuss research methodology of the study. Firstly, it will introduce the design of the research. And then it will explain the sampling design which includes content of population under study, sampling design, sample size, questionnaire to distribute and unit of analysis. Next, it will discuss the questionnaires design which introduce that the study will use the Likert scale to design the questionnaires and it will adapt and adopt to the questionnaires in previous research. Finally, it will illustrate the measurement of study which includes the pilot test, demographic profile, preliminary test and hypotheses test.

### **3.1 Research design**

A research design was defined as the framework that is used to guide a researcher in conducting a study. (Epetimehin and Ekundayo, 2014). This includes the method to collect the data and the procedure to evaluate the necessary data for the study. Schindler and Cooper (2014) also defines a research design as the process of determining the sampling method, the sample size, and how measurement of data and data analysis will be carried out.

In addition, this study will adopt a descriptive research survey design to describe the characteristics of the customers' intentions associated with the individuals. (Schindler and Cooper, 2014). According to Mugenda et al., (2013) descriptive survey makes both qualitative and quantitative methods are available in research and does not need to change the study environment. And the correlation study will be used in this research. (Bryman and Bell, 2015). The correlation study aims to study the relationship between the customers' satisfaction and the influence factors. (collies and Hussey, 2013). Furthermore, the correlational study needs to be conducted in a natural environment with minimal interference by the researcher and the setting of the study which is meet the requirement of the natural environment and minimal interference so that it can be treated as non-contrived. (Sekaran and Bougie, 2016).

This study will use the paper/questionnaires-based survey as the major data collection method and the data form the respondents are used only once. And this study will use the cross-sectional design as the information from the respondents is used only once over a period of days or weeks months. (Mukesh et al., 2013)

## **3.2 Sampling design.**

### **3.2.1 Population under study**

Based on Sekaran and Bougie (2016), population is defined as an integrated group of individuals, events, or things of interest which the research would like to examine. The population of this study are the customers who lives in Kuala Lumpur, Malaysia. There are about 1.67 million people lives in Kuala Lumpur, Malaysia. Hence, the population of the study is 1.67 million. (China Daily, 2017)

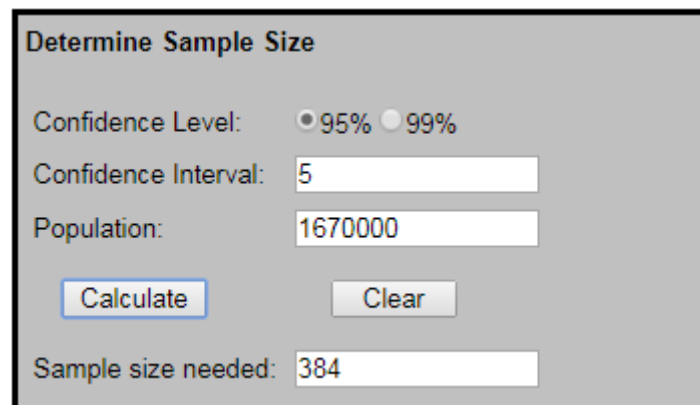
### **3.2.2 Sampling Plan**

This research is using sampling. Based on Sekaran and Bougie (2013), Sampling is the process to select proper and sufficient number of elements from the population and total population sampling is one type of sampling which has specific propose and the sample has a set of characteristics. Hence, the sampling of this study is to determine the number of people lives in Kuala Lumpur, Malaysia (Cooper and Schindler, 2014). This study uses a sample instead of total population sampling because there is a large number of entire population so that it is difficult to distribute and collect data from each single member of the population (Bryman and Bell, 2015). Zikmund et. al. (2012) supported that the sampling design contains 2 major types which incldes probability sampling and non-probability sampling. The study will use non-probability sampling, because research does not need the popularization and just need the quick and low-cost access to data (Sekaran and Bougie, 2016).

Based on Cooper and Schindler (2014), non-probability sampling design includes 2 major types which are convenience sampling and purposive sampling. This study will adopt a convenience sampling since it makes the process of information collecting from members of population to be easy and convenient. (Zikmund, et. al., 2012).

### 3.2.3 Sample Size

Based on Sekaran and Bougie (2016), the confidence level, confidence interval and the population size have significant influence on the determination of sample size. Based on Krejcie and Morgan (1970), this study will use 95% confidence level and 5% confidence interval. The amount of population is 4 million, therefore the requirement sample size is 384 like the figure as below.



The image shows a software interface titled "Determine Sample Size". It contains the following elements:

- Confidence Level:** Two radio buttons, with "95%" selected and "99%" unselected.
- Confidence Interval:** A text input field containing the number "5".
- Population:** A text input field containing the number "1670000".
- Buttons:** A blue "Calculate" button and a grey "Clear" button.
- Output:** A text input field at the bottom labeled "Sample size needed:" containing the number "384".

Figure 5 Sample size Source: The Survey System (2012)

### 3.2.4 Questionnaire to Distribute

Based on the calculation, the sample size needed is 384. In this study, it will have 400 sample which means that it will distribute 400 questionnaires to random people who lives in Kuala Lumpur, Malaysia. Which is based on the Sekaran and Bougie (2016), who stated that the proper sample size for the most research is between 30 and 500 and the number of questionnaires can be more than required sample size.

### 3.2.5 Unit of Analysis

Based on Cooper and Schindler (2014), the unit of is analysis considered to be the respondents layer that provides data during the following data analysis session. In this study, individual is used as unit of analysis, because the focus of the study is to describe the influence of the independent variable customers' intentions and the research is based on the analysis of the collection of each individual data and each individual answer. (Sekaran and Bougie, 2016).

### **3.3 Questionnaire design**

#### **3.3.1 Explanation of questionnaire**

The questionnaire is a wide range of questions that the researchers prepared to record the answers to have analysis before they were distributed to the respondents. Which is considered to be an effective data collection mechanism (Bryman and Bell, 2015). In this study, questionnaire will be used to collect data and have analysis as the data that will be collected in this study are quantitative data which is the main function of questionnaire to collecting the quantitative data. (Cooper and Schindler, 2014). And in this study, the research pay attention to the using of wording to avoid biases world as far as possible and ensure that the collected information is proper for testing hypotheses, and the questionnaire is well-constructed and easy for respondents to understand. (Zikmund et. al., 2012).

#### **3.3.2 Likert scale**

Likert scale is a kind of psychometric response scale which is applied in questionnaire to get respondents' degree of agreement of statements (Zikmund et. al., 2012). Market research widely use the Likert to measure respondents' attitude and response to the specific products and services so that has targeted improvement based on the research outcomes. (Joshi, Kale, and Pal, 2015; Khizindar et. al., 2015). This study uses the Likert scale to make it convenient to design and control the scale and make respondents to understand the questionnaire easily. (Cooper and Schindler, 2014). There are 2 types of Likert scale which includes 5-point Likert scale and 7-point Likert scale. (Bryman and Bell, 2015). In this research, 5-point Likert scale will be used as it contributes to the following session of data analysis. 5-point Likert scale means that respondents identify their agreement level of the statement to 5 levels which includes Strong Disagree =1, Disagree =2, Neutral =3, Agree =4, and Strongly Agree =5 to confirm influence factors of customers' satisfaction. (Amin et. al., 2012; Hafez and Akther, 2017).



	Items	No.	Sources/References
Part I	Demographic Profile	3	Sahoo and Mishra (2013) Adzoyi and Klutse (2015) Msallam and Alhaddad (2016)
Part II (Dependent Variable)	Customers' Intentions	4	Junadi (2015) Sfenrianto (2015) Ghorban (2012) Keramati (2014)
Part III (Independent Variables)	Perceived Security	4	Karimov (2016) King, & Shung (2017) Hewer (2013) Young (2016)
	Effort Expectancy	4	Hung (2012) Chang (2012) Jacqueline & Vischer (2012) Yu (2012)
	Social Influence	4	Gans & Scheeling (2012) Adeyeye (2012) Paynter & Lim (2012)

**Figure 6. Questionnaires and sources**

Based to Zikmund et. al. (2012), the design of questionnaires can use 3 methods which includes adopt questions from pre-existing researches, adapt questions from pre-existing researches and design new questions. Adopting means that take the instrument with less change and the Adapting means that there is a significant change in using of the instrument (Katrina A. Korb, 2012). Both adapting and adopting method will be used in design of questionnaires as it makes it easy to respondents to understand the questions which is helpful to improve the validity of the questionnaire (Sekaran and Bougie, 2016).

### **3.4 Measurement of study**

Measurement is a procedure that describes the characteristics of a phenomenon in a study through reliable and valid allocating numbers (Zikmund et. al., 2012). In this study, the pilot test, demographic profile, preliminary testing and hypotheses testing will be used to complete the measurement.

#### **3.4.1 Preliminary Testing**

Preliminary testing is under the pilot test that is mentioned before. It measures that whether the factors in questionnaire are proper and whether the respondents understand the questionnaire in same way. (Sekaran and Bougie, 2016). This study will ensure that the loading value exceeds 0.6 which means that the factors in questionnaire has at least mediocre proper level and the way that the respondents understand the questions has at least mediocre similarity level.

#### **Demographic Profile.**

Demographic profile is the data which indicates the personal characteristics of population such as age, gender, income, education level, race, religion, etc. (Sekaran and Bougie, 2016). In this study, information of age, gender, and income is collected since the difference of these factors has influence on the customer satisfaction to the commercial banks. (Adzoyi and Klutse, 2015).

#### **Reliability Test.**

Reliability is used to identify a reduced number of factors from a larger number of measured variables (Hair et al, 2014). The reliability test is widely used in questionnaires because of its high efficiency and this study will also use the reliability test to evaluate whether the measurement is reliable. (Cooper and Schindler, 2014). Cronbach's Alpha value is generally used to represent the outcome of the measurement which is ranged from 0 to 1. (Bryman and Bell, 2015). And according to Mohajerani and Miremadi (2012), the Cronbach's Alpha value can be separate to 7 levels which includes unacceptable reliability (0-0.49), poor reliability (0.5-0.59),

questionable reliability (0.6-0.69), acceptable reliability (0.7-0.79), good reliability (0.8-0.89), excellent reliability (0.9-0.99) and perfect reliability (1). In this study, it will ensure that the Alpha value exceed 0.7 which means that there is an at least acceptable reliability of the measurement.

### **3.4.2 Hypotheses Testing**

A hypothesis is a guess and assumption about outcome of the study. Hypothesis testing is a way to test the results of a survey or experiment to see if there is a meaningful result. (Sekaran and Bougie, 2016). In this study, it will use the simple multiple regression and one-way ANOVA test to complete the hypotheses testing.

Multiple regression is an extension of simple linear regression which is used to predict the value of a variable based on the value of two or more other variables and the variable that the study predict is the dependent variable. (Cooper and Schindler, 2014). According to Khizindar et. al. (2015), The objective of multiple regression is to understand more about the relationship between several independent and a dependent variable. In this study, multiple regression analysis is used to learn more about the relationship between customers satisfaction and the service quality, environment and technology of bank so that determine which factor has more powerful influence on the customers' satisfaction. (Khuong and Dai, 2016).

The one-way analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of three or more independent groups. (Sekaran and Bougie, 2016). As stated by Zikmund et. al. (2012), one-way ANOVA can be used to forecast a continuous dependent variable with several independent variables. In this study, one-way ANOVA test is used to predict the continues factors except the service quality, environment and technology of bank that has influence on the customers' satisfaction.

### 3.4.3 Factors analysis

In this study, factor analysis will be used to test the validity of the questionnaires and study (Ting, 2014). Based on Rahman and Kamarulzaman (2012), validity and reliability are used to measure the goodness of the items which is necessary to be conducted before hypotheses testing.

Kaiser-Meeyer-Olkin (KMO) Test is a measure of how suited your data is for factor analysis which measures the adequacy of sampling for each variable in the model and for the complete model. (Rahman & Jalil, 2014). Which means that the KMO test measure whether the factors the study choose to analyze is useful or useless. Based on Khizindar, Azzam, and Khanfar (2015), the range of loading value is between 0 to 1, and Kaiser (2015) separates the loading value to 6 levels which includes unacceptable (0-0.49), miserable (0.50 to 0.59), mediocre (0.60 to 0.69), middling (0.70 to 0.79), meritorious (0.80 to 0.89) and marvelous (0.90 to 1.00). The higher value means that there is adequate sample in this study, and hence the analysis is more accurate. (Rahman and Kamarulzaman, 2012). In this study, it will ensure that the loading value exceeds 0.6 which means that the number of sample that choose to analyze has at least mediocre level in this study. (Cooper & Schindler, 2014).

### 3.4.4 Multiple regression

Cooper and Schindler (2014) stated that multiple regression analysis is a descriptive tool that allows multivariate independent variables to account for dependent variables, thus ensuring a significant level of the study. Meanwhile, based on Ho (2016), multiple regression analysis is a statistical method that uses a coefficient equation to analyze the linear relationship between a dependent variable and two or more independent variables. Multiple regression analysis is often used to study problems and assumptions. In addition, multiple regression analysis can find the optimal independent variable of the dependent variable. The formulation as below.

$$Y = a + b_1 * X_1 + b_2 * X_2 + \dots + b_p * X_p$$

### **3.5 Conclusion**

To conclude, this chapter has introduced the research method that used in this study. Descriptive research survey design to describe the characteristics of the customers' intentions and it will use the questionnaires-based survey as the major data collection method. A quantitative approach will be used in this study with the use of non-probability sampling. The sample size of this study is 400 and the individual is used as unit of analysis. The design of the questionnaires is based on the 5-point Likert scale. Finally, this study will use the preliminary test to ensure the utility and property of the factors and ensure that the respondents can understand the item in questionnaire in same way. And it will use the multiple regression and one-way ANOVA test in hypotheses testing to analyze the most powerful factors that influence the customers' intentions to use e-payment in Kuala Lumpur, Malaysia and predict the new factors that has influence on customers' intentions to use e-payment in Kuala Lumpur, Malaysia.

## Chapter 4 Data Analysis

This chapter interviewed 384 respondents and all the questionnaires were collected for data analysis. In this section, the analysis discusses the reliability analysis, demographic analysis, and also use factor analysis to identify the factors that influence customer intention of e-payment. At the end of this chapter used multiple regression to measure the relationship between dependent variables and independent variables.

### 4.1 Socio-Demographic Profile

This part discusses the descriptive analysis of 384 respondents' demographic characteristic.

This research used descriptive analysis to describe the socio demographic profile of 384 respondents. This part introduces the gender, age and monthly income level of respondents.

#### gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid male	220	55.0	55.0	55.0
female	180	45.0	45.0	100.0
Total	400	100.0	100.0	

Table 1 Gender of Respondents

Table 1 shows there are 400 respondents in this study. From this table, we can see there are 220 (55.0%) male respondents and 180 (45%%) are female respondents.

**age**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 21-30	90	22.5	22.5	22.5
31-40	160	40.0	40.0	62.5
41-50	110	27.5	27.5	90.0
more than 51	40	10.0	10.0	100.0
Total	400	100.0	100.0	

Table 2 Age of Respondents

Table 2 shows the result of respondents' age, most of the respondents were between 31-40 years old which were 160 (40.0%), and the second high of respondents were 41-50 years old which were 110(27.5%). From this table, we can see there are only 40 (10.0%) respondents were interviewed in this research.

**income level**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid RM2,001-RM3,000	80	20.0	20.0	20.0
0 RM3,001-RM4,000	160	40.0	40.0	60.0
0 RM4,001-RM5,000	120	30.0	30.0	90.0
0 More than RM5,001	40	10.0	10.0	100.0
Total	400	100.0	100.0	

Table 3 Income level of Respondents

As show in table 3, there were 80 (20%) respondents earned between RM2,001-RM3,000, 160 (40.0%) respondents earned between RM3,001-RM4,000,

120 (30.0%) respondents were earned between RM4,001-RM5,000per month and only 40 (10%) respondents were earn more than RM5,001.

## 4.2 Reliability test

**Reliability Statistics**

Cronbach's Alpha	N of Items
.886	16

This study uses reliability statistics to test the stability of 16 items. According to literature review, when the Cronbach's Alpha value is more than 0.7 means the items have high reliability. From this table we can see the Alpha value of this research was 0.886 which measure the reliability of these 16 questions. And the Cronbach's Alpha value of this research has high consistency with the Theory of reasoned action items and that shows this model is fit for this research.

## 4.3 Factor analysis

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.691
Bartlett's Test of Approx. Chi-Square	509.067
Sphericity df	15
Sig.	.000

In this study, keyer-meyer-olkin (KMO) sampling adequacy test and Bartlett's spherical test were used to measure sampling adequacy and the correlation between all variables. KMO test measures the ratio of total variation in dependent variables, which is explained by independent variables. According to Hutcheson and Sofroniou



(1999), KMO measurement sampling adequacy of explanatory adjectives with various types of interpretation. For example, the values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, values between 0.8 and 0.9 are great and value above 0.9 are marvelous. KMO can be used to identify which variables should be removed from factor analysis due to the lack of multicollinearity. In addition, the statistically significant Bartlett test value for sphericity was lower than 0.05, indicating that there was sufficient correlation between variables. Kaiser meyer-olkin (KMO) sampling adequacy test and Barlett's spherical test were first conducted in all statements to confirm the appropriateness of factor analysis. In this research, the result of KMO test reached the value of at least 0.691 which indicated that the sampling adequacy and factor analysis can be carried out.

Variables	Communalities
1 It is flexible to use e-payment in transaction	0.781
2 The important people (family/ relatives/ friends) of you recommends e-payment in transaction	0.779
3 The important people (family/ relatives/ friends) of you uses e-payment in transaction	0.763
4 Government and central bank regulations which is significant when using e-payment in transaction	0.746
5 Security statements can be find easily which is significant when using e-payment in transaction	0.733
6 It is convenient to use e-payment in transaction	0.570

In this research, we used communality to shows the variance of each variable with other variables in the analysis. Communality of a research is the percentage of the variable's variance; therefore, the communality range of this research is from 0.733 to 0.763. Based on this result, the first variable has the higher communality which is 0.781, that means this variable is fairly represented by other factors.

	Factor Loading		
	F1	F2	F3
<b>Effort expectancy</b>			
It is flexible to use e-payment in transaction	0.874		
It is convenient to use e-payment in transaction	0.628		
Variance (percent of explained)	<b>24.568</b>		
<b>Perceived security</b>			
Security statements can be find easily which is significant when using e-payment in transaction		0.849	
Government and central bank regulations which is significant when using e-payment in transaction		0.738	
Variance (percent of explained)		<b>24.171</b>	
<b>Social Influence</b>			
The important people (family/ relatives/ friends) of you recommends e-payment in transaction			0.812
The important people (family/ relatives/ friends) of you uses e-payment in transaction			0.792
Variance (percent of explained)			<b>24.130</b>
Total percentage of variance			<b>72.869</b>

This table shows the result of factor analysis which conducted six statements. In this research, there are three latent factors that influence customer intention toward e-payment. And the total variance of this research is 72.869.

For the effort expectancy, we recognized this the first factor of this research after the factor analysis. This factor includes two sub-variables which have total variance of

24.568. the first sub-variable of this factor is “It is flexible to use e-payment in transaction” which is 0.847 and the second is “It is convenient to use e-payment in transaction” which is 0.628.

Then there are two sub-variables of Perceived security which include “Security statements can be find easily which is significant when using e-payment in transaction” which is 0.849 and “Government and central bank regulations which is significant when using e-payment in transaction” which is 0.738.

The last factor of this research is social influence and that include two sub-variables which are “The important people (family/ relatives/ friends) of you recommends e-payment in transaction” (0.812) and “The important people (family/ relatives/ friends) of you uses e-payment in transaction” (0.792).

#### 4.4 Multiple regression

According to Hubeman and Saldana (2013), the multiple regression is used to indicate the relationship between dependent variable and independent variables.

##### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.739 <sup>a</sup>	.545	.542	.42105	1.892

a. Predictors: (Constant), effort expectancy mean, perceived security mean, social influence mean

b. Dependent Variable: DV mean

This table shows the R-Square of the current model is 0.545 which means there are 54.5% of customer intention can be explained by the three independent variables which are perceived security, effort expectancy and social influence in this study.

Moreover, the remain 46.5% is due to other factors. Based on this table, the Durbin-Watson of this research is 1.892 which is between 0-2, and that is means positive autocorrelation.

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.234	3	28.078	158.379	.000 <sup>b</sup>
	Residual	70.204	396	.177		
	Total	154.437	399			

a. Dependent Variable: DV mean

b. Predictors: (Constant), effort expectancy mean, perceived security mean, social influence mean

From this table, we can see the F value of this research is 158.379 and the p value is 0.00 which is less than 0.5. Therefore, the F test is significant of this research and we can conclude the model is acceptable for this research.

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.	Collinearity Statistics	
						B	
1 (Constant)	1.303	.126		10.352	.000		
socialinfluencemean	.069	.030	.092	2.337	.020	.739	1.354
perceivedsecuritymean	.365	.030	.465	12.113	.000	.780	1.282
effortexpectancy mean	.258	.030	.348	8.615	.000	.704	1.419

a. Dependent Variable: DVmean

This table shows the VIF value of this research is more than 0.1 and less than 10 which means there is no high correlations between the customer intention and three independent variables.

According to Moster and Kalton (1985), the p-value of a research is less than 0.020 which means there is significant relationship between dependent variable and independent variables.

Based on the research, the regression equation of this research is shown below:

$$Y = 1.303 + 0.069(\text{social influence}) + 0.365(\text{perceived security}) + 0.258 (\text{effort expectancy})$$

For the social influence factor, we can see the  $\beta$  is 0.069 and p-value is 0.00 which is less than 0.5, that means the social influence has significant relationship with customer intention. The  $\beta$  of this research means that the customer intention of

e-payment will increase 0.069 when the social influence increase 1.

Then for the perceived security, the  $\beta$  is 0.365 and p-value is 0.00 which means this factor can influence the customer intention of e-payment. And for the effort expectancy, the  $\beta$  is 0.258 and p-value is 0.00 that means the perceived security can influence the customer intention of e-payment.

## 4.5 Summary

According to the data analysis above, the hypothesis result of this research shows below:

Hypothesis	Hypothesis statement	Result
H1	There is any relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.	Fail to Reject
H2	There is any relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.	Fail to Reject
H3	There is any relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.	Fail to Reject

## **Chapter 5 Conclusion and Discussion**

In the last section of this study, this chapter will discuss the researching finding based on the result of analysis in chapter 4. Then, based on the result of hypothesis will have recommendation, suggestion, limitation and further research.

### **5.1 Conclusion**

To conclude, it fails to reject all the hypothesis in this study.

Firstly, it found that customer's perceived security is one of significant factors that influence the customers' intentions to use e-payment and the relationship between customers' perceived security and the customers' intentions to use e-payment is positive which means that the higher level of the customers' perceived security, the higher intention to use e-payment. It can conclude that when the e-payment make customers feel that they can use it safely, the customers is willing to use the e-payment system.

Secondly, the data analysis indicates that there is significant relationship between effort expectancy and customers' intentions to use e-payment and the relationship between them is also positive so that the high effort expectancy customers are more willing to use the e-payment. High expectancy means that the customer like it so that hope that it can be better so that they have high intention to use it.

Finally, based on the result, it explains that social influence has most significant influence on customers' intention to use e-payment. And the relationship between social influence and customers' intention to use e-payment is also positive. It indicates that the social relationship can affect the customers' intention. The supports and recommendations of important people such as families and friends can significantly influence the customers intention.

## **5.2 Recommendation**

Based on pervious result in this study, it founds that customers' perceived security, effort expectancy and social influence have significant influence on customers' intention to use e-payment. The recommendation is to attract more and more customers in Kuala Lumpur, Malaysia to use the e-payment.

Firstly, it is better to government and central bank of Malaysia to formulate the regulations to make the transaction under the e-payment can be more normative so that increase customers' sense of security in using e-payment. Which is helpful to improve the customers' level of perceived security so that increase their intention to use e-payment. Furthermore, making the security statements can be easily found by customers so that they can understand and believe the e-payment system is also an effective way to improve the customers' sense of safety so that they are willing to use e-payment.

Secondly, Malaysia government can encourage and support more companies in KL to accept the e-payment system so that increase the availability and flexibility and e-payment system and it is also helpful to customers to make their payment can be more convenient. Which is helpful to improve customers' effort expectancy to e-payment so that attract more and more customers to use e-payment in KL. Besides, the companies in KL can guide customers to learn to use the e-payment in transactions so that ensure that most of customers can use the e-payment.

Finally, Malaysian government can encourage people especially the youth to use the e-payment. As the youth is more open to accept the new things and they have more technical knowledge in e-payment. One people likes to use e-payment which can influence a group of people to increase their intention to use e-payment. It is effective to aim at one group of people to make them use e-payment and influence more and more people to use e-payment.



### **5.3 Limitation**

It is difficult to find large number of sample and not all the customers are willing to accept to complete the questionnaires which leads the lack of the sample size. It may lead the general assumptions to them are not very accurate. The objective of quantitative method is the quantification of data. It allows the researcher to summarize provides his opinions based on the data. This method inclusive two phases which are planning and execution, and therefore there are some limitations in the process that out of our control. (Simon, 2014). Firstly, the limited outcomes in a quantitative research. The structured questionnaires in quantitative research lead to limited outcomes which is unhelpful to the research to have an in-depth exploration about the factors that influence the customers' intentions to use e-payment in Kuala Lumpur, Malaysia. (Sudeshna, 2016). Secondly, difficulty in data analysis. Quantitative study needs the extensive statistical analysis, the effective response needs to relate to the research problem which involve social sciences, education, anthropology and psychology aspects. The simple questionnaire which only answer yes or no is difficult to have a detailed data analysis. The time is not enough the make the research in- depth. There is limited time to find enough participates.

### **5.4 Further Research of Study**

There are some suggestions for further research of this study. Firstly, further study can choose a country which the customers have high intention to use the e-payment system such as China. Which is helpful to analyze the advantages and disadvantages of Malaysia in e-payment system so that has targeted improvement to attract more customers to use e-payment in Malaysia.

Then, according the Adjusted R Square value of this study, there is 54.5% of the variability on the factors that influence customers' intentions to use e-payment in Kuala Lumpur, Malaysia. The remain 45.5% is due to other factors. Therefore, it is necessary to consider more factors that influence the customers' intentions to use

e-payment. For example, the culture and customers' performance expectancy to e-payment can be considered in further research of study.

## **5.5 Personal Reflection**

This research provides me an opportunity to learn about many things and improve myself in many aspects.

Firstly, I have learned a lot about the e-payment system in Malaysia and its influencing factors. Through many pervious study I have a deeper understanding about the development of e-payment system and its advantages and disadvantages.

Moreover, it is helpful to me to learn to use the SPSS to complete the data analysis. SPSS is effective in data analysis so that it is significant to learn to use it. Through this research, I have learned a lot about the use and function of SPSS which is helpful to my future life.

Finally, it is high time to express my appreciation to my supervisor Dr. Arasu, he helped me a lot in my study. Dr. Arasu guided my study in a right direction and he also explains some concepts to me in details to help me understand them so that I can clearly understand what I need to do.

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## Appendix

### Appendix 1. Questionnaire.



**INTI**  
International University  
LAUREATE INTERNATIONAL UNIVERSITIES\*

#### Dear Participants:

This questionnaire is to fulfil Master of Business Management program (MBA) final year project at the INTI International University only for the academic research. The purpose of this study is to study the factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia.

This questionnaire has 3 short sections that which need to take up your short time to complete. The researchers sincerely hope that you would make this study a success by answering all questions frankly, honestly and thoroughly.

Your privacy would be retained, and no information obtained from this study shall be disclosed in any manner that would identify you. All information obtained would be kept strictly confidential. The data obtained will be analyzed as a group for statistical purposes.

Specific instruction is given at the beginning of each section of the questionnaire. Kindly complete the questionnaire by answering all questions in each section. We wish to thank you in advance for your cooperation and participation in this study.

Thank you very much for your cooperation.

Section A: Please rate your overall evaluation of E-payment system (Please circle the appropriate number) (Strongly Disagree: 1) (Disagree: 2) (Neutral: 3) (Agree: 4) (Strongly Agree: 5)

Questions		Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
1	Technical protection to privacy is significant when using e-payment in transaction.	1	2	3	4	5
2	Security statements can be find easily which is significant when using e-payment in transaction	1	2	3	4	5
3	Government and central bank regulations which is significant when using e-payment in transaction.	1	2	3	4	5
4	It is easy to get back cheated money which is significant when using e-payment in transaction.	1	2	3	4	5
5	You hope that it is easy to use e-payment in transaction.	1	2	3	4	5
6	You hope that it is convenient to use e-payment in transaction.	1	2	3	4	5
7	You hope that it is flexible to use e-payment in transaction	1	2	3	4	5
8	You hope that it is easy to you to learn to use e-payment in transaction	1	2	3	4	5
9	The important people (family/ relatives/ friends) of you recommends e-payment in transaction.					
10	The important people (family/	1	2	3	4	5

	relatives/ friends) of you uses e-payment in transaction					
11	The important people (family/ relatives/ friends) of you support e-payment in transaction	1	2	3	4	5
12	The important people (family/ relatives/ friends) of you likes e-payment in transaction	1	2	3	4	5

**Section B: Please rate your overall satisfaction of public bicycle sharing (PBS) system**

Question	Strongly Disagree	Disagree	No Opinion	Agree	Strongly Agree
13 You are willing to use e-payment system in the future	1	2	3	4	5
14 You will recommend others to use e-payment system in transaction	1	2	3	4	5
15 Using e-payment is fun	1	2	3	4	5
16 Using e-payment is safe	1	2	3	4	5

**Section C: Demographic information**

Gender	Male <input type="checkbox"/> Female <input type="checkbox"/>
Age	Below 20 <input type="checkbox"/> 21-25 <input type="checkbox"/> 26-30 <input type="checkbox"/> 31-35 <input type="checkbox"/> 36-40 <input type="checkbox"/> More than 41 <input type="checkbox"/>
Monthly Income	Below RM2,000 <input type="checkbox"/> RM2,001 - RM3,000 <input type="checkbox"/> RM3,001 – RM4,000 <input type="checkbox"/> RM4,001 – RM5,000 <input type="checkbox"/> Over RM5,000 <input type="checkbox"/>



## Appendix 2. SPSS Data

### gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	220	55.0	55.0	55.0
	female	180	45.0	45.0	100.0
	Total	400	100.0	100.0	

### age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	90	22.5	22.5	22.5
	31-40	160	40.0	40.0	62.5
	41-50	110	27.5	27.5	90.0
	more than 51	40	10.0	10.0	100.0
	Total	400	100.0	100.0	

**income level**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid RM2,001-RM3,000	80	20.0	20.0	20.0
RM3,001-RM4,000	160	40.0	40.0	60.0
RM4,001-RM5,000	120	30.0	30.0	90.0
More than RM5,001	40	10.0	10.0	100.0
Total	400	100.0	100.0	

**Reliability Statistics**

Cronbach's Alpha	N of Items
.886	16

**KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.691
Bartlett's Test of Sphericity	Approx. Chi-Square	509.067
	df	15
	Sig.	.000

	Factor Loading		
	F1	F2	F3
<b>Effort expectancy</b>			
It is flexible to use e-payment in transaction	0.874		
It is convenient to use e-payment in transaction	0.628		
Variance (percent of explained)	<b>24.568</b>		
<b>Perceived security</b>			
Security statements can be find easily which is significant when using e-payment in transaction		0.849	
Government and central bank regulations which is significant when using e-payment in transaction		0.738	
Variance (percent of explained)	<b>24.171</b>		
<b>Social Influence</b>			
The important people (family/ relatives/ friends) of you recommends e-payment in transaction			0.812
The important people (family/ relatives/ friends) of you uses e-payment in transaction			0.792
Variance (percent of explained)	<b>24.130</b>		
Total percentage of variance	<b>72.869</b>		

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.739 <sup>a</sup>	.545	.542	.42105	1.892

a. Predictors: (Constant), effort expectancy mean, perceived security mean, social influence mean

b. Dependent Variable: DV mean

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.234	3	28.078	158.379	.000 <sup>b</sup>
	Residual	70.204	396	.177		
	Total	154.437	399			

a. Dependent Variable: DV mean

b. Predictors: (Constant), effort expectancy mean, perceived security mean, social influence mean

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.303	.126		10.352	.000		
	socialinfluencemean	.069	.030	.092	2.337	.020	.739	1.354
	perceivedsecuritymean	.365	.030	.465	12.113	.000	.780	1.282
	effortexpectancy mean	.258	.030	.348	8.615	.000	.704	1.419

a. Dependent Variable: DVmean

## Appendix 3. Power Point Slides

### THE FACTORS THAT INFLUENCING THE INTENTION OF CUSTOMERS TO USE E-PAYMENT IN KUALA LUMPUR, MALAYSIA.

Name: WANG JUNYURUI  
Student ID: I13004090  
Under the Guidance of:  
Dr. Arasu Raman

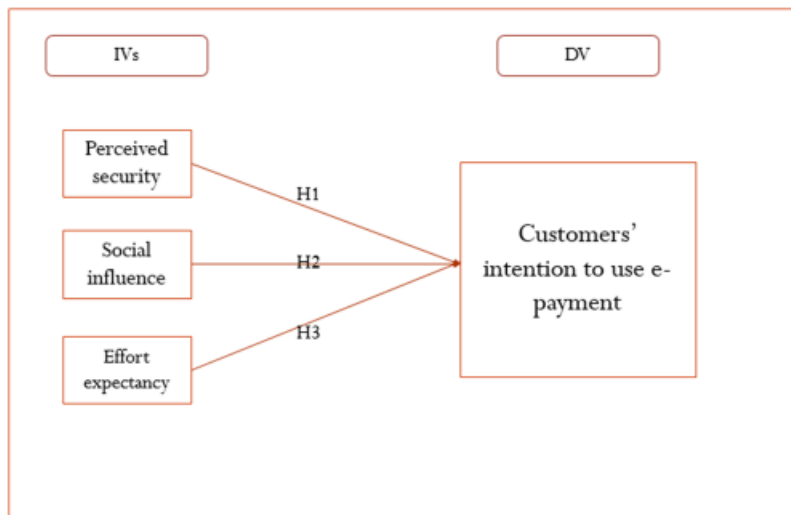


### AGENDA

- Conceptual Framework
- Hypotheses (relate back to ROs & RQs)
- Demographic Data of Respondents
- Preliminary Analysis
- Hypotheses Testing
- Findings and Discussion
- Recommendations
- Future research

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## CONCEPTUAL FRAMEWORK



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### Research Objectives

- To study the relationship between perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.
- To study the relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.
- To study the relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

### Research Questions

- Is there any relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.
- Is there any relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.
- Is there any relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

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## HYPOTHESES

- H<sub>1</sub> : There is a significant relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur Malaysia.
- H<sub>2</sub> : There is a significant relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia
- H<sub>3</sub> : There is a significant relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

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## DEMOGRAPHIC DATA OF RESPONDENTS

Socio-demographic profile of respondents (n=400)

### Gender

gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	220	55.0	55.0	55.0
	female	180	45.0	45.0	100.0
	Total	400	100.0	100.0	

### Monthly Income

income level		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM2,001- RM3,000	80	20.0	20.0	20.0
	RM3,001- RM4,000	160	40.0	40.0	60.0
	RM4,001- RM5,000	120	30.0	30.0	90.0
	More than RM5,001	40	10.0	10.0	100.0
	Total	400	100.0	100.0	

### Age

age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	90	22.5	22.5	22.5
	31-40	160	40.0	40.0	62.5
	41-50	110	27.5	27.5	90.0
	more than 51	40	10.0	10.0	100.0
	Total	400	100.0	100.0	

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## RELIABILITY TEST

### Reliability Statistics

Cronbach's Alpha	N of Items
.886	16

- Total sample size of this study is 400

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## HYPOTHESES TESTING

### Factor Analysis

In this study, Kaiser-Meyer-Olkin (KMO) sampling adequacy test and Bartlett's test were used to measure the sampling adequacy and the presence of the correlation between all variables.

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		691
Bartlett's Test of Sphericity	Approx. Chi-Square	509.067
	df	15
	Sig.	.000

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	Factor Loading		
	F1	F2	F3
<b>Effort expectancy</b>			
It is flexible to use e-payment in transaction	0.874		
It is convenient to use e-payment in transaction	0.628		
Variance (percent of explained)	<b>24.568</b>		
<b>Perceived security</b>			
Security statements can be find easily which is significant when using e-payment in transaction		0.849	
Government and central bank regulations which is significant when using e-payment in transaction		0.738	
Variance (percent of explained)		<b>24.171</b>	
<b>Social Influence</b>			
The important people (family/ relatives/ friends) of you recommends e-payment in transaction			0.812
The important people (family/ relatives/ friends) of you uses e-payment in transaction			0.792
Variance (percent of explained)			<b>24.130</b>
Total percentage of variance			72.869

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## HYPOTHESES TESTING

### Multiple Regression Analysis

Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.739 <sup>a</sup>	.545	.542	.42105	1.892

a. Predictors: (Constant), effort expectancy mean, perceived security mean, social influence mean

b. Dependent Variable: DV mean

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.234	3	28.078	158.379	.000 <sup>b</sup>
	Residual	70.204	396	.177		
	Total	154.437	399			

a. Dependent Variable: DV mean

b. Predictors: (Constant), effort expectancy mean, perceived security mean, social influence mean

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(\*\* statistically significant at the 0.05 level)

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.303	.126		10.352	.000		
	socialinfluence mean	.069	.030	.092	2.337	.020	.739	1.354
	perceivedsecurity mean	.365	.030	.465	12.113	.000	.780	1.282
	effortexpectancy mean	.258	.030	.348	8.615	.000	.704	1.419

a. Dependent Variable: DVmean

$$Y = 1.303 + 0.069(\text{social influence}) + 0.365(\text{perceived security}) + 0.258 (\text{effort expectancy})$$

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## SUMMARY OF HYPOTHESES TESTING RESULTS

Hypothesis	Hypothesis statement	Result
H1	There is a significant relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.	Fail to Reject
H2	There is a significant relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia	Fail to Reject
H3	There is a significant relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.	Fail to Reject

## KEY FINDINGS



- There is a significant relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.
- There is a significant relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia
- There is a significant relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.

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## RECOMMENDATIONS

- It is better to government and central bank of Malaysia to formulate the regulations
- Malaysia government can encourage and support more companies in KL to accept the e-payment system
- Malaysian government can encourage people especially the youth to use the e-payment.

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## FUTURE RESEARCH DIRECTION

- Further study can choose a country which the customers have high intention to use the e-payment system such as China.
- It is necessary to consider more factors that influence the customers' intentions to use e-payment. For example, the culture and customers' performance expectancy to e-payment can be considered in further research of study.

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## THANKS AND FEEDBACK

*Thank  
You!*

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## Appendix 4. Initial Research Paper Proposal

Student name	Wang Junyurui
ID	I13004090
Concise Title	Factors that influence customer's intention to use e-payment in Kuala Lumpur, Malaysia
Problem Definition	<p>The development of the E-commerce and e-business promote the development of the e-payment all over the world including Malaysia. (Zaky, 2016). There is a greatly increasing rate in usage of e-payment all over the world especially in China. But for Malaysia, there is only a slow increasing rate of usage of the e-payment from 2010 to 2018. The economic development of Malaysia had the similar trend with the development of e-payment. It had a growth rate which is between 0 to 2% from 2010 to 2018.</p> <p>E-payment had about 20 years development in Malaysia since 1999, but there is a low speed of its growth rate. In other words, there are limited people use the e-payment in Malaysia. This research will study the factors that influencing the intention of customers to use e-payment in Malaysia. The development of e-payment has significant influence on the economic growth in Malaysia. So, it is significant to attach importance to the e-payment in Malaysia.</p>
Research Objectives & Research Question	<p>Research Objectives:</p> <p>Research objective is the statement that identify and describe the variables and concepts and the relationship between them of the research.</p> <p>1.3.1 Broad objective.</p> <p>The broad objective of this study is to study the factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia.</p> <p>1.3.2 Specific objectives.</p> <p>There are major 3 specific research objectives which based on the broad research objective as follow.</p>

	<p>RO1: to study the relationship between perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.</p> <p>RO2: to study the relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.</p> <p>RO3: to study the relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.</p> <p>Research Question:</p> <p>Based on the work of Meltzoff and Easterbrook et al (2012), the research question is set out in research which the research will provide the answer. These questions are very significant as they are focuses of the research and the answer are related to the objective of the research.</p> <p>There are many types of research questions and they can separate two major types based on the focus. The focus can separate to creating solutions and creating knowledge. (Robert Feldt, 2013). Of course, all types of research questions are related to the objective of the research.</p> <p>In this study, there are 3 specific questions related to the research objective about the factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia.</p> <p>RQ1: Is there any relationship between the perceived security and customers' intention to use e-payment in Kuala Lumpur, Malaysia.</p> <p>RQ2: Is there any relationship between the social influence and customers' intention to use e-payment in Kuala Lumpur, Malaysia.</p> <p>RQ3: Is there any relationship between the effort expectancy and customers' intention to use e-payment in Kuala Lumpur, Malaysia.</p>
Scope of study	<p>This research particularizes in the factors that influencing the intention of customers to use e-payment in Malaysia. Moreover, it is to ascertain the relationship between the perceived</p>

	<p>security, culture and the effort expectancy and the intention of customers to use e-payment in Malaysia.</p> <p>The data are collected from the targeted participants answers to the questionnaires. And the all the participants are from Malaysia.</p>
<p>Significance of the research</p>	<p>Academic significance:</p> <p>This research is significant to the academic area as it provides the insight into customers' intension towards the e-payment. The findings of this study are helpful to improve the availability of literature in the market. (Tobak, 2014).</p> <p>Managerial significance:</p> <p>With the development of the technology, e-commerce plays more and more important role in the development of the economy. E-payment system is also become one of significant payment method and the development of e-payment can promote the growth of the economy. And meanwhile, the customers' intention to use the e-payment has significant influence on development of the e-payment. In Malaysia, it is significant to attach importance to the customers' intention to use the e-payment as it has the vital influence on development of the e-payment so that influence the growth of economy in Malaysia. This study is helpful to know about more information about the factors influencing the customers' intention to use the e-payment in Malaysia so that have the targeted improvement to attract more customers to use the e-payment.</p>
<p>Literature Review</p>	<p>Overview.</p> <p>In order to make it better to understand the research, this research referred some content that relevant to the topic in books and journals. In this chapter, it will review the theory of customers' intention in Malaysia perspective and the influencing factors which includes the perceived security, social influence and effort expectancy. And then, this chapter will illustrate the relationship between the customers' intention and the factors. Besides, this chapter will review the theory of each factor. Finally, it will use the framework and set the hypotheses to</p>

make the idea clearer in this research.

#### E-payment.

The concept of electronic payment can be interpreted as the transfer of money from a payer to a payee through an electronic medium. Electronic payments involve the exchange of funds initiated through electronic communication channels (Shon & Swatman, 2012). It can also be defined as a process of payment that does not require the using of paper instruments (Junadi, 2015). An electronic signal is a prerequisite which must exist in order to be able to connect directly to the depositor or creditor bank's account (Gans & Schering, 1999). Typically, electronic payments are made when you buy online. When you buy online, verification, validity, and approval exist. Most of the transactions apply to Internet/online banking and credit cards. However, electronic payments are not limited to credit cards, debit cards, electronic money, and internet banking. Payments via ATM or bank counters are also considered electronic payments, as long as the customer transfers money using electronic devices.

Payment is a pulse of business, especially for business-to-consumer models. Money flows are considered to be one of the key success factors for e-commerce and the flow of information and products (Tsiakis, 2013). For online transactions, credit cards, credit cards, checks, debit cards, and electronic wallets are the major available payment instruments. However, credit card is the most common payment method for online transactions (Xie and Wong, 2013). In fact, purchasing through e-commerce does not mean that buyers must pay online fees directly during the transaction. In addition, they can use ATMs to make payments and digitally transmit payment information.

#### Customer's intention.

Customers' intention is a kind of decision-making that studies the reason that why the customer choose the product or the service instead of another one. (Shah et al., 2012). Morinez et al.



(2013) define customer's intention as a situation where consumer tends to choose a certain product in certain condition. In fact, Customer's intention is a complex process. Customers' intentions are usually related to customers' behaviors, attitudes and perceptions. Customer's behavior is one of the most important factor to consumers accessing and evaluating specific products and services so that make decision (Hamid Akbariyeh, 2013). Ghosh (2015) pointed out that customer intention is an effective tool to predict the customers' decision-making process. There are some factors that has significant influence on customers' intentions such as perceived quality and value of the products and services. In addition, consumers' intention is affected by internal or external motivations during the decision-making process (Gogoi, 2013). Researchers have proposed six stages before they decide to choose the product and service which includes awareness, knowledge, interest, preference, persuasion, and purchase (Kotler & Armstrong, 2013). Customers are always worried about the product and service if they have less knowledge and understanding about the product and service as they think that it is not reliable and there is a high risk to choose the product or service (Gogoi, 2013).

Perspective of customers intention to e-payment in Malaysia.

It can be divided into three major periods from the 1970s to the mid-2000s of the development of electronic payment systems in Malaysia, as shown in Figure 1. In the early stages of the late 1970s, payment systems began with the deployment of credit cards. Then in the late 1990s, a network-based and Internet-based payment system was applied. The latest mobile-based payment system appeared in the mid-2000s.

In Malaysia, with the invasion of information technology and major retail electronic payment systems (FPX) and interbank GIRO (IBG), payment systems are growing rapidly (Mohammad, 2013). Based on Basir (2012), the electronic payment systems are highly used in credit cards, online banking and interbank GIRO (IBG) by Malaysians, while credit cards, debit cards and electronic money are used at lower levels. Abdullah (2012) supported it who claimed that 90% of e-commerce transactions are paid by credit card which means that Malaysians are more

familiar with credit cards than other methods, although there are other payment methods.

In recent years, Malaysia's payment system has been changing. One of the notable changes is the emergence of electronic payment systems. The central bank has been driving the development of payment systems, especially in the gradual introduction of electronic payment schemes, because they believe that these systems have the potential to increase the efficiency of the overall economy (Basir, 2013). In recent years, the active introduction of electronic payment tools has increased the per-transaction value and transaction volume of electronic payment instruments. However, checks are still the main payment tool. With more efficient business operations, lower costs, enhanced security, and broader choice of payment channels, SMBs can benefit from the use of electronic payment programs.

In Malaysia, electronic payment systems are increasingly recognized by consumers. The increase in non-cash retail transactions in recent years is an evidence of it. As Figure 2 shows, the number of non-cash transactions in Malaysia increased from 13.8 to 32.5 (from 2003 to 2007). In terms of value, in the duration of 2003 to 2007, the share of electronic payments in total non-cash retail sales increased from 3% to 7% (Bank of Malaysia 2007). The increasing of cost is one of most significant reason of increasing use of electronic payment instruments, which may save on safety and insurance premiums, as well as safety, as holding cash reduces the risk of theft, robbery and human error. In addition, customers have more confidence of the security measures of electronic payment instruments. For example, bank card security features that require personal identification numbers which prevents theft and fraud. And it is helpful to increase the willingness of consumers to use electronic payments. Among the electronic payment tools, the main tools used in Malaysia are credit cards, internet banking and IBG. Credit and debit cards is also used by customers but less important. Electronic money is a term commonly used for settlement, neither using cash nor paper which refers to those prepaid instruments that contain the value of money that can be used to buy when the merchants accept it as a payment and it will be automatically deducted from the electronic money balance. Currently, there are two types of electronic money: card-based electronic money, such as

prepaid cards; and web-based, such as Internet accounts that can be accessed via mobile phones. Both methods are secondary to electronic payment instruments. Mobile banking is still not widely used.

Factors influence the customers' intention to e-payment.

Customer's intention to e-payment is that customers are willing to choose the e-payment as the payment method. It is convenient to customers to use the e-payment as they do not need to bring too many cash. And it is also better to company to accept the e-payment as it is more accurate and efficient to them to record and calculate the transaction information.

It is significant to research that how to influence customers' intentions to choose e-payment. To research the influence factors to customers intention to e-payment is to research what they need and expect to e-payment. In this study, it major analyze major 3 factors which includes customers' perceived security, social influence and customers' effort expectancy to e-payment.

Perceived security.

Perceived security is a critical part effecting on whether customers make a payment online. Some researchers mentioned that the lack of online payment channel and policies supporting limited purchasing power of customers in in the past decade. More and more Third-party e-commerce payments found and tried to promote the new channels. However, did not rise the intention of customer online payment. They would not like to trust online transaction and care about money refund. According to relevant researches, articles pointed out two main reasons why development of E-payment slowing down in Malaysia are more likely caused by privacy disclosure and payment insecurity.

The scale of investigation could narrow down in three questions that are Technical protection, security statements and Government and central bank regulations based on two reasons as

above. The growth of E-commerce increased rapidly in the past decade. At the same time, the Technical protection keeps getting to be more secured and reliable with time. Noteworthy, majority of researchers believed perceived security has a positive effect on intention of customers to use E-payment system. Perceived security was defined by the “customers’ perception of the degree of protection against these threats (Yousafzai, Pallister & Foxall, 2013). Other scholar remained the different point that he considered Perceived security could be the extent an individual believes a mobile device will be free of risk to conduct C2C e-commerce (Lori N. K. Leonard, 2010). Customer willing to pay the bill relaying on powerful e-payment system. On the other word, there is positive correlation which was proved between intention of online payment and level of technological protection.

Social influence.

Social influence is a popular method as a call to attention. Everything could be main factors impacting on sense of people in the Digital Era such as emotions, opinions or behaviors. Many scholars proved that positive correlation in between which means positive effect on intention to use e-payment system. According to research of University of British Columbia, both sociological activities and psychological behavior could change others’ mind and determine whether transaction happened. For example, retail sales often persuade customers to consume much of time on shop or products. Festinger’s social comparison theory mentioned the role of social influence in consumption. It says aspects of social influence consists of Compliance, Identification, and Internalization from a free-thinking society.

Social influence also impact on marketing nowadays. Majority of people love to share their opinion, feeling and belief for getting recognition of consumption. And this ability is strong enough result in purchasing experience. Customer usually are suspicious of reliability of online payment and hesitate which channel is the safest. Noteworthy, customer would listen advise of online users because their comments are only criteria to judge whether e-payment secured to buy products. As the active use of all major social networking sites continues to grow,

engaging with influential people has become a key component of the marketing equation.

Well-known influencers are promoters, vibrators, and people who can make things happen. They inspire culture, shape trends, and put forward opinions of the people's trust and attention. Their thoughts and the use of their portraits are also high-paying. Of course, not everyone has access to elite athletes, superstar performing artists, widely read journalists or other celebrities, not to mention budget contacts with them.

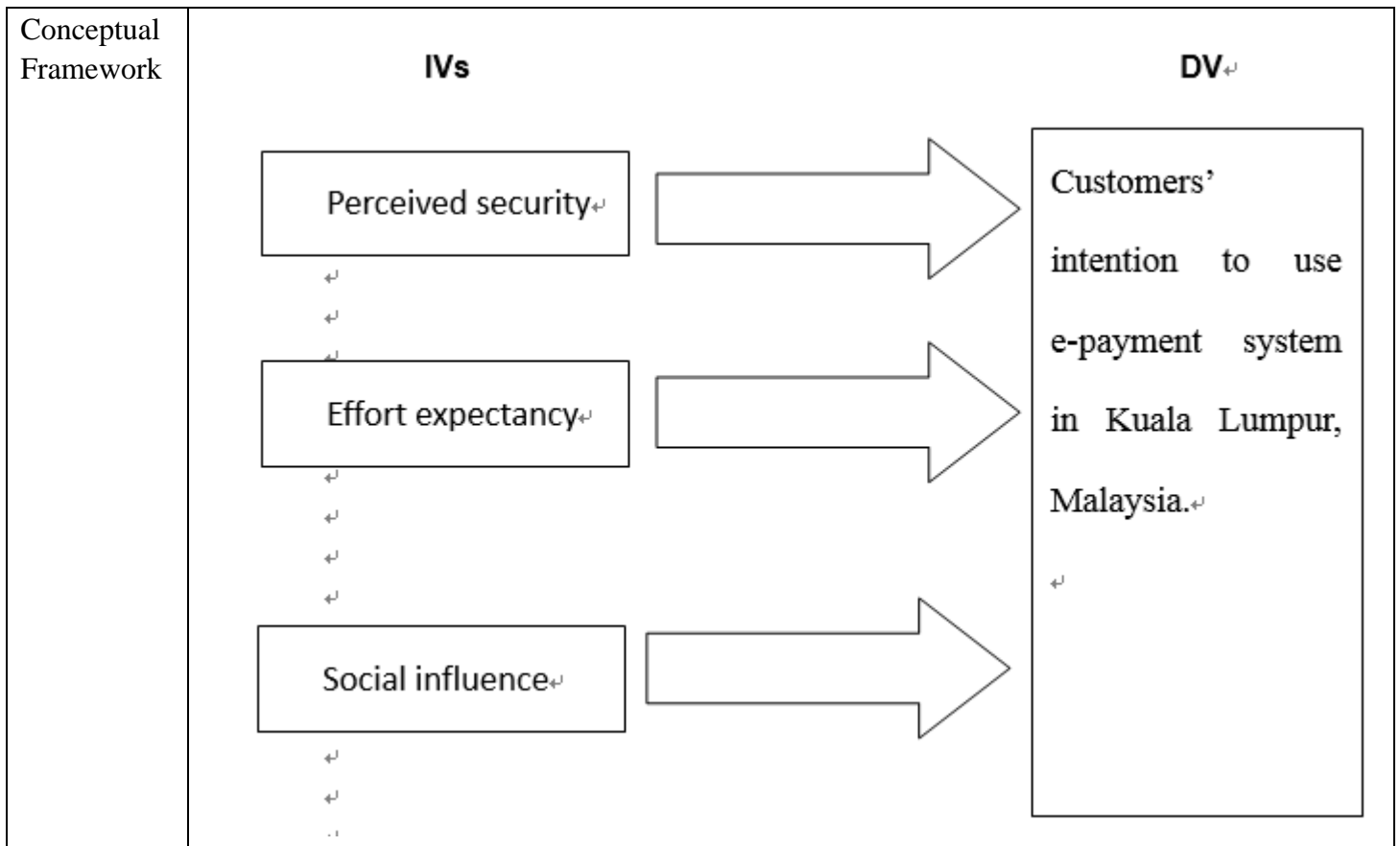
Effort expectancy.

Customers' Effort expectancy is the level of ease related to the use electronic payment (Venkatesh, 2013). There is a high similarity between effort expectancy and the performance expectations, Venkatesh (2013) captured three structures from other models that were considered to be perceived ease to use, complexity, and easy to use. Ease to use is the first concept which is based on the Davis' technology acceptance model and it means that people can use new technologies effortlessly. The second concept is complexity of the MPCU (Thompson, 2012) which is integrated into the expected expectations. The complexity in this model is considered as the difficulty of using the system, as the user perceives. The ease of use as the last concept is the core construct of IDT (Rogers, 2015), which is defined as in addition to the same differences in complexity. The definition of complexity involves a general system, while ease of use is about innovation (Venkatesh, 2013). Plouffe (2012) and Thompson (2012) confirmed the similarities between these concepts.

Arman and Hartati (2015) stated in previous studies that expected expectations have a positive impact on behavioral intentions and practical use of technology or technology. Zhang, Huang, Hong, Li, 2007;). And it is supported by Most researchers such as Phichitchaisopa and Naenna (2013). However, Arman and Hartati (2015) have concluded that there is no significant effect of effort expectancy to customers' intentions. Of course. Arman and Hartati (2015) argue that there is a possibility that the characteristics of the sample has influence on the outcomes. There are almost 70% of the participants are advanced age people (50-70 years old) and they have

	rich experience, the age and experience of them make the effort expectancy to them moderated.
TRA	<p>TRA theory is one of the most common models which is used to analyze the individual behavior. (Fishbein and Ajzen, 2012). The model stems from the learning theory and assumes that the behavior of a particular object is performed by the intention. It is intended to represent a person's conscious plan in an effort to perform an act (Eagly and Chaiken, 2012). The theory of rational behavior (Fishbein and Ajzen, 1975) was first introduced in the field of social psychology and is widely used to explain individual behavior. This hypothesis argues that behavior is predicated on the individual's willingness to participate in a particular activity. On the contrary, intention is predicted by two factors, the individual's attitude toward the result of the behavior and the perspective of the individual's social environment, which is called subjective norms (Fishbein and Ajzen, 2012).</p> <p>It is difficult to measure the similarities between people all over the world so that it is also difficult to recommend and create rules that explain how all people make buying decisions (Abdulrahman, 2012). However, experienced scholars came up with a useful "outline" and a set of guidelines to analyze how the consumers make purchasing decisions. The validation of TRA theory is very significant before adopting consumer behavior in the Kingdom of Saudi Arabia. In addition, Bang. (2012) contended that, the TRA model contains cultural biases of west. Researchers support the viewpoint and state that “TRA should be revised, or extended” (Javalgi, Khare, &amp; Gross, 2012). Ticehurst and Veal (2012) also agreed this viewpoint and stated that the outcomes of the research can be influence by the culture.</p> <p>Theory of Reasoned Action (TRA) was adopted in several studies which predict the actual behavior in different locations and theory includes all types of actual behaviors (Shappard, 2012). Shappard, Randolph, Wolff and Sherran use the meta-analysis studies to support the TRA which includes the intentions, attitude and subjective norm among the TRA. Intention is the “probability, as stated by the respondent, that he/she will perform the stated action”. (Ajzen &amp; Fishbein, 2012). The attitudes and subjective norms constitute the intention. Fishbein (2012) has proposed that behavior is the additional variables which has influence on the intention and could be included in model of the TRA. Behavioral intentions "capture the motivational factors</p>

that influence a behavior; they try their best to perform themselves. (Ajzen, 2012, p. 181). Attitude is a stand about the person's feeling of favorableness or unfavorableness toward a concept. (Fishbein and Ajzen, 2012). Based on TRA, attitude is the first determinant of individual intention to act. According to Ajzen and Fishbein, attitude towards behavior is the estimation to a certain behavior which could be positive or negative which depends on the evaluation construct. It is "determined by a total set of accessible behavioral beliefs linking behavior to various outcomes and other attributes" (Ajzen and Fishbein, 2012). Thus, attitude is an important belief that a person is positive or negative about the result of his or her own behavior. Therefore, when the consumer has a positive and significant belief in his behavior, his attitude toward such behavior is positive. On the contrary, when he has a negative and obvious belief in a result of his purchase, he will be considered a negative attitude. Ajzen and Fishbein mentioned, "Subjective norms are a person's own estimate of the social pressure to perform or not perform the intended behavior" (Ajzen and Fishbein, 2012). It refers to a people's perception of other people's such as his or her friends and families' perception to his or her behaviors and the outcome of these behaviors. In other words, whether the individual's opinion is positive or negative, normative belief and motivation to comply will create the subjective norm. The consumer's perception is that the importance of the people around, and how they think about him or her actions will determine the outcome of the action. (Ajzen and Fishbein, 2012).





## Appendix 5. Turnitin Digital Receipt

MBA Project			
ORIGINALITY REPORT			
<b>10%</b>	<b>3%</b>	<b>5%</b>	<b>6%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS
PRIMARY SOURCES			
<b>1</b>	Sfenrianto Sfenrianto, Junadi Junadi, Melva Hermayanty Saragih. "The analysis of consumer's intention model for using E-payment system in Indonesia", 2017 International Conference on Sustainable Information Engineering and Technology (SIET), 2017 Publication		<b>1%</b>
<b>2</b>	Submitted to Universiti Teknologi MARA Student Paper		<b>1%</b>
<b>3</b>	www.adbi.org Internet Source		<b>1%</b>
<b>4</b>	Dekar Urumsah. "Factors Influencing Consumers to Use e-services in Indonesian Airline Companies", Emerald, 2015 Publication		<b>1%</b>
<b>5</b>	Submitted to University of Wales central institutions Student Paper		<b>&lt;1%</b>
<b>Junadi, Sfenrianto. "A Model of Factors</b>			

## **Appendix 6. Project Log Book**

This is an important document, which is to be handed in with your dissertation. This log will be taken into consideration when awarding the final mark for the dissertation.

<b>Student Name:</b>	<b>Wang Junyurui</b>
<b>Supervisor's Name:</b>	<b>Dr. Arasu Raman</b>
<b>Dissertation Topic:</b>  <b>The factors that influencing the intention of customers to use e-payment in Kuala Lumpur, Malaysia.</b>	

## SECTION A. MONITORING STUDENT DISSERTATION PROCESS



The plan below is to be agreed between the student & supervisor and will be monitored against progress made at each session.

Activity	Milestone/Deliverable Date								
Discussed Project Topic	14/05								
Topic and Literature Review Confirmation		21/05							
Correction Chapter 1-3			31/05						
Finalized Chapter 1-3				07/06					
Prepare Proposal Defense slides					29/06				
Discussed Questionnaire						06/07			
Data Analysis discussed							13/07		
Review Chapter 4								20/07	
Finalized Project									27/07



## SECTION B. RECORD OF MEETINGS

The expectation is that students will meet their supervisors up to seven times and these meetings should be recorded.



**Meeting 1**

Date of Meeting	14/05/2018
Progress Made	Initial meeting with Dr. Arasu Present proposal and discuss project topic with supervisor
Agreed Action	To improve and gain extra information on literature review
Student Signature	
Supervisor's Signature	



**Meeting 2**

Date of Meeting	21/05/2018
Progress Made	Topic and literature review confirmation
Agreed Action	Enhancing the number of literature review Improve on literature review
Student Signature	
Supervisor's Signature	



**Meeting 3**

Date of Meeting	31/05/2018
Progress Made	Correction of first three-chapter format and develop the research framework
Agreed Action	Prepare draft for chapter 1-3
Student Signature	
Supervisor's Signature	



**Meeting 4**

Date of Meeting	07/06/2018
Progress Made	Finalized chapter 1-3 Discuss proposal defense slides
Agreed Action	Prepare proposal defense slides
Student Signature	
Supervisor's Signature	



**Meeting 5**

Date of Meeting	29/06/2017
Progress Made	Prepare proposal defense slides
Agreed Action	Finalize proposal defense slides Prepare survey questionnaires for review
Student Signature	
Supervisor's Signature	



**Meeting 6**

Date of Meeting	06/07/2018
Progress Made	Discuss questionnaire with supervisor
Agreed Action	Correction and enhancement on questionnaires Start data collection
Student Signature	
Supervisor's Signature	



**Meeting 7**

Date of Meeting	13/07,2018
Progress Made	Detail discussion on chapter 4 Analyze data
Agreed Action	Start preparing chapter 4
Student Signature	
Supervisor's Signature	

**Meeting 8**

Date of Meeting	20/07/2018
Progress Made	Review chapter 4 and discuss on improvement Discuss on chapter 5
Agreed Action	Complete chapter 4 Start preparing chapter 5
Student Signature	
Supervisor's Signature	

**Meeting 9**

Date of Meeting	27/07/2018
Progress Made	Discuss and improve the final presentation slides
Agreed Action	Finalize the whole chapter 1-5
Student Signature	
Supervisor's Signature	


**Section C: Comments on Management of Project.**

Student Comments

This study and the whole process have assisted me to enhance my academic ability and communication skill in many aspects. I am very honored and happy study with Dr. Aras. I am very grateful to him. That is an important experience in my life.

Supervisor Comments

*This piece of work is interesting  
and without Ethen's working.*

Signature of Student		Date	13
Signature of Supervisor		Date	
Ethics Confirmed		Date	