# INVESTIGATION CONSUMERS BEHAVIOR TOWARD MOBILE PAYMENT INTENTION AMONG UNIVERSITIES' STUDENTS IN KLANG VALLEY

BY

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#### DECLARATION

We hereby declare that:

(1) This postgraduate project is the end result of my own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) The word count of this research report is 12,949 words.

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## LIST OF ABBREVIATIONS

UTAR	University Tunku Abdul Rahman
SPSS	Statistical Package for Social Science

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#### PREFACE

The research project that is undertook by our group constituted as a fulfilment of the requirement in pursuing the Undergraduate of Bachelor of International Business (Hons). We have selected "Investigation on Consumers Behaviour toward Mobile Payment Intention among Universities' students" as our topic to conduct this research. In this research, we have outlined the few variables which are perceived ease of use, perceive usefulness, trust and social influences.

The selected variables play a crucial role in determining the possible factors that influence mobile payment intention. The motive of choosing the mobile payment industry as our area of study is due to the topic is still relatively new to the market and it does not consist much of emphasize and focus of the researchers on this topic. The topic that we have chosen also contribute useful information and findings to several parties such as restaurants, milk tea shops and other shops that adapting to the mobile payment technology, government, mobile payment service provider, future researchers and consumers to have better understanding on the mobile payment service and its determinants. Hence, the research project could provide a vital to the field of mobile payment industry.

#### ABSTRACT

This study was aimed to investigate the consumers behavior toward mobile payment intention among universities' students in Klang Valley. To specifically examine the in-depth of the mobile payment adoption intention, background and issues related to the research topic had been discussed. This study is designed to achieve the following objective: (1) To test out the relationships between the trust and the universities' students adoption for the mobile payments intention; (2) To find out the significant relationships between the perceived usefulness and the mobile payment intention among the universities' students; (3) To study of the relationships between the perceived ease of use and the universities' students adoption to mobile payments intention; (4) To test the relationships between the social influence and mobile payment among the universities' students.

This research might also be beneficial to certain parties' mobile payment service providers, shops that adopted mobile payment service, government, future researchers and consumers. Furthermore, reviews of literature by previous author and researcher are provided in order to further explain the association between the variables and the explanation of intention to adapt mobile payment technology.

In this research, data were collected from primary sources where questionnaires are distributed to 200 respondents in 5 selected universities in Klang Valley area using Snowball sampling technique. Statistical Package for the Social Science (SPSS) software version 21.0 is used to carry out the research to construct new findings in the association between the independent variables and mobile payment adoption intention. The results and findings are then demonstrated in few different parts which included descriptive analysis for demographic profile, measurement of scale and the inferential analysis. Last but not least, all the findings in the research are concluded in the last chapter. Implication of the study are also further described, as well as the limitations. Not to mention, several recommendations for future research are provided in order to sums up the entire completed research.

#### **CHAPTER 1: RESEARCH OVERVIEW**

#### **1.0** Introduction

The study is to investigate the consumers behaviour towards mobile payment intention among universities' students in Klang Valley. In the chapter is consisting for 7 sections to summarize the chapter one, there are background of research, problem statement, objective of research, question of research, significance of study, layout of the chapter and the chapter summary. In this part is preparing to illustrate and describe the clear ideas to the whole study. The 7 sections will explain in the details about the research project.

#### **1.1 Research Background**

The development of the technology of internet and the advancement of mobile phone had built opportunities and the treats to the business transactions. According the researcher Kousaridas, Parissis & Apostolopoulos (2008), the growth of technology such as the electronic commerce was constructing the mobile payment in most of the business sectors and an important relationship between the successful business and the financial services.

According to Yeow Pooi Mun, Haliyana Khalid, Devika Nadarajah (2017), mobile payment is referring to the individual uses mobile device to perform to a transaction without interacting directly with the POS system (Point of Sale). For example, online shopping over the internet, transfer the fund through a mobile application and reading a chargeable article.

The growing of the mobile internet is encouraging the consumers to become more popular that do the transactional purpose with use the smartphone. The transaction can like online shopping, initiating payment transfer though a bank website, securing contactless payment with a POS terminal and paying for a product or service with using the mobile wallet applications, etc (ISACA, 2010). For the benefit for the business sectors, mobile payment is playing an important role, there is because mobile payment encourages impulse purchasing, so this statement make consumers do not need to bring a lot of money and it will help to avoid the lost sales opportunities which if the customers bring not enough money and want to buy the product next time. With using this mobile payment system, company can increase their revenue easily (Lowry, 2016).

Based on the survey Malaysian Communication and Multimedia Commission (MCMC) done in 2008, there show that Malaysia is ranked at the second place in ASEAN for number of the mobile device users. This study done by MCMC determined that the majority age range of the mobile phone users in Malaysia were between 15-50 years old which consists of 66.8% of the young adults. Based on the Visa Consumer Payment Attitude survey (2016), they found that 74% of the Malaysians are become less needful for the cash and they choose to do the transaction though mobile payment or e-payment. Most of the Malaysians few that mobile payments are more convenient and efficient to them and no need to bring the cash.

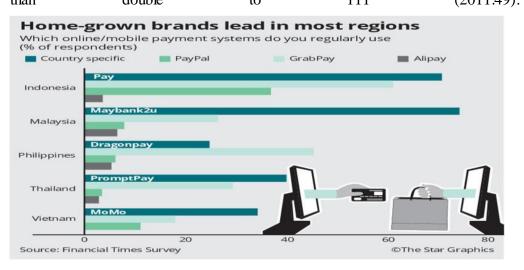
Out target location for this research is Klang Valley and is also called Kuala Lumpur. It was major capital of Malaysia that with the fastest growth for the economic and financial in Malaysia. For the Klang Valley, there is 94 square kilometres and it has 1.76 million of the population. The working group for the Klang Valley which the ages are between 15 years old to 60 years old and it had increased from 63% to 69% in year 2016, there is because the people are seek for more work opportunity in Klang Valley. This statement prove that Klang Valley have a higher income state and the higher purchasing power (World Population Review, 2016).

## **1.2 Problem Statement**

In this research is to investigate consumer behaviour towards mobile payment among to the universities' students who are the majority that the students are young generation and have the spending power with them.

Malaysia is a country that growing the popularity on the acceptance the mobile payment (Ramalingam, 2012), but according the research that done by Luarn & Lin(2005); Paynter & Lim (2001); Murthy U., Mariadas P. A., Prumal G. (2017)), they found out about Malaysian still have some engage in the mobile payment system because of the challenges that will face by them like the lack of knowledge for the internet and lack of confident to the mobile payment system. Nowadays, there still have some Malaysian were remain using the cash and cheques, there is because of the doubtful with the mobile payment system (Hataiseree,2008). In the research is focus on the examines students' willingness to use the mobile payment as the payment system as the transaction for the product or service.

According to the annual report 2017 Bank Negara Malaysia, most of the business that operation in Malaysia and also in the whole world are using the mobile apps to do the transaction like example China which the country is the highest number of mobile payment users in the world. In the annual report also show that the number of transactions using the mobile apps per capital had more than double to 111 (2011:49).



The graph above show that the percentage of the users that regularly to use online or mobile payment system. Based on the financial time survey, Malaysian most of them are using the country specific online payment there is maybank2u to do the transaction fund but the mobile payment system such as the Grabpay, Alipay and etc that use but Malaysian is quite low compare with some advance countries like China, US etc.

In this study, there are some benefit to the financial, banking sectors and the business sector, they can be more understand about the consumers' needs and reaction when use the mobile payment. It also will benefit the sector for the software developers, so they can provide the program or software to solve the problem that face by the users. In these studies, we will try to discover about the elements, factor and the problem issues that affect the consumers toward mobile payment.

## **1.3 Research Objectives**

Major objective that focus in the proposal is to investigate that consumers behaviour toward mobile payment intention among the universities' students.

The specific objectives are:

- 1. To test out the relationships between the trust and the universities' students adoption for the mobile payments intention.
- 2. To find out the significant relationships between the perceived usefulness and the mobile payment intention among the universities' students.

- 3. To study of the relationships between the perceived ease of use and the universities' students adoption to mobile payments intention.
- 4. To test the relationships between the social influence and mobile payment among the universities' students.

## **1.4 Research Questions**

The focus of the question is to observe the effect of the customers behaviour that affect the mobile payment in Klang Valley.

The research questions are:

- 1. How the trust affects the adoption on mobile payment intention?
- 2. Does any significant relationships between the adoption to mobile payments intention and perceived usefulness?
- 3. How the perceived ease of use influences the mobile payments intention?
- 4. Does any relationships between the and the mobile payment intention?

## 1.5 Significance of Study

The rapidity growth of the technologies had improved the term of internet technologies. The behaviour of the new generation like example the university students will persuade that the marketers to update their marketing strategies.

For the traditional strategies of marketing are unsuitable to apply to the new generations such as the consumers start from generation Z.

Mobile payments will become the new trend to the marketers that put more effort to promote and attract toward the young generations. The electronic device such as the laptop, smartphone already adoption in their daily lives. The introduction for the mobile payment is playing the most important role for the innovation for the company and so on.

In this research is to investigate and understand how that the consumer behaviour affects the intention of the mobile payment among the university's students. The findings in this research will become the supportive data to identify the factor of consumer behaviour so the marketers and the financial institutions can have suitable strategies to promote the mobile payment to the whole Malaysian.

## **1.6 Chapter Layout**

In this research, there are few more chapters such as Chapter Two, Chapter Three, Chapter Four and Chapter Five.

#### Chapter 2: Literature Review

The schematic diagram developed in Chapter 2 to identify the independent and dependent variables. The literature reviews were explained the variables that affect consumer behaviour for using mobile payment for the universities' student such as perceived usefulness, perceived usefulness, social influence, trust and mobile payment intention.

#### Chapter 3: Research Methodology

Research methodology part will includes the design of research, data collection methods, design of sampling, instrument of research, construct measurement, data process and data analysis was conducted in Chapter 3. It describes the techniques used to collect data and the methods of data collection that used in the research.

#### Chapter 4: Research Results

Chapter 4 shows that data analysis from the questionnaire. The Pearson Correlation Coefficient and Multiple Regression Analysis are presented to investigate the relationships of the variables. The results of the analysis will be presented in the tables and chart which illustrated by Statistical Package for Social Science (SPSS).

#### Chapter 5: Discussion and Conclusion

Chapter 5 shows the summarized research finding, statistical analysis and discussions on the main findings, and implications of research. Moreover, it discussed the limitation, delimitation and some recommendations for future research.

## **1.7 Chapter Summary**

In conclusion, there is a brief for introduction, background of the research and the problem statement had been clearly explained, illustrate and describe at those section. Besides that, the objective for this research project had been clearly noted in the research objective part which to investigate about the mobile payment among the universities' students. Moreover, the relationship between the consumer behaviours that influences the using mobile payment to do the transaction among the universities' students. There is the questionnaire prepare to test the relationship between the one and other.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.0 Introduction

In the chapter had provide the literature review about the customers behaviour towards mobile payment intention among universities' students in Klang Valley. Chapter 2 includes observed literature review for the research that discuss the term and characteristics that related to the variables respectively. For first part will discusses consumers behaviour that influence for the mobile payments' intention among the universities' students in Klang Valley. Follower part is the theoretical framework for the research, and it will show by the graphical way and will be summaries the relationships between the dependent and independent variables.

## 2.1. Literature Review

#### 2.1.1. Intention

As indicated by Collins English Dictionary, definition of intention is the act or fact of intending or determination to do a particular thing or act in a particular manner. Theory of Reason Action (TRA) recommended by Fishbein and Ajzen (1975) that a behaviour is predicted by an individual's goal to take part in a given expectation that connecting by two factors, the person's attitude towards the given abstract norms and behaviour. TRA mentioned that a person's intention to adopt the innovation is affected by subjective norms and attitude, which can be look back to an individual's normative and behavioral beliefs. Besides, intention also define as motivational elements that affect behaviour on how much effort individual are pleased to attempt that resulted to conduct the behaviour. An individual's behavioral belief reflects on their positive or negative evaluation, while normative indicates to a person's perception of social pressures whether to embrace the innovation or not (Yang, Lu, Sumeet, Cao & Zhang, 2011).

As indicated by Dahlberg and Holmberg (2014), Theory of Planned Behaviour (TPB) model mentioned that dissemination or acknowledgment speculations provide determinants in assessing the payment practices. Besides, TPB can measure person's intention to adopt payment practices in view of assessing beliefs (Dahlberg & Holmberg, 2014).

In addition, Venkatesh and Davis (2000) had shown the intention will affect individual's usage behaviour. The attribute of choices that certain users will prefer more are convenient and user-friendly system. Furthermore, different of individual and system characteristics variables may influence the intention to use when users make decision to use (Venkatesh & Davis, 2000).

However, information systems (IS) researchers test out the intention models from social psychology in predicting a person's intention to adapt into the technology. The first one shows that attitude is identify with consequences of individual's behaviour. Secondly, subjective norm indicated as individual's enthusiasm of performance as per the referents. The next determinants are perceived behavioral control of some important persons in making a decision might affect another's behavioral intention (Harrison, Mykytyn & Riemenschneider, 1997).

According to Nicole, Morgan, Adrian and Anita (2015), they examine two broadly utilized bases for predicting technology adoption which are Technology Acceptance Model (TAM) and Unified Theory of Technology Acceptance and Use of Technology 2 (UTAUT2). TAM and UTAUT2 is

used to exploit and examine a model which is better able to forecast consumers' intention to use an innovative technology, in the case of mobile payment service. TAM is an adoption of the Theory of Reasoned Action, which indicates that behavior is a direct effect of behavioral intention. (Fishbein & Ajzen, 1975) Based on the TAM, a consumer's attitudes toward a new technology or a new product influence behavioral intention. However, this attitude thus is influenced by its ease of use and perceived usefulness. Both of the determinants are powerful forecaster of acceptance of mobile payment services. In UTAUT model, researcher proposes four constructs which are effort expectancy, performance expectancy, social influence and assisting conditions. The four elements are suggested to be significant antecedents of behavioral intention. According to Shin's study, researcher found rational with previous study that security and trust are the prime predictors of behavioral intention in UTAUT model. On the other hand, social influence has a significant influence on intention, which suggest the viewpoint of rivals place an important role in the adaptation of mobile payment services (Shin, 2009).

#### 2.1.2. Perceived ease of use

Perceived ease of use is refer based on the level of which an individual believes that using an information technology system would be free of effort. It is one of the key aspects in the technology acceptance model which lead to behaviour toward use, intention to use and actual use as well as potentially affect the second key variable, perceived usefulness. On the other hand, Perceived ease of use can be argued as the extent of an individual's acceptance as true that using the mobile payment method is an exacting method which will not be unfavourable to that individual. (Gahtani, 2001).

It considered as one of the qualified quality measurement or great impact on showing the consumers' acceptance of innovation of new technology. It brings out the one's view that there is effortless or simply ease to do for using a certain system and bring out effectiveness of the system to the life (Davis, 1989; Taylor & Todd, 1995).

According to the research done by Davis et. Al in 1989, the researcher has provided some of the evidences pertaining the crucial effect of the perceived ease of use on the motive (direct or indirect) with the effect on perceived usefulness. The usage of mobile phone can be maximized when it has both easy to use and learn. Thus, in study of Changsu Kim, Mirosobit Mirusminov.

Given the specialized obstructions of utilizing cell phones, perceived ease of use become the one of the main important factors of receiving mobile payment system (Kim et al., 2010). It includes how the users think that how simple or hard to use mobile payment system (Davis, 1989). According Venkatesh et al., 2003, the perceived ease of use builds a significant when the started period and use the system, and it became no significant after the starting period. In the earlier studies, the perceived ease of use has relationship with the mobile payment system (Davis (1989), Kim et EJISDC (2017)). But in some number of the researches, there are the positive relationships between the the mobile payment intention and perceived ease of use (Hamza, 2014).

Based on the Davis, Bagozzi & Warshaw (1992), Moore & Benbasat (1991), perceived ease of use is one of the main factors that will easier to affect consumers' acceptance of a system and it also is a one of the dimensions that have largest influence on the acceptance of new technologies. According the TAM developed by Davis (1992,1989), he refers that the system that is perceived as ease to use, it will provide more usefulness to the users. According Phonthanikitihaworn et al., (2015), that is identified with instrumentality of the perceived ease of use develop and approved by different researchers in mobile service context.

#### 2.1.3. Perceived usefuless

Perceived usefulness is the grade to which the consumer beliefs that use the system can make their job performance more efficiency from Davis, 1989. 'Job' can be supplanted with the 'everyday life' in attend to the mobile payment. As we know that, the influence of the usefulness on the consumers' acceptance had been extensively validated in previous studies of the TAM. The numerous benefits had ben provide by the mobile payment system. Like example, there are 91% of the respondents agreed that the fastest processing in important in the research done by Pousttchii's (2003). In this research, we can know that the faster way to do the transaction also is a benefit for the business.

According to the Davis et al.,1989, he says that the consumers' intention to utilize the information technology is predicated to the biggest grade to the consumers' perceived usefulness for the system. There is some amount of the experimental evidence in the mobile technology that regard that consumers intention to use the mobile technology (Au & Kauffman, 2008). Based on the research from Chang Su Kim, Mirsohit Mirus monov and In Lee, they found that the consumers will use the mobile payment to do the transactions needs or financial issues when they find that system to be more useful.

Perceived usefulness also characterized as "the potential customer's abstract conviction that use the specific system will improve the consumers' job performance in an organizational (Davis et al., 1989). In some cases, showed that perceived usefulness is also one type of perceived relative advantage, because this reason, researcher name Rogers (1983), he considered that perceived usefulness is one of the extent to the innovation to better than its predecessor.

Based on the researchers Davis et al. and Venkatesh, they defined perceived usefulness as a person who believe that use the referenced. Perceived usefulness also refers from the last studies that done by Cabanillas et al., Francisco et al., Gefen et al., Phonthanukitihaworn et al defined that users for the mobile payment will understood that the value for the mobile payment.

According to the researchers Shatskikh (2013), he mentions that there are lack of actual benefit or clear understanding of the benefits provided by the mobile payment system. When the consumers found that system is useful to consumers, it will develop a positive attitude toward system, furthermore if able, he or she use the system to obtain the perceived benefit. Is was a fundamental assumption to the TAM and the usefulness offered by a system or new technology is operationalized as the perceived usefulness build in the relevant literature (Davis (1989), Davis et al., (1992)).

#### 2.1.4. Trust

Trust has categories in two components, there are cognitive component and behavioral component. For cognitive, based on Dwyer, Schurr and Oh (1987), they say that the expectation of party for the promises or words from another party are reliable and the fulfil the promise in a relational exchange. According to the Castañeda (2005), they identify that trust in 3 types: benevolence, integrity and competence. And for the behavioral perspective trust, based on Mayer et al. (1995), he found that trust is the willingness of the person trust toward for the word or action of the another person with vulnerable and based on the expectation that the trustee will do with the particular action influences to the trustor.

There are two critical challenges of the mobile payment: perceived risk and trust. Besides that, trust is the subjective to believe the person will fulfil the promise and the expectations of the stakeholder can create a goodwill. Trust also can build up from the goodwill from a person or company (Paylou, 2010). Many researchers studied about the trust on e-service such as e– banking (Gao and Waechter, 2017), they found that trust are the most protrusive element in the e-payment but for the traditional payment and the mobile payment consumers are like to use the traditional payment because the consumers need more trust to the mobile payment.

According Zhang et al. (2012), he found that trust was the extent to the individual believe that use mobile commerce was more secure and not privacy threats. Previous studies done by Zarmpou et al. (2012), they study out that the trust from customers had the positive relationship to the perceived usefulness and the perceived ease of use. But there is a research in Tanzania show that there is a negative effect between trust and the mobile payment services (Anthony & Mutalemwa, 2014).

Based on McKnight & Chervany (2001), they found that trust is not easy to define there is because trust can have many meanings, dimensions and facets. Trust also is a multi-disciplinary term, it has been research in many types of domain such as psychology, management, communication, sociology, economics and political science (McKnight & Chervany (2001)). According to Lewicki (2006), he mentions that psychologists see the trust as a personal attribute, for the sociologists as a social structure and the economists perceive trust as a mechanism of an economic choice.

According Berry and Parasuraman (1991) found out the foundation for successful relationship with consumers are trust, as it largely determines the consumer's future conduct and loyalty towards the business. As the past research mentions that trust is a complex notion and it is not easy to understand. There not constant meaning or definition for trust, but many researchers recognized that trust is important. Based on Robbins (1999), trust need take a long period to build up, and it also easily to destroyed and hard to build again. In the research, Grandison and Sloman (2000), they agree that trust as the firm that belief in the competence of an agent to act dependably, securely and reliably.

#### 2.1.5. Social influence

Social influence is defined as individual's perceived pressures from social networks on adoption or otherwise of the innovation. (Yang, Lu, Sumeet, Cao & Zhang, 2011). According to Yang, Lu, Sumeet, Cao and Zhang (2011), researchers model a construct of social influences by subjective norm and image with thought of the intentionality of utilizing the mobile payment services. The major assumption is that individual will get their consultation by interacting in social network and to reduce their uneasiness which happen because of vulnerability from embracing an innovation. According to the research of Lu, Yao and Yu (2005), researchers study out social influences is the type of image and subjective norm impact perceived usefulness positively. Other than that, social influences will in general decrease the perceived adoption risk since they gave a solid proof that showing the legitimacy and propriety of the adoption decision (Lu, Yao, Yu, 2005).

According to Nicole, Morgan, Adrian and Anita (2015), social impact is steadily grounded in models of technology acceptance. It also is more basically in the model of consumer behaviour, which are the Theory of Planned Behavior and Theory of Reasoned Action. There is an arguing that Technology Acceptance Model (TAM) tends to ignore the social context in a technology adoption. Moreover, social influence had become a crucial intention for new technologies adoption. The intention for adopting new technologies involve the linkage among peers, individual tend to rely badly on peer-to-peer communication. Nevertheless, social norms are important determinants for the adoption of technology. Social influences will have likewise a roundabout impact by perceived usefulness on the mobile payment service adoption intention (Yang, Lu, Gupta, & Zhang, 2012).

Based on the research of Park, Ahn, Thavisay and Ren (2019), social influence is connected with the individual's perceived forces from the social network in adopting the innovation. Individuals are more likely to communicate with others to minimize their uneasiness about an innovation adoption. Social influence as the degree to which people see the important that others trust people should utilize such innovation. (Venkatesh, Thong & Xu, 2012). According to Thakur (2013), there are many studies tested out the results are a direct relationship between social influences and behavioral intention regards to mobile payment adoption. Researcher proved that behavioral intention to adopt mobile payment is positively affected by social influence. This relationship recommends that adopting in mobile payments is good to the reference bunch despite the fact that the selection might be negative to an individual.

According to Kim, Rasouli and Timmermans (2014), social influence give a superior comprehension of vulnerability in the forecasts of market shares that because of an absence of knowledge to products and services. Researchers stated that social influence offers better informative power and gives progressively significant understanding into such behaviour. People are social creatures, individuals are members of social network and connecting with other networks' individuals. Through collaboration with social network individuals, individuals tend to gain info about choices and update their desires for the outcomes. Thus, individuals' intention can be influenced by the decision made by peoples of their social network. However, there is some types of social influence that will affect individual decision behavior. Because of joint activity involvement, collective decisions, negotiation, and so forth, which include sharing and exchanging the information to social network individuals, individuals may wind up mindful of new options (Han et al., 2008).

According to Oliveira et al., (2016), researchers affirm the criticalness of social influence on individual's mobile payment adoption intention. This suggested recommendation and option of the individuals' persuasive and essential may in fact the adoption of advancements intended though the mobile payment system, accordance with users are very impacted by the suggestion in their social network. (Cabanillas L., S anchez-Fern andez, & Munoz-Leiva, 2014). Oliveira et al., suggested that dealers, backers and application designers ought to consider approaches that capitalize by the social influence among clients to achieve wide adoption of mobile payment service as the impact of the intention to suggest is a critical factor that may benefit to the mobile payment service providers. Social network marketing, which is suggestion shared by companions, relatives and bosses, are those ground-breaking approaches to help in acknowledgment, advancement and fruitful adoption of mobile payment technology. Marketers need to comprehend who is really contributing with their opinions to social networks, sites and discussions, their intention in doing as such, and what impacts their behaviour so as to improve the adoption (Oliveira et al., 2016).

#### 2.2. Conceptual Framework

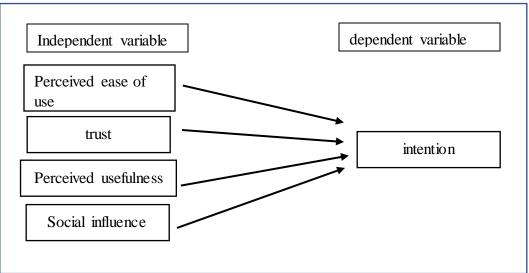


Figure 2.1 conceptual framework

Source: Developed for the research

A conceptual framework had conduct to determine the relationship between the variables. In figure 2.1 showed that there had the relationship between the independent variables (IV) and the dependent variable (DV). The independent variable is the consumer behaviour toward mobile payment among the university's students and the dependent variable is the intention for the mobile payments.

## 2.3. Conclusion

For chapter study out the literature review that relates to the mobile payment. We had found that four consumer behaviour that will influence the mobile payment as an independent variable such as perceived ease of use, trust, perceived usefulness and social influences. The dependent variable in this research is intention. There are a cleared and relevant schematic diagram had been provided as the figure 2.1 and well defined in this chapter by view the previous studies had been done by other researchers.

## **CHAPTER 3: RESEARCH METHODOLOGY**

## 3.0 Introduction

Research methodology is the techniques used to collect data or information in conducting the research. Therefore, this chapter includes design of research, data collection methods, design of sampling, research instrument, construct measurement, data processing and data analysis to show the study is carried out.

This chapter enables to increase readers' understanding and generate better evaluation on the outcome of the research.

## **3.1.** Research Design

The use of a research design is to make sure that the respondents obtained enables us to answer the initial question as unambiguously as possible. Based on Zikmund, Babin, Carr & Griffin (2009), it is a principal plan that clearly states the strategies and measures for gathering and examining the desired information to address the research problem. Develop this research design is to evaluate the research questions is either descriptive or explanatory. This stage would affect data that collected by us. In this study, quantitative research was chosen as data were collected through questionnaires and it involves a large number of respondents to produce the results for this study. The data collected are using numerical measurement and statistical analysis to test in the research objective (Zikmund et al., 2009).

This study is to investigate the customer behaviour which include trust, perceived usefulness, social influence and perceived ease of use towards mobile payment among university students.

## **3.2.** Data Collection Methods

Data collection is a main aspect for all study. It is a procedure for collecting data from various sources and measures and measures it to test out the answers for the problem face in the research. The inaccurate of data collection would affect the results for the study and lead to no avail results. It consists of two types of data, there are primary data and secondary data that can been collected for conducting a study. In this research, both data are collected and used to conduct it.

#### **3.2.1. Primary Data**

Primary data is the data that is first-hand information that researcher collected by himself without any previous record and information. The primary data usually obtain from surveys, observations, questionnaire, personal interview and experiments. It may take a longer time to collect the data and information. This type of data will bring more accurate and up-todate information to researchers as the information is directly relevant to their research. In this research project, questionnaire collected as first-hand data and it is an effective method which can assist the researcher to obtain large amount and accurate data in a given period of time.

#### 3.2.2. Secondary Data

Secondary data is the information collected by other researchers earlier. Secondary data sources usually obtain from government publications, website, books, journal articles, and internet records. The data and information can get in a short time. However, the secondary data might be outdated and lead to the accuracy of the final results. Within this research project, most of the information and definition are obtained through the journal's article via online.

## **3.3.** Sample Design

#### **3.3.1.** Target Population

The target population is the population or a group of users and consumers, that researcher is interested in researching and analysing from them. The target population of this study focuses on the universities' students who are the majority that the students are young generation and have the spending power with them.

#### **3.3.2.** Sampling Frame and Sampling Location

The sampling frame is the list of all items population in this study. It is a complete list of everything that we want to study. The sampling frame of this study is the universities' student by the ages among 18 to 24 with either sex or race participate the survey questionnaire. The questionnaires has been distributed to the audiences that from the universities at Klang Valley. So, the population in Klang Valley are more convenient to researcher in the process of delivering and collecting the questionnaires. The questionnaires had been distributed at the five selected universities at the sampling location in Klang Valley such as Universiti Tunku Abdul Rahman (UTAR), Taylor's Universities, Multimedia University (MMU), Sunway University and UCSI University.

#### **3.3.3. Sampling Elements**

The respondents are categorized in group of foundation, undergraduate, postgraduate and master students which are pursuing their studies currently within sampling locations will involve in this research. This group of respondents will be chosen because they able to provide more accurate information than others and giving us the reason as they have the basic knowledge of mobile device and e-commerce.

#### 3.3.4. Sampling Technique

In this study, snowball sampling had been use in this research which is a non-probability method. It used to collect the samples data. The chosen individual is unknown, so not every individual has equal chances. Researchers usually will test out with the relevant results although this method is a simple way that save time and cost. For this method of sampling concept is based on the idea of the rolling snowball concept. The sample was spreading out through the links to the sampled people that already set (Neuman, 2005). For this method of sampling, it considers as the cheaper and the easier compare to other method to find out the conduct of individual and it also will easily to influence to the students and the young adult to get their peer influence. According to the Zikmund (1994), researcher found that using this method of sampling, it will be very low cost to do this research.

#### **3.3.5.** Sampling Size

From research by Roscoe (1975), researchers recommended that the sampling size among 30 to 500 is suitable for most research. It cannot set neither too large nor too small in the research. Researcher can benefit of the central limit theorem if sample size is greater than 30 (Roscoe, 1975). 200 questionnaires had been distributed to the five selected private universities and there are four variables to be investigate in this study. The method of data had been collected with use the structured questionnaires from January 2019 until March 2019. Out of the 200 set questionnaires, there is no questionnaire is incomplete.

## **3.4.** Research Instrument

Research instrument is a tool of measurement used to obtain required data. Questionnaire is selected as an instrument in this research due to its low cost and less time consuming than other such as interview and observation. Questionnaire is a fastest way that using lowest cost to obtain primary data compared to interview and observation. Also, it can collect more data as it can reach huge number of respondents. Because of limited resources, questionnaire is a most effective way to help us collect data in this research.

## 3.4.1. Design of Questionnaire

Design of the questionnaire for this study is in the form of fixedalternative questions. The alternative responses given to the respondents is limited so the respondents only choose the response which is closest to their viewpoint. It is less time consuming and less interviewer skills needed for this type of questionnaire.

The questionnaire consists of 3 section there are section A until section C. In section A which has 6 questions about demographic information of respondents which is gender, age, ethnic, which university respondents study at, educational level and income level. Next, for section B there are 3 questions about the general information of the respondents about mobile payment service which are did the respondents heard about mobile payment, did they used mobile payment before and how frequency of using mobile payment. Section C from the questionnaire is concern about the factors that influence mobile payment intention of respondents. The questions designed is based on the dependent variable which are perceived ease of use, perceived usefulness, trust and social influence. There have 3 to 5 questions are asked on each dependent variable. Nevertheless, the independent

variable of the study which is intention to perform mobile payment have also 3 questions consist in section C of questionnaire.

In section A and section B, the Simple-dichotomy question is used which respondents required to choose only one answer from two or more alternatives. For section C, the attitude rating scale which is respondent have to respond from strongly disagree to strongly agree.

The questions in the questionnaire are adapted from some sources which are from some past journals. The questions that are selected from the past journals will be modified and rearrange it in order.

#### 3.4.2. Pilot Test

It is important to run through pilot test in research as it test the designed questionnaire before it distributed to respondents. A pilot test is basically a small-scale research which gathering the data from individual that similar with the target respondents in actual survey (Zikmund et al., 2009). The conducted pilot test able to help researchers to figure out the potential mistake or error of the research method and questionnaire. Cronbach alpha was usually used to test the reliability of the data.

In this research, there are 20 set of copies for the pilot test sample had been distributed to the students which study among 5 selected private universities in Klang Valley. Statistical Package for Social Sciences (SPSS) software is used to check and determine whether data missing in questionnaire. This is to avoid respondents did not answered some of the questions in the questionnaire. Table 3.1 shows the result of Cronbach's Alpha reliability test.

Variables	Cronbach's Alpha	No. of items
Perceived Ease of Use	0.916	5
Perceived Usefulness	0.881	4
Trust	0.781	3
Social influences	0.939	4
Intention	0.885	3

Table 3.1 Result of Cronbach's Alpha reliability test

From the table 3.1 show that the variables are the considered variable as alpha value are more than 0.6, mean that the alpha values all are acceptable and reliable.

The highest alpha value in the table is social influences which is 0.939 with the 4 items compare to other factors. Next, the second highest for the variables is perceived ease of use. There alpha value is 0.916 with the 5 items. Intention is the third highest Cronbach's Alpha values compare to the other factor. The alpha value for the intention is 0.885 with the 3 items. Followed by the perceived usefulness which is 0.881 alpha value with 4 items. Lastly the lower Cronbach's Alpha value is trust. The value of trust is 0.781 with the 3 items.

By using the reliability test, the result can conclude that use the Cronbach's Alpha can measure the dependent variables and independent variable can achieved and fulfilled the level of the reliability.

## **3.5.** Construct Measurement

#### 3.5.1. Scale of Measurement

Scale of measurement is an instrument to measure the level of accuracy, consistency and stability of items tested in questionnaire and in the form of value or number. The scale measurement that are commonly used in the research is divided to four types, there are nominal scale, ordinal scale, interval scale and ratio scale. In this study, there are two types of measurement scale using in the study, there are nominal scale and ordinal scale.

# 3.6. Origin of Construct

Variables	Issues	Measurement Items	Sources
Perceived ease of	1	I do not get frustrated when	Har Lee, Cyril
use		use mobile payment.	Eze and Oly
	2	Mobile payment is easy to	Ndubisi
		learn and use.	(2011)
	3	I feel flexible in performing	
		mobile payment.	
	4	Mobile payment provides	
		various payment channels that	
		ease my online shopping	
		process.	
	5	Less effort is needed when I	
		perform mobile payment.	
Perceived	1	Mobile payment improves my	Har Lee, Cyril
usefulness		search for mode of payment	Eze and Oly
		that I desired.	Ndubisi
	2	Mobile payment can	(2011)
		minimize the time I usually	
		spent on payment.	
	3	Mobile payment can help me	
		in terms of making better	
		payment decisions.	
	4		

Table 3.2: Summary of Constructs and Sources

		Mobile payment makes it	
		easier for me to make	
		products comparison among	
		payment modes.	
Trust	1	A trustable software will	Teoh, Chong,
		ensure payment modes	Lin and Chua
		available is reliable.	(2013)
	2	A software that wants to keep	
		promises and obligations will	
		attract me to use mobile	
		payment more ofte.	
	3	I will use mobile payment the	
		terms and conditions are clear.	
Social Influence	1	People who are important to	Teoh, Chong,
		me are likely to recommend	Lin and Chua
		using mobile payment	(2013)
		technology.	、 <i>,</i> ,
	2	People who are important to	
		me would probably suggest	
		that I should use mobile	
		payment technology.	
	3	People who are important to	
		me expect me to use mobile	
		payment technology.	
	4	People who influence my	
		behavior think that I should	
		use mobile payment	
		technology.	
Intention	1	Because my friends and	Teoh, Chong,
		family are using mobile	Lin and Chua
		payment.	(2013)
	2	Because I like the feeling of	
		using mobile payment.	
	3		

	Because I don't want to be the	
	only one who does not use	
	mobile payment	

## 3.7. Data Processing

#### 3.7.1. Data Checking

Data checking was also known as questionnaire checking. It is the first step of data processing to make sure all the questionnaires are completely filled by respondents which does not missing any answer in every single question.

#### **3.7.2.** Data Editing

Data editing involves process of checking and correcting the omissions, legibility, and consistency of data collected from respondents (Zikmund et al., 2009). This is because some respondents may fail to answer single or a few questions, give ambiguous and inconsistent answer that causes data become incomplete and inaccurate. Through this process, researchers able to edit and adjust the data into more complete, readable and consistent before entered into statistical software (Zikmund et al., 2009).

#### 3.7.3. Data Coding

Data coding is a process of classifying and categorizing participants" responses by assigning a number into every answer so that the responses can be entered into database (Sekaran et al., 2013).

In this research, for instance, the coding used in section A of questionnaire, ethnic of respondents can be coded as "1" for Malay, "2" for Chinese, "3" for Indian, and "4" for Other; whereas in part B for instance, how frequency of respondents using the mobile payment can be coded as "1" for daily, "2" for weekly, "3" for monthly, and "4" for yearly. In section C of questionnaire, the extent to which the respondent agrees or disagree can be assigned as "1" for Strongly disagree, "2" for Disagree, "3" for Neutral, "4" for Agree, and "5" for Strongly agree.

### 3.7.4. Data Transcribing

Data transcribing is the process of entering all coded data into computer and transcribed into Statistical Package for Social Sciences (SPSS) software for the data analysis.

#### **3.7.5.** Data Cleaning

The final stage is data cleaning in data processing. This process consists of checking error and verification to make sure the all codes are valid. Statistical Package for Social Sciences (SPSS) software is used to check the accuracy of data and identify the coded data that are out-of-range of the acceptable answers (Zikmund et al., 2009).

## **3.8.** Data Analysis

#### **3.8.1.** Descriptive Analysis

Descriptive analysis is a simple way for raw data transformation to describe the basic features such as using measures of central tendency, variability and distribution (Zikmund et al., 2009). Generally, frequency, percentage, valid percentage and cumulative percentage is the common method that used in descriptive statistics. In this study, the descriptive analysis is include gender, age, ethnic, education level and others information about the respondents. It will be shown in pie chart based on the scale of measurement used.

#### **3.8.2. Reliability Test**

Reliability test plays an important role in testing the goodness of data. It makes sure the consistent measurement across various items in the instrument (internal consistency) and across time (stability) that without bias in measurement (Sekaran et al., 2013). Cronbach's alpha is a popular method used in this test. It shows how fit the items in a set are positively correlated to each other (Sekaran et al., 2013). The range for alpha coefficient is shown in table below.

Cronbach Alpha, a	Strength of Association
α<0.6	Poor Reliability
0.6 - 0.7	Fair Reliability
0.7 - 0.8	Good Reliability
0.8 - 0.95	Very Good Reliability

Table 3.3: The Range for Alpha Coefficient

Source: Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2009). Business research methods (8th ed.). New York: South-Western/Cengage Learning.

## **3.8.3. Inferential Analysis**

#### 3.8.3.1. Pearson's Correlation Coefficient Analysis

Pearson's correlation coefficient analysis is mainly used to measure the strength of two variables with the linear association that relationship. (Zikmund, 2003). The degree of change in another variables is measure using correlation analysis. For example, this test is to measure the relationship between social influence and adoption intention of mobile payment.

The table below explained the strength of the correlation between two variables:

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

Table 3.4: Rules of thumb about Correlation Coefficient size

0.01 - 0.20 / -0.20 ~ -0.01	Slight, almost negligible
-----------------------------	---------------------------

Source: Hair et al. (2008)

### 3.8.4. Multiple Regression Analysis

Multiple Regression analysis is to study out the four independent variables, there are perceived ease of use, perceived usefulness, trust and social influences to explain the relationship between the independent variable (IV) and dependent variable (DV) which is intention of mobile payment for the universities' students in Klang Valley.

## **3.9.** Conclusion

In conclusion, this chapter highlighted research design, data collection methods, sampling design, research instrument, construct measurement, data processing and data analysis. Quantitative research, descriptive and inferential analysis were used as research design in this study. Besides, both primary and secondary data were collected to conduct the research. 200 sets of questionnaires were distributed equally to respondents who study in 5 selected private universities in Klang Valley through online with using snowball sampling. Furthermore, we distributed 20 sets of questionnaires to a small group of respondents for pilot test before actual survey. Statistical Package for Social Sciences (SPSS) software was used to run the data processing. Moreover, descriptive analysis and inferential analysis were discussed in the study. In addition, Pearson's Correlation Coefficient analysis and Multiple Regression analysis were carried out to examine association between variables.

## **CHAPTER 4: DATA ANALYSIS**

## 4.0 Introduction

This chapter consists of the analysis of results and data that relevant to this study. The result was attained through the data collection method from 200 respondents in this chapter. The raw data collected will be analyses through Statistical Package Social Science (SPSS) version 21 software. This chapter consist of three main parts which are descriptive analysis, reliability test and inferential test to analysis this research data. The outcome are shown in table form and illustrated graphically to present the result in an understandable and readable method. The objective is to increase the understanding of the readers. The data obtained were clearly represented in pie chart and bar graph.

## 4.1. Descriptive Analysis

Descriptive analysis is a common type of analysis that always used by researchers to describe the basic characteristic of respondents and summarizes the data by using charts and tables. It included gender, age, ethnic, education level and others information about the respondents. The Section A and Section B of the questionnaire will be summarized by using descriptive analysis.

## 4.1.1. Demographic Profile

There are a total of 6 questions that represent the respondents' demographic profile.

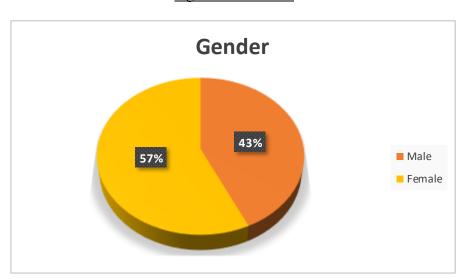
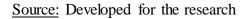


Figure 4.1: Gender



|--|

		Frequency	Percentage	Valid	Cumulative
			(%)	Percentage	Percentage
				(%)	(%)
]	Male	86	43	43	43
Valid		114	57	57	100
Female					
	Total	200	100	100	

Source: Developed for the research

Based on Table 4.1, there are a total 200 respondents are involved in this research. There was 86 male respondents and 114 female respondents.

The majority of respondents were female which consists of 57% respondents (N=114). The remaining of the respondents was male which consists 43% respondents (N=86). The valid percentage of male respondents was 43% while the female was 57%.

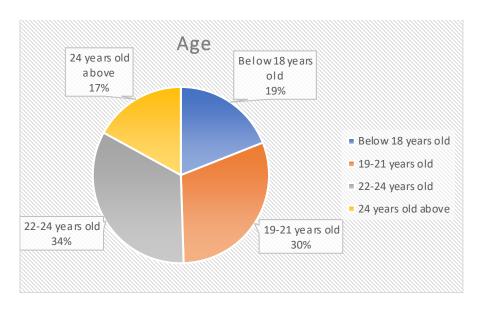


Figure 4.2: Age

Source: Developed for the research

1400 <del>4</del> .2. Age	Table	4.2:	Age
---------------------------	-------	------	-----

		Frequency	Percentage	Valid	Cumulativ
				Percentage	e
					Percentage
	Below 18 years old	38	19	19	19
Valid	19-21 years old	61	30.5	30.5	49.5
	22-24 years old	67	33.5	33.5	83
	24 years old above	34	17	17	100.0
	Total	200	100.0	100.0	

Source: Developed for the research

Table 4.2 shows the age group of respondents in the analysis. The result shows that the largest age group of respondents was involved in this research was between 22-24 years old which consists of 67 respondents,

which contributes 33.5% respondents. The second large age group of respondents was between 19-21 years old which contributes 30.5%, which is 61 respondents. This followed by 19% of respondents involved, the respondents are from the age group of below 18 years old which consists of 38 respondents. The lowest percentage of the respondents involved is above 24 years old, which is 17% only which has 34 respondents.

Ethnic 1% 45% 45% 24% Malay Indian Other

Figure 4.3: Ethnic

Source: Developed for the research

Table 4.3: Ethnic

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
	Chinese	90	45.0	45.0	45.0
Valid		49	24.5	24.5	69.5
Malay					
		59	29.5	29.5	99.0
Indian					
		2	1.0	1.0	100.0
Other					
		200	100.0	100.0	
Total					

Source: Developed for the research

The ethnics of respondents who involved in this research are Chinese, Malay, Indian and other ethnic. According to table 4.3, it shows the highest percentage of the ethnic who are involved in the research is Chinese which consists of 45% respondents (N=90). The lowest percentage is other ethnic which has 1% respondents only (N=2). While, Malay and Indian consist 24.5% and 29.5% respondents respectively, which has 49 and 59 accordingly.

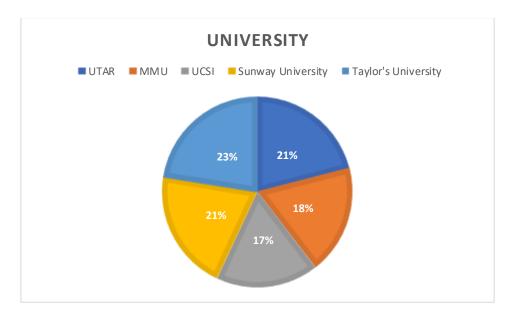


Figure 4.4: University

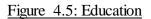
Source: Developed for the research

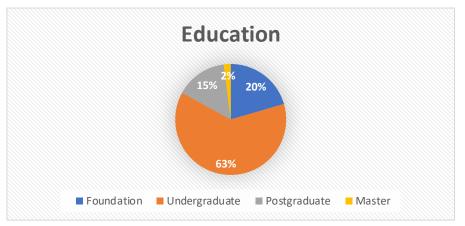
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		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
	UTAR	42	21.0	21.0	21.0
Valid	MMU	37	18.5	18.5	39.5
	UCSI	35	17.5	17.5	57.0
	Sunway	41	20.5	20.5	77.5
University					

Taylor's	45	22.5	22.5	100.0
University				
Total	200	100.0	100.0	

Table 4.4 shows which university students that involved in this research. Most of the respondents are studying in Taylor's University which consists 22.5% (N=45). Then follow by the respondents who are studying in UTAR which contribute 21% (N=42). The lowest percentage of the respondents are studying in UCSI which consist 17.5% (N=35). While the remained respondents who are study in MMU and Sunway University contribute 18.5% (N=37) and 20.5% (N=41) respectively.





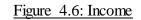
Source: Developed for the research

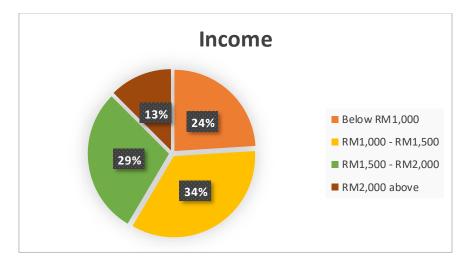
Table 4.5: Education
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	Frequency	Percentage	Valid	Cumulative
			Percentage	Percentage
	41	20.5	20.5	20.5
Foundation				
Valid	125	62.5	62.5	83.0
Undergraduate				

	30	15.0	15.0	98.0
Postgraduate				
Master	4	2.0	2.0	100.0
Total	200	100.0	100.0	

Table 4.5 shows the level of education which the respondents who involved in this research are pursuing. Majority of the respondents are undergraduate students which consist of 62.5% (N=125). There are 20.5% of the respondents are foundation students (N=41). Then follow by postgraduate students who involved in this research which consist 15% (N=30). The lowest percentage of the respondents which are Master students, consist only 2% (N=4).





Source: Developed for the research

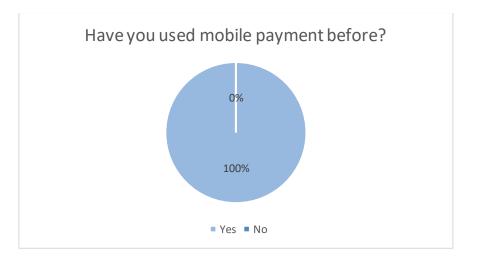
Table	4.6:	Income

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Below RM	1,000	48	24.0	24.0	24.0
Valid	RM1,000 –	69	34.5	34.5	58.5
RM1,500					

RM1,500 – RM2,000	58	29.0	29.0	87.5
RM2,000 above	25	12.5	12.5	100.0
Total	200	100.0	100.0	

Table 4.6 shows the income level of the respondents who involved in this research. The group of respondents from the monthly income RM1,000-RM1,500 consist of 34.5% which achieve the highest percentage (N=69). Then follow by the group of respondents from the monthly income RM1,500-RM2,000 consist of 29% (N=58). The lowest amount of respondents is 25 which from the group of monthly income RM2,000 above, there are only 12.5% of respondents. The respondents whose monthly income below RM1,000 have 48 respondents, which consist 24% of respondents.

#### Figure 4.7: Have you used mobile payment before?



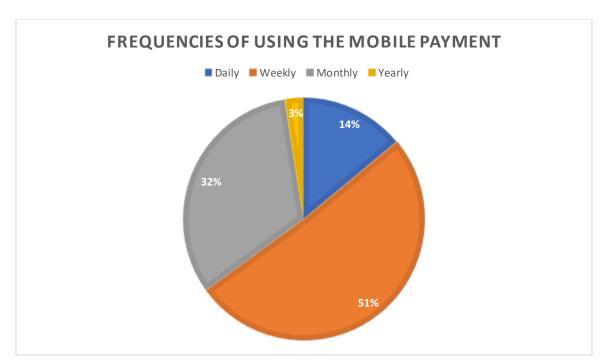
Source: Developed for the research

Table 4.7: Have	you used mobile	payment	before?

	Frequency	Percentage	Valid	Cumulative
			Percentage	Percentage
	200	100	100	100
Yes				

Valid	No	0	0	0	100
		200	100	100	
Total					

Table 4.7 shows the respondents who had used mobile payment before. All of the respondents involved in this research had used mobile payment before which means there is 100% respondents used mobile payment before.



#### Figure 4.8: Frequencies of using mobile payment

Source: Developed for the research

	Frequency	Percentage	Valid	Cumulative
			Percentage	Percentage
Daily	28	14.0	14.0	14.0

Table 4.8: Free	juencies	of using	the mobile	payment

Weekly	102	51.0	51.0	65.0
Monthly	65	32.5	32.5	97.5
Yearly	5	2.5	2.5	100.0
Total	200	100.0	100.0	

Table 4.8 shows the respondent's frequencies of using the mobile payment. Most of the respondents use mobile payment weekly which consist 51% (N=102). There are 65 respondents use mobile payment monthly which is 32.5% of total respondents. The lowest percentage of respondent's frequencies of using the mobile payment is yearly, consist only 2.5% of total respondents (N=5). While the rest 14% of respondents are using the mobile payment daily which have 28 respondents.

## 4.2. Reliability Analysis

Cronbach's Alpha Reliability is to test the reliability of the study and allow the researcher to come out the consistent result (Hair et al. 2006). The number 1 and 0 is the specific number that measure the Cronbach's Alpha. If the coefficient is closer than 1, means that the Cronbach's Alpha had a better consistency within the items. According to the Schuessler (1971), the researcher say that the alpha values is largest than 0.6 it had state acceptable and reliable result.

The table below show the reliability test result:

Table 4.9: Internal Reliability Test

Variables	Cronbach's Alpha	No. of items
Perceived Ease of Use	0.916	5

Perceived Usefulness	0.881	4
Trust	0.781	3
Social influences	0.939	4
Intention	0.885	3

Based on the table above show that all variables are the considered variable as alpha value are more than 0.6, mean that the alpha values all are acceptable and reliable.

The highest alpha value in the table is social influences which is 0.939 with the 4 items compare to other factors. Next, the second highest for the variables is perceived ease of use. There alpha value is 0.916 with the 5 items. Intention is the third highest Cronbach's Alpha values compare to the other factor. The alpha value for the intention is 0.885 with the 3 items. Followed by the perceived usefulness which is 0.881 alpha value with 4 items. Lastly the lower Cronbach's Alpha value is trust. The value of trust is 0.781 with the 3 items.

By using the reliability test, the result can conclude that use the Cronbach's Alpha can measure the independent variables and dependent variable can achieved and fulfilled the level of the reliability.

## 4.3. Inferential Analysis

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

Table 4.10: Rules of thumb about Correlation Coefficient size

## 4.3.1. Pearson Correlation Coefficient

For the table above, that is the matrix of correlation, it represents that the positive and significant variable between the factor and the dependent variable. Based on the research, there are only two coefficient range that involve in the result. The two ranges are the high strength of association and the moderate for the strength of association. The factors that involve in the high strength are the social influences, there are 0.729 and the perceived usefulness, there are 0.715. for the factor of trust (0.533) and perceived ease of use (0.654) is in the moderate for strength of association.

Variable	Correlation	p-values
	coefficients	
Intention vs perceived ease of use	0.654	P<0.05
Intention vs perceived usefulness	0.715	P<0.05
Intention vs trust	0.533	P<0.05
Intention vs social influences	0.729	P<0.05

Table 4.11: Correlation coefficient

Based on the table show that the correlation coefficient between the dependent variable (DV) that is intention and the independent variable (IV) that is perceived ease of use, perceived usefulness, trust and social influences. According the result had been done, they will group in 3 categories which is the high and moderate for strength of association. The positive for the moderate relationship between the independent variable and dependent variable include the perceived ease of use (r=0.654) and the trust (r=0.533). Based on this result show that the perceived ease of use and trust are significant related to the dependent variable (DV) which is intention for

mobile payment. So, mean that the factors which are perceived ease of use and trust are supported.

Moreover, another result had been tested and group in to other categories are perceived usefulness and the social influences and group in to the high strength of association. The result test found out that the perceived usefulness is r=0.715 and the social influences Is r=0.729. based on the result it shows that they are a strong significant relationship between the intention for mobile payment.

#### 4.3.2. Multiple Regression Analysis

	-				
	Unstand	ardized	Standardized		
	Coeffici	ents	Coefficients		
		Std.			
Model	В	Error	Beta	t	Sig.
1 (Constant)	551	.274		-	.046
		.271		2.012	.010
perceived ease of	.063	.107	.047	.588	.557
use					
perceived	.458	.104	.356	4.399	.000
usefulness					
trust	.178	.070	.136	2.539	.012
social influence	.438	.067	.393	6.494	.000
R					.803
R Square					0.645
Adjusted R					0.637
Square					0.037

Table 4.12: Multiple Regression Result

F-test			88.384
Sig			0.000
Std. Error of the Estimate			0.55974
Durbin-Watson			1.237

Dependent Variable: intention for the universities' students in Klang Valley.

Multiple Regression analysis is to study out the four independent variables, there are perceived ease of use, perceived usefulness, trust and social influences to explain the relationship between the independent variable (IV) and dependent variable (DV) which is intention of mobile payment for the universities' students in Klang Valley. For the result had been test out using the four independent variables are statistically significant F test is 88.384 and the p-value is p<0.05. So, mean that the test show that the factors will influence the universities' students about the intention of the mobile payment. Based on the result,  $R^2$  which is 0.645. It found that is a small but evidence to show the relationship between the intention for mobile payment and the factors such as the perceived ease of use, perceived usefulness, trust and social influences. The value 0.637 is the value for the adjusted  $R^2$ , it also means that there are 63.7 percent of the variation in the intention of mobile payment is influence by the factors or independent variable and the rest of the 36.3 percent is influence by other factor that we didn't mention in this research.

The shape of data that is the normal distribute of single metric variable to refer the normally test. The Appendix 2 and 3 had been provide for a reference are the frequency distributions and the P-P plots of the regression show as a normal distribution.

Next, the Scatterplot is to show the generally random pattern as the nonlinear pattern and show the relationship between the independent variable (IV) and dependent variable (DV). The result will list out the homoscedasticity in the multivariable independent variable set the value of the predictors.

Besides that, Durbin Watson Test is the test that measure the autocorrelation from the regression. It also names serial correlation. In this test statistic, the range between 1 to 3 is the consider value (Field, 2009). In this research, the Durbin Watson statistic value is 1.237, mean that it considers as normal.

Based on the result for the regression, the result as below:

Y= -0.551 + 0.063 (PEOU) + 0.458 (PU) + 0.178 (TRU) + 0.438 (SI)

 $\mathbf{Y} = \text{intention}$ 

PEOU = Perceived Ease of Use

PU = Perceived Usefulness

TRU = Trust

SI = Social Influence

Hypotheses	Results	Supported or not
		supported
H1: There is a significant relationship	P>0.05	Not supported
between perceived ease of use and		
intention adopt mobile payment.		
H2: There is a significant relationship	P<0.05	Supported
between perceived usefulness and		
intention adopt mobile payment.		
H3: There is a significant relationship	P>0.05	Not supported
between trust and intention adopt		
mobile payment.		
H4: There is a significant relationship	P<0.05	Supported
between social influences and		
intention adopt mobile payment.		

Table 4.13: Summary of Hypotheses Testing

Based on the table show that there are some increasing of the perceived ease of use which is 0.063, perceived usefulness is 0.458, trust is 0.178 and the social influences increase 0.438 in order to increase 1 unit for the intention of adoption to the mobile payment. Next, the strongest influences standardised beta to the intention adoption to mobile payment is the social influences which is 0.393. besides that, the second highest standardized beta is 0.356, follow by the trust which is 0.136 and lastly is perceived ease of use which is 0.047.

*H1: There is positive relationship between perceived ease of use and intention adopt mobile payment.* 

The table show the result about the p-value is 0.557 with the P>0.05. So, the null hypothesis does not be rejected at the most 5 percent error. It also concludes that there is no significant relationship between the perceived ease of use and the intention adoption to the mobile payment. The process and the step to the perform transaction is more difficult to the respondents

compare to using cash and credit card and it will become inconvenient to the consumers or users.

H2: There is positive relationship between perceived usefulness and intention adopt mobile payment.

The p – value for the perceived usefulness is 0.000 and p<0.05. so, the null hypothesis will be rejected at the 5 percent error. It concludes that there is a significant relationship between the perceived usefulness and the intention adoption to mobile payment. According to the previous research had been done by Davis, Bagozzi and Warshaw (1989), the result show that the perceived usefulness is one of the factors that can influences consumers make decision to adopt the mobile payment.

*H3: There is positive relationship between trust and intention adopt mobile payment.* 

The table show the result about the p-value is 0.012 with the P>0.05. So, the null hypothesis does not be rejected at the most 5 percent error. It also concludes that there is no significant relationship between the trust and the intention adoption to the mobile payment. Trust is not related to the intention n for the perform mobile payment (Kim et al.,2009 and Pavlou, 2001). Trust also not suitable to become a motivation to the users to adopt the mobile payment compare to other factors.

*H4: There is positive relationship between social influences and intention adopt mobile payment.* 

The p – value for the perceived usefulness is 0.000 and p<0.05. so, the null hypothesis will be rejected at the 5 percent error. It concludes that there is a

significant relationship between the social influences and the intention adoption to mobile payment. Social influences are not the strong and necessary factor to influence to all the consumers. But it is the one of factor that can easily to influence the consumers make decision to choose the mobile payment to do the transaction.

## 4.4. Conclusion

For the conclude this chapter, the factor analysis and the reliability test had been tested by the SPSS software system to run though the all data analysis. The dependent variable and the independent variables will do the discussion in the coming chapter.

# CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATION

### **5.0Introduction**

In this chapter, it will make a conclusion for chapter 4 and the research project. It included the summary of descriptive analysis and inferential analysis. Beside these, the results for discussion of major findings and implications the research also included in this chapter. Moreover, this chapter will also emphasis for the discussion toward the results of research as analyzed in chapter 4. It also will discuss the limitations of the study and give some recommendations for future research.

## 5.1. Summary of the Statistical Analysis

#### 5.1.1. Descriptive Analysis

The purpose of this research is to investigate the consumers behaviour towards mobile payment among university students in Klang Valley. The personal characteristic of respondents are described by using the demographic factors such as gender, age, ethnic, university, education level, income level, whether respondents used mobile payment before and how frequencies of using mobile payment.

In this research, there were total 286 respondents are involved. There were 86 male respondents and 114 female respondents. The majority of

respondents were female which has 57% respondents are. The remaining of the respondents was male which have 43% respondents.

For the age group, the result shows that the largest age group of respondents was involved in this research was between 22-24 years old which consists of 67 respondents (33.5%). The second large age group of respondents was between 19-21 years old which is 61 respondents (30.5%). This followed by the age group below 18 years old which consists 38 respondents were involved (19%). The lowest percentage of the respondents involved is 24 years old above, which has 34 respondents (17%).

The ethnic of respondents who involved in this research are Chinese, Malay, Indian and other ethnic. The Chinese has the highest percentage of the ethnic who are involved in the research, which consists 45% respondents (N=90). The lowest percentage is other ethnic which has 1% respondents only (N=2). While, Malay and Indian consist 24.5% and 29.5% respondents respectively, which has 49 and 59 accordingly.

Next moving to which university students that involved in this research. Most of the respondents are studying in Taylor's University which consists 22.5% (N=45). Then follow by the respondents who are studying in UTAR which contribute 21% (N=42). The lowest percentage of the respondents are studying in UCSI which consist 17.5% (N=35). While the remained respondents who are study in MMU and Sunway University contribute 18.5% (N=37) and 20.5% (N=41) respectively.

For the level of education, the result shows that Majority of the respondents are undergraduate students which consist of 62.5% (N=125). There are 20.5% of the respondents are foundation students (N=41). Then follow by postgraduate students who involved in this research which consist

15% (N=30). The lowest percentage of the respondents which are Master students, consist only 2% (N=4).

The group of respondents from the monthly income RM1,000-RM1,500 consist of 34.5% which achieve the highest percentage (N=69). Then follow by the group of respondents from the monthly income RM1,500-RM2,000 consist of 29% (N=58). The lowest amount of respondents is 25 which from the group of monthly income RM2,000 above, there are only 12.5% of respondents. The respondents whose monthly income below RM1,000 have 48 respondents, which consist 24% of respondents.

Next is the result of the respondents who had used mobile payment before. All of the respondents involved in this research had used mobile payment before which means there is 100% respondents used mobile payment before.

Lastly, for the frequencies of using the mobile payment such as daily, weekly, monthly and also yearly. Most of the respondents use mobile payment weekly which consist 51% (N=102). There are 65 respondents use mobile payment monthly which is 32.5% of total respondents. The lowest percentage of respondent's frequencies of using the mobile payment is yearly, consist only 2.5% of total respondents (N=5). While the rest 14% of respondents are using the mobile payment daily which have 28 respondents.

### 5.1.2. Scale of Measurement

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

Table 5.1: Internal Reliability Test

The scale of measurement is based on the reliability test. In this study, there are five variables were tested by using Cronbach's Alpha. All variables are the considered variable as alpha value are more than 0.6, mean that the alpha values all are acceptable and reliable. The highest alpha value in the table is social influences which is 0.939 with the 4 items compare to other factors. Next, the second highest for the variables is perceived ease of use. There alpha value is 0.916 with the 5 items. Intention is the third highest Cronbach's Alpha values compare to the other factor. The alpha value for the intention is 0.885 with the 3 items. Followed by the perceived usefulness which is 0.881 alpha value with 4 items. Lastly the lower Cronbach's Alpha value is trust. The value of trust is 0.781 with the 3 items. By using the reliability test, the result can conclude that use the Cronbach's Alpha can measure the independent variables and dependent variable can achieved and fulfilled the level of the reliability.

#### **5.1.3. Inferential Analysis**

#### 5.1.3.1. Pearson Correlation Coefficient

Variable Correlation p-values coefficients Intention perceived 0.654 P<0.05 VS ease of use Intention vs perceived 0.715 P<0.05 usefulness Intention vs trust 0.533 P<0.05 Intention vs social 0.729 P<0.05 influences

Table 5.2: Rules of thumb about Correlation Coefficient size

For the table above, that is the matrix of correlation, it represents that the positive and significant variable between the factor and the dependent variable. Based on the research, there are only two coefficient range that involve in the result. The two ranges are the high strength of association and the moderate for the strength of association. The factors that involve in the high strength are the social influences, there are 0.729 and the perceived usefulness, there are 0.715. For the factor of trust (0.533) and perceived ease of use (0.654) is in the moderate for strength of association.

Based on the table show that the correlation coefficient between the dependent variable (DV) that is intention and the independent variable (IV) that is perceived ease of use, perceived usefulness, trust and social influences. According the result had been done, they will group in 3 categories which is the high and moderate for strength of association. The positive for the moderate relationship between the independent variable and dependent variable include the perceived ease of use (r=0.654) and the trust (r=0.533). Based on this result show that the perceived ease of use and trust

are significant related to the dependent variable (DV) which is intention for mobile payment. So, mean that the factors which are perceived ease of use and trust are supported.

Moreover, another result had been tested and group in to other categories are perceived usefulness and the social influences and group in to the high strength of association. The result test found out that the perceived usefulness is r=0.715 and the social influences is r=0.729. Based on the result it shows that they are a strong significant relationship between the intention for mobile payment.

### 5.1.3.2. Multiple Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients		
		Std.			
Model	В	Error	Beta	t	Sig.
1 (Constant)	551	.274		- 2.012	.046
perceived ease of use	.063	.107	.047	.588	.557
perceived usefulness	.458	.104	.356	4.399	.000
Trust	.178	.070	.136	2.539	.012
social influence	.438	.067	.393	6.494	.000
R					.803
R Square					0.645
Adjusted R Square					0.637
F-test					88.384
Sig					0.000

Table 5.3: Multiple Regression Result

Std. Error of the Estimate		0.55974
Durbin-Watson		1.237

Dependent Variable: intention for the universities' students in Klang Valley.

For the result had been test out using the four independent variables are statistically significant F test is 88.384 and the p-value is p<0.05. So, mean that the test show that the factors will influence the universities' students about the intention of the mobile payment. Based on the result,  $R^2$ which is 0.645. It found that is a small but evidence to show the relationship between the intention for mobile payment and the factors such as the perceived ease of use, perceived usefulness, trust and social influences. The value 0.637 is the value for the adjusted  $R^2$ , it also means that there are 63.7 percent of the variation in the intention of mobile payment is influenced by the factors or independent variable and the rest of the 36.3 percent is influence by other factor that we didn't mention in this research.

## 5.2. Discussion of Major Findings

Hypotheses	Results	Supported or not
		supported
H1: There is a significant	P>0.05	Not supported
relationship between perceived ease		
of use and intention adopt mobile		
payment.		
H2: There is a significant	P<0.05	Supported
relationship between perceived		
usefulness and intention adopt		
mobile payment.		
H3: There is a significant	P>0.05	Not supported
relationship between trust and		
intention adopt mobile payment.		
H4: There is a significant	P<0.05	Supported
relationship between social		
influences and intention adopt		
mobile payment.		

Table 5.4: Summary of Hypotheses Testing

Source: Developed for the research

# 5.2.1. Relationship between perceived ease of use and intention adopt mobile payment

*H1: There is positive relationship between perceived ease of use and intention adopt mobile payment.* 

The table show the result about the p-value is 0.557 with the P>0.05. So, the null hypothesis does not be rejected at the most 5 percent error. It also concludes that there is no significant relationship between the perceived

ease of use and the intention adoption to the mobile payment. The process and the step to the perform transaction is more difficult to the respondents compare to using cash and credit card and it will become inconvenient to the consumers or users.

# 5.2.2. Relationship between perceived usefulness and intention adopt mobile payment

H2: There is positive relationship between perceived usefulness and intention adopt mobile payment.

The p-value for the perceived usefulness is 0.000 and p<0.05. So, the null hypothesis will be rejected at the 5 percent error. It concludes that there is a significant relationship between the perceived usefulness and the intention adoption to mobile payment.

# 5.2.3. Relationship between trust and intention adopt mobile payment

*H3: There is positive relationship between trust and intention adopt mobile payment.* 

The table show the result about the p-value is 0.012 with the P>0.05. So, the null hypothesis does not be rejected at the most 5 percent error. It also concludes that there is no significant relationship between the trust and the intention adoption to the mobile payment.

# 5.2.4. Relationship between social influences and intention adopt mobile payment.

*H4: There is positive relationship between social influences and intention adopt mobile payment.* 

The p-value for the perceived usefulness is 0.000 and p<0.05. So, the null hypothesis will be rejected at the 5 percent error. It concludes that there is a significant relationship between the social influences and the intention adoption to mobile payment. Social influences are not the strong and necessary factor to influence to all the consumers. But it is the one of factor that can easily to influence the consumers make decision to choose the mobile payment to do the transaction.

### 5.3. Implication of Study

#### 5.3.1. Managerial Implication

This study provides some implication to restaurant and those milk tea shop that adapt the mobile payment technology. Our result suggest that the perceived usefulness and social influences are both strong predictor of consumer's intention to use mobile payment service. Therefore, restaurant and milk tea shop should have their own specialist on first to understand their target segment's beliefs and values, then promote mobile payment technology in the way that compatible with their needs, lifestyles and values. Some marketing strategy could be implemented to cater the group of trendy, innovative and also tech-friendly consumers, basically Gen-Y who desire flexibility on the mobile payment service provided. Next, in order to convince consumer to adopt in the new payment method, mobile payment technology should be developed to provide more added values and nevertheless increase the level of security. The strong convincing reasons are needed for consumers to adopt to the new payment method. As mobile payment consist of the service consists of monetary transaction, thus the level of security must strong enough in order for consumers to trust in the mobile payment service.

Mobile payment service had been proved that it is a convenient and usage effectively in real world for gaining higher market shares from cash. Besides providing lower and cheaper transaction cost for business and consumers, the consistently maintaining competitive environment is also an important element to enhance the mobile payment technology and also provided various experiences to consumers.

#### 5.4. Limitation of Study

There are two limitation despites its contribution to some major find was found in this research. Although the problem and limitation affect the research process, most of the problem consider as inevitable. So the only way is always put the problem down which the problem was couldn't prevent or eliminated.

First limitation relate and revealed in this research is all of the data were collected through questionnaire from Klang Valley. Although Klang Valley's population are more condense than other states, but it cannot be representing the whole view of the mobile payment adoption intention in private university. Nevertheless, the respondents are basically those who are categorized as youngster which the range of age category is not broader enough to represent the overall data. So the results are not generalized and Klang Valley cannot be representing a whole nationalities.

The next limitation is the overall respondents are highly educated. Respondents with higher educational qualification night have different intentions to adopt mobile payment compare to lower educational qualification respondents. The findings could be better if the respondents are targeted to wider range of education qualification.

### 5.5. Recommendation for Future Research

This study has pointed out three recommendations for future research. The objective of this section is to let the researchers have better understand towards similar research's area and to ease the researchers in conducting future research.

Firstly, the research population or the targeted respondents should be include a broader range of age group and also widen the geographical coverage. It can be ensure that the data are collected in a variety of perspective. Researcher have to improve the hypotheses to be more accurately and specifically, nevertheless expanding the total of sample size because it will have a different result on the hypotheses.

Beside, future researchers are suggested to target the population with lower educational level as their sample because different level of education will have different adoption intention on mobile payment, hence it will provide a more generalized data for future researchers.

## 5.6. Conclusion

The main objective of this research study is to investigate the consumer behaviour toward mobile payment among university students. The study examined and identified four determinants to effect the adoption intention towards the mobile payment service. The four determinants are perceive ease of use, perceive usefulness, trust and social influence. The concluded and discussed descriptive analysis, inferential analysis, managerial implication, limitation of study and also the recommendation for future study are explained in this chapter.

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#### Appendix 3.1: Questionnaire

#### Survey Questionnaire



Dear Value Respondents:

We are from Universiti Tunku Abdul Rahman's (UTAR) undergraduate students.

Currently we are conducting a research as our final year project. The objective of this study is to find out the consumers' behavior toward mobile payment intention among universities students. Your participation is highly valuable, and your answers will be treated as strictly confidential and anonymous. It will take 10 minutes to complete the survey. Thank you very much for your time and participation in this research.

Yours Faithfully,

Khew Yi Fei	1508169
Wong Choon Fai	1507122

#### Section A: Demographic Profile

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

1.	Gender:	I	Male
		Ι	Female
2.	Age:		18 years old 1 years old
			4 years old rs old above
3.	Ethnic:		Malay
			Chinese Indian
			Others:
4.	Education:		Undergraduate
			Post graduate
			PHD Master
			11105001
5.	Income:		Below RM1000
			RM1001 – RM1500
			RM1501 – RM2000 Above RM2000

6. Have you heard about mobile payment?

Ye	S
No	

- 7. Have you used mobile payment before?
  - Yes No

# Section B: Evaluate the factors influence e-payment in Klang Valley's private university students.

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

(1) = Strongly	Disagree	(2) = Disagree	(3) = Neutral
	(4) = Agree	(5) = Strongly	Agree

Please circle one number per line to indicate the extent to which you agreed or disagreed with the following statements.

#### 1. Perceived ease of use

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. I do not get frustrated when use mobile payment.	1	2	3	4	5
b. mobile payment is easy to learn and	1	2	3	4	5
use.					

c. I feel flexible in					
performing mobile payment.	1	2	3	4	5
d. mobile payment					
provides various payment channels that ease my online	1	2	3	4	5
shopping process.					
e. Less effort is needed					
when I perform mobile payment.	1	2	3	4	5

# 2. <u>Perceived of usefulness</u>

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. mobile payment					
improves my search					
for mode of	1	2	3	4	5
payment that I					
desired.					
b. mobile payment can					
minimize the time I					
usually spent on	1	2	3	4	5
payment.					
c. mobile payment can					
help me in terms of					
making better	1	2	3	4	5
payment decisions.					

d. mobile payment					
makes it easier for					
me to make					
products	1	2	3	4	5
comparison among					
payment modes.					

## 3. <u>Trust</u>

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. A trustable software will ensure payment modes available is reliable.	1	2	3	4	5
b. A software that wants to keep promises and obligations will attract me to use mobile payment more often.	1	2	3	4	5
c. I will use mobile payment the terms and conditions are clear.	1	2	3	4	5

#### 4. Social Influence

Circle the number that best describes your response to each statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. People who					
are important					
to me are	1	2	3	4	5
likely to					
recommend					
using mobile					
payment					
technology.					
b. People who					
are important					
to me would					
probably	1	2	3	4	5
suggest that I	-	_	C C		C
should use					
mobile					
payment					
technology.					
c. People who					
are important					
to me expect	1	2	3	4	5
me to use		_			5
mobile					
payment					
technology.					
d. People who					
influence my					
behavior	1	2	3	4	5
think that I				т	5

should use			
mobile			
payment			
technology.			

#### 5. Intention to do / perform mobile payment

The following statements reflect a person's intention to do / perform mobile payment. Please rate how closely these statements reflect your intention of perform mobile payment in the near future.

Circle	the number	that best desc	ribes vour re	esponse to	each statement.
	the manneer	unat 0000 0000	1000 500 10		each statement.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Because my friends and family are using mobile payment.	1	2	3	4	5
b. Because I like the feeling of using mobile payment.	1	2	3	4	5
c. Because I don't want to be the only one who does not use mobile payment.	1	2	3	4	5

I have the intention of performing online shopping in the near future

Adopted from: Goh, S. W. (2017). *Factors Affecting Adoption of E-Payment among Private University Students in Klang Valley* (Doctoral dissertation, UTAR). Appendix 4.1 frequency gender of respondents

	Senter								
				Valid	Cumulative				
		Frequency	Percent	Percent	Percent				
Valid	Female	114	57.0	57.0	57.0				
	Male	86	43.0	43.0	100.0				
	Total	200	100.0	100.0					

gender

Appendix 4.2 age of respondents

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	19 – 21				
	years	61	30.5	30.5	30.5
	old				
	22 - 24				
	years	67	33.5	33.5	64.0
	old				
	24 years				
	old	34	17.0	17.0	81.0
	above				
	Below				
	18 years	38	19.0	19.0	100.0
	old				
	Total	200	100.0	100.0	

Age

Appendix 4.3 Ethics of respondents

	Ethics								
				Valid	Cumulative				
		Frequency	Percent	Percent	Percent				
Valid	Chinese	90	45.0	45.0	45.0				
	Dusun	2	1.0	1.0	46.0				
	Indian	59	29.5	29.5	75.5				
	Malay	49	24.5	24.5	100.0				
	Total	200	100.0	100.0					

Ethics

Appendix 4.4 university of respondents

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	MMU	37	18.5	18.5	18.5
	Sunway University	41	20.5	20.5	39.0
	Taylor's University	45	22.5	22.5	61.5
	UCSI	35	17.5	17.5	79.0
	UTAR	42	21.0	21.0	100.0
	Total	200	100.0	100.0	

# University

Appendix 4.5 education level of respondents

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Foundation	41	20.5	20.5	20.5
	Master	4	2.0	2.0	22.5
	Post graduate	30	15.0	15.0	37.5
	Undergraduate	125	62.5	62.5	100.0
	Total	200	100.0	100.0	

### **Education level**

Appendix 4.6 income level of respondents

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Below	48	24.0	24.0	24.0
	RM1,000	+0	24.0	24.0	24.0
	RM1,000 -	69	34.5	34.5	58.5
	RM1,500	09	54.5	54.5	50.5
	RM1,501 -	58	29.0	29.0	87.5
	RM2,000	38	29.0	29.0	87.3
	RM2,000	25	12.5	12.5	100.0
	above	25	12.5	12.5	100.0
	Total	200	100.0	100.0	

#### Income level

Appendix 4.7 do the respondents heard about mobile payments

Do the respondents	heard	about	mobile	payments
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				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Yes	200	100.0	100.0	100.0

Appendix 4.8 do the respondents used mobile payments before

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Yes	200	100.0	100.0	100.0

Do the respondents used mobile payments before

Appendix 4.9 frequency of respondents using mobile payments

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Daily	28	14.0	14.0	14.0
	Monthly	65	32.5	32.5	46.5
	Weekly	102	51.0	51.0	97.5
	Yearly	5	2.5	2.5	100.0
	Total	200	100.0	100.0	

frequency of respondents using mobile payments

Appendix 4.10 reliability test

#### **Reliability Statistics**

.890	.893	5
Alpha	Items	Items
Cronbach's	Standardized	N of
	on	
	Alpha Based	
	Cronbach's	

	Mean	Std. Deviation	Ν
Perceived ease of use	4.3020	.69513	200
Perceived of usefulness	4.1650	.72224	200
Trust	3.9483	.70817	200
Social Influences	4.0213	.83379	200
Intention	4.0950	.92932	200

#### **Item Statistics**

## Inter-Item Correlation Matrix

	Perceived	Perceived			
	ease of	of		Social	
	use	usefulness	Trust	Influences	Intention
Perceived	1.000	.826	.537	.611	.654
ease of use	1.000	.820	.557	.011	.034
Perceived of	.826	1.000	.454	.657	.715
usefulness	.820	1.000	.454	.037	./15
Trust	.537	.454	1.000	.534	.533
Social	.611	657	524	1.000	.729
Influences	.011	.657	.534	1.000	.129
Intention	.654	.715	.533	.729	1.000

### **Item-Total Statistics**

	Scale	Scale			Cronbach's
	Mean if	Variance	Corrected	Squared	Alpha if
	Item	if Item	Item-Total	Multiple	Item
	Deleted	Deleted	Correlation	Correlation	Deleted
Perceived ease of use	16.2296	7.258	.777	.717	.859

Perceived					
of	16.3666	7.086	.792	.747	.855
usefulness					
Trust	16.5833	7.827	.587	.382	.897
Social	165102	6 600	755	501	962
Influences	16.5103	6.699	.755	.591	.862
Intention	16.4366	6.153	.789	.645	.856

#### **Scale Statistics**

		Std.	N of
Mean	Variance	Deviation	Items
20.5316	10.653	3.26386	5

ANOVA with Cochran's Test

		Sum of		Mean	Cochran's	
		Squares	df	Square	Q	Sig
Between	1 People	423.980	199	2.131		
Within	Between	14.812	4	3.703	59.010	.000
People	Items	14.012	+	5.705	57.010	.000
	Residual	185.992	796	.234		
	Total	200.804	800	.251		
Total		624.784	999	.625		

Grand Mean = 4.1063

Appendix 4.11 Pearson's Correlation Coefficients

			Perceived			
		Perceived	of		Social	
		ease of	usefulnes		Influence	Intentio
		use	S	Trust	S	n
Perceived	Pearson					
ease of	Correlatio	1	.826**	.537**	.611**	.654**
use	n					
	Sig. (1-		.000	.000	.000	.000
	tailed)		.000	.000	.000	.000
	Ν	200	200	200	200	200
Perceived	Pearson					
of	Correlatio	.826**	1	.454**	.657**	.715**
usefulnes	n					
S	Sig. (1- tailed)	.000		.000	.000	.000
	Ν	200	200	200	200	200
Trust	Pearson					
	Correlatio	.537**	.454**	1	.534**	.533**
	n					
	Sig. (1- tailed)	.000	.000		.000	.000
	Ν	200	200	200	200	200
Social	Pearson					
Influence	Correlatio	.611**	.657**	.534**	1	.729**
S	n					
	Sig. (1- tailed)	.000	.000	.000		.000
	Ν	200	200	200	200	200
Intention	Pearson					
	Correlatio	.654**	.715**	.533**	.729**	1
	n					

#### Correlations

Sig. (1- tailed)	.000	.000	.000	.000	
Ν	200	200	200	200	200

\*\*. Correlation is significant at the 0.01 level (1-tailed).

#### Appendix 4.12 Regression

	Model Summary						
				Std.			
			Adjuste	Error of			
Mode		R	d R	the			
1	R	Square	Square	Estimate			
1	.803ª	.645	.637	0.55974			

a. Predictors: (Constant), social influence,trust, perceived ease of use, perceived usefulness

	Sum of				
	Square		Mean		
Model	S	df	Square	F	Sig.
1 Regression	110.76	4	27.692	88.38	.000
	6	4		4	b
Residual	61.095	195	.313		
Total	171.86	100			
	2	199			

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

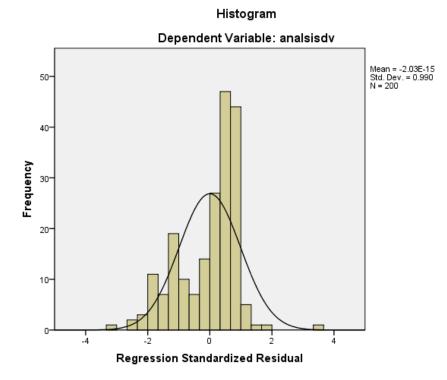
a. Dependent Variable: intention

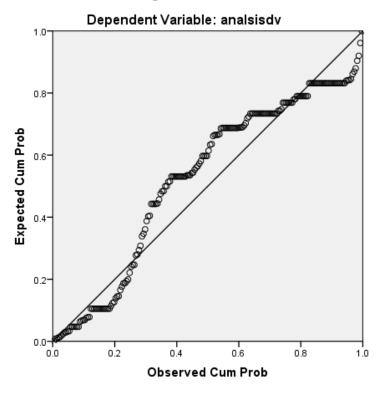
b. Predictors: (Constant), social influence,trust, perceived ease of use, perceived usefulness

	Unstandardized Coefficients		Standardized Coefficients		
		Std.			
Model	В	Error	Beta	t	Sig.
1 (Constant)	551	.274		- 2.012	.046
perceived ease of use	.063	.107	.047	.588	.557
perceived usefulness	.458	.104	.356	4.399	.000
trust	.178	.070	.136	2.539	.012
social influence	.438	.067	.393	6.494	.000

a. Dependent Variable: intention

Appendix 4.12 Chat





Normal P-P Plot of Regression Standardized Residual

Scatterplot Dependent Variable: analsisdv

