FACTORS AFFECTING ADOPTION OF E-PAYMENT AMONG PRIVATE UNIVERSITY STUDENTS IN KLANG VALLEY

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DECLARATION

I hereby declare that:

1. This Research Project is the end result of my own work and the 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 16,076.

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Besides that, I would also like to show appreciation towards the respondents for their time and effort in completing the questionnaires. Without their contribution from their responses, this research project would not have proceeded.

Last but not least, I also want to show my gratitude towards my seniors, which they have shared their knowledge and experiences with me. Even I am not able to mention everyone by name but by using this platform I would like to thanks to all these people.

DEDICATION

This humble work is especially dedicated to:

Dr. Chong Shyue Chuan, my project supervisor,

All the respondents,

And

To my family and all my loved ones,

Thank you for being my guidance and support.

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PREFACE

The purpose of this research project is to evaluate the factors affecting adoption e-payment among private university students in Klang Valley. The total of use of e-payment is still growing as compared to the years before based on the results and findings of other researchers. Therefore, retailers and marketers are keen to find out the factors that affect intention to adopt e-payment.

Besides, this study examines how the independent variables (Attitude, Subjective Norm, Perceived Ease of Use, Perceived Usefulness, Perceived Security, Trust, Benefit and Self-efficacy) will affect the dependent variable (E-Payment Intention). The researcher for this project would like to evaluate the e-payment intention of private universities' student in Klang Valley. Therefore, this research project would be able to provide a better understanding to the retailers and marketers regarding the factors affecting adoption e-payment among private university students in Klang Valley.

Lastly, I hope that this research project can provide the readers with a better insight and knowledge of the e–payment intention in younger adults.

ABSTRACT

Purpose: The purpose of this study is to examine the factors affecting adoption of e-payment among private universities student in Klang Valley.

Design/methodology/approach: This study inspects factors affecting adoption e-payment among private universities student in Klang Valley by using cross-sectional analysis of 500 target respondents in five different private universities in Klang Valley. This paper observes the relationship between attitude, subjective norm, perceived ease of use, perceived usefulness, perceived security, trust, benefit and self-efficacy to the e-payment intention of private universities' students.

Findings: It can be concluded that there is a significant relationship between the attitude, subjective norm, perceived ease of use, perceived usefulness, perceived security, trust, benefit and self-efficacy to the e-payment intention of private universities' students. Besides, I found out that self-efficacy has the strongest relationship with online shopping intention.

Practical Implications: This study is important to academicians, buyers and sellers who involved in e-payment as it demonstrates attitude, subjective norm, perceived ease of use, perceived usefulness, perceived security, trust, benefit and self-efficacy are among the eight critical factors in affecting the e-payment intention.

Originality/value: There is only a few research studies have attempted to explain the factors affecting e-payment intention with the adoption variables from Technology Acceptance Model (TAM) and Theory of Planned Behaviour (TPB). Instead, many researchers were conducted to examine how security and trust related to consumers' purchase intention. Thus, this study may extend the literature demonstrating the eight factors affecting e-payment intention of private universities' student in Klang Valley.

CHAPTER 1

INTRODUCTION

1.0 Introduction

The objective of this study is to determine the factors that affecting adoption of e-payment among private university students in Klang Valley. This chapter consists of summarized chapter one into six parts to illustrate and describe a clear idea for whole research project. All the parts will be explained in details which consist of hypotheses, research objectives, problem statement, research background and significance of study in this entire chapter.

1.1 Research Background

The advancement of wireless and internet technology has created opportunities and challenges for good and services commerce. The growth of electronic commerce is built upon e-payment that most of the business cooperation views this e-payment system as very important concerns for successful business and financial services (Kousaridas, Parissis & Apostolopoulos, 2008). This statement is supported by many previous studies such as Hsieh (2001), Peha and Khamitov (2004). In addition, Stroborn, Heitmann, Leibold and Frank (2004), Linck, Pousttchi and Wiedemann (2006), Cotteleer, Cotteleer, Prochnow (2007), and Kousaridas et al. (2008) stated in their studies on electronic commerce.

Electronic payment, which is also called as e-payment has become well-known nowadays for paying transactions the online purchases made. (Teoh, Choy, Lin & Chua, 2013). There are many limitations in traditional e-payment systems that inhibit consumers from adopting them. Based on Chou et al. (2004) and Linck et al. (2006) stated that in correlation with the traditional payment methods, e-payment system in the market have few constructive characteristics together with convenience, security, anonymity, reliability, scalability, privacy, acceptability and effectiveness. These also stated in several previous studies such as Stroborn et al. (2004), Tsiakis and Sthephanides (2005). Besides that, Cotteleer et al. (2007) and Kousaridas et al. (2008) had mentioned in their study as well. According to Hord (2005), e-payment symbolises some kind of cashless payment that does not include a physical paper cheque. E-payment is used widely in digital environment such as electronic shopping (e-shopping) or online shopping, electronic banking (e-banking) and electronic learning (e-learning) that involves internet connection to work with. There are some studies that refer e-payment as financial exchange (Kalakota & Whinston, 1997; Zhang & Jasimuddin, 2012). The major purposes of e-payment are serve as e-banking that may include payment method for e-shopping, which all the customer can remote all the transactions using electronic value but not paper cheque.

According to the research done by Teoh, Chong, Lin and Chua (2013), they managed to identify two major e-payment systems used in Malaysia that impact the development of e-commerce transactions. The systems are large value payment system (SIPS) that incorporates real-time digital exchange and securities system (RENTAS). The e-payment systems had divided into three categories that include retail payment channels such as internet and mobile banking or payment, retail payment instruments such as credit or debit card and e-money as well as the last category which is retail payment systems that equally to shared automated machine (ATM) network, direct debit and Interbank GIRO. These systems is growing gradually that economies also benefit from this. E-payment systems had support on Malaysia's gross domestic product (GDP) transactions that is 58 times, which equal to amount RM49.5 trillion (USD15.9 trillion) in the year 2011. According to research done by Moody's Analytics, the increase in number of e-payments usage had contribute to GDP amounting USD 296 billion in year 2011 to 2015 internationally. According to the report done by Central Bank of Malaysia in 2012, the increase in retail payment transactions are mainly on electronic money and credit cards which stated that there are more than 80 per cent conducted electronically in the year 2011. Government E-payment Adoption Ranking's

research had showed that Malaysia has placed 29th out of 62 countries based on the overall performance use of e-payment (Economist Intelligence Unit Limited, 2012).

Based on survey piloted by the Malaysian Communication and Multimedia Commission (MCMC) in 2008, Malaysia ranked second for number of mobile users in ASEAN market. The study discovered that most of the mobile phone users were those age between 20-49 years old. The survey states that young adults consists of 66.8 per cent that majority mobile users in Malaysia. According to the 2016 Visa Consumer Payment Attitudes survey, 74 per cent of Malaysians are becoming less reliant on cash and prefer to make e-payments. The cause of this is due to most of the consumers do not feel safe using cash. E-payments are more convenient and efficient that less trouble for consumers to carry cash for small ticket items. Technology savvy Malaysians such as students in the private university have realise the benefits of using e-payments such as mobile payments, contactless cards and wearable with the advancement growth of technology in payment solutions.

Under the act of the Private Higher Education Institutions Act (PHEIA) 1996, private higher education institutions were legitimately recognised in Malaysia in 1996. According to Ministry of Higher Education (2010) stated that there are currently 20 of 514 of the private higher education institutions are status of a universities in Malaysia. Student that are currently pursuing their tertiary education are 17 years old and above, which the year of birth are mostly between the year 1994 to year 1997 (MOHE, 2014). This group of students are also known as Generation Y that are born between years 1978 and 1994 (Hanas, 2006) but there are some research shown that Generation Y are those born in early 1980s to early 2000s. According to Wolburg and Pokrywczynski (2001), it has been forecasted that Generation Y will reach 22 million student's population that have greater spending power than any previous generation. The increase in mobile penetration has also caused a fast flow in mobile commerce. Malaysian youths claimed that owning a mobile phone is a fundamental part of their life (Abdullah, 2004). As more young generations own and integrate smartphones into their daily lives, adoption of e-payment such as mobile payments will also increase.

According to the research done by Forrester Research Inc., generation Y that most of them are students has their own personalities which suit the tools and technologies (Howe & Strauss, 2009). This group of people thought that they are special, team oriented,

achievement oriented, pressured, self-confident, ordinary and protected. There are potential customers that are able to benefits from technologies.

Klang Valley, also called as Kuala Lumpur is the main capital of Malaysia that has the fastest growth in terms of economy and financially. According to the study of World Population Review (2016), there are population of 1.76 million people in the area of 94 square kilometres. The report also included the population growth in Klang Valley that the working group, which age are between 15 and 59 that the population have increased from 63 percent to 67 percent in year 2000 as people seek for more work opportunities. This also proved that people in Klang Valley have relevantly more purchasing power due to higher income.

1.2 Problem Statement

The objective of this study is to demonstrate the identification of the factors that affecting the use of e-payment in private universities' students whom are majority of them are the young generation student that have greater spending power.

According to the Department of Statistics Malaysia, they had forecasted in 2010 Malaysia consist of the largest segment that consists of 11 million people, which is 40 per cent of Malaysia's population are young adults. Hence, this group of universities' students will be a profitable target segment for Malaysian marketers as they have a massive drive to apply and have the financial ability to meet their wants and desires.

Malaysia is growing popularity on adoption of e-payment (Ramalingam, 2012). However, Malaysian are still little engage in e-payment due to some challenges such as less knowledge on internet and this lead less confident on e-payment system (Luarn & Lin, 2005; Paynter & Lim, 2001). There are customers still remain using cash and cheques because there are doubtful with the benefit of e-payment (Hataiseree, 2008). This study focuses on examining students' willingness to use e-payment as a payment instrument to do a transaction which trade in exchange for products or services.

According to Central Bank of Malaysia (2009), customers are not willing to use e-payment due to lack of awareness. Many studies also showed that security and trust are the main reason and concern that customer not willing to use e-payment. With the study done by Abrazhevich (2001) identified that e-payment system setting and design do not meet customers' or user's requirement and expectations. Several studies to date had been conducted in the field of e-payment but most of the national of these studies conducted are outside Malaysia which is United States, Ireland, and other Europe countries. Therefore, Malaysia has less studies on adaptation towards e-payment compared to other countries.

To my knowledge, there are currently no findings on the factors that influence private universities' student use e-payment in Klang Valley. This is interesting to study the factors specifically among private university student in Klang Valley, Malaysia. Most of studies predict that use of e-payment will increase at a significantly in the coming few years. Moreover, this study will benefits few financial and banking sectors or providers in more understanding customer needs and concerns when using e-payment. Furthermore, this will also benefit software developers or providers in handling issues faced by user in e-payment system. This study will discover the elements and also the factors that may affect consumer adoption of e-payments as an alternative means of payment by proposing a conceptual model.

1.3 Research Questions

A set of questions are recommended regarding the research issue in order to explain the topic. The questions specified below supports the research study on the variables that adoption on e-payment among private universities' student:

1. What is the relationship between subjective norm and adoption on e-payment?
2. How does the perceived ease of use influence the adoption on e-payment?
3. Is there any significant relationship between the perceived usefulness and adoption on e-payment?
4. What are the influences on the adoption of e-payment from perceived security?
5. How does the trust effect the adoption on e-payment?
6. What is the relationship between attitudes and adoption on e-payment?
7. How does the benefit effect the adoption on e-payment?
8. Is there any relationship between self-efficacy and adoption on e-payment?

1.4 Research Objective

The main objective circulated from the problem statement can help to determine the aspects that effecting the adoption of e-payment in Klang Valley.

1.4.1 General Objectives

This section states the objective of conducting this research. Since e-payment is getting more common in the virtual world, hence, the aim of doing this research is to understand the factors influencing the acceptance of e-payment in Klang Valley, by identifying the determinants suggested by the Theory of Planned Behaviour (TPB) and Technology Acceptance Model (TAM).

1.4.2 Specific Objectives

The specific objectives are listed as belows:

1. To determine the relationship between perceived security and universities' student adopt to e-payment.

2. To analyses the relationship between trust and universities' student adopt to e-payment.

3. To identify the relationship between perceived ease of use and universities' student adopt to e-payment.

4. To examine the relationship between subjective norm and universities' student adopt to e-payment.

5. To test the significant relationship between perceived usefulness and universities' student of e-payment adoption.

6. To identify the relationship between attitude and universities' student adopt to e-payment.

7. To examine the relationship between benefits and universities' student adopt to e-payment.

8. To determine the relationship between self-efficacy and universities' student adopt to e-payment.

1.5 Significance of the Study

The rapid development of technologies has led to a great improvement in terms of Internet technologies. The demographic profile and the behaviour of the new generation such as young students from private universities persuade marketers to revise their strategies. The traditional marketing strategies might not be applicable to young generation such as students. Stimulating developments that are currently undergoes concern on Malaysian context shows the estimation that there will be increase in significant rate in the coming next few years.

E-payment will become a trend that marketers have to put more effort in terms promote or appealing towards the young generations. As more young adults that own and integrate electronic devices such as laptop and mobile phones into their daily lives, adoption of e-payments will also increase. The introduction of e-payment will play an important role in determining the innovations of tomorrow.

This study is critical to be conducted to understand how private universities' students' attitudes and behaviours affect their intention to use e-payment. The findings as a supportive data to identify significant factors so that applicable strategies can be formulated to support marketers or financial institutions in promoting e-payment use among Malaysia's young adults.

Besides that, the results has contributed to financial institutions, online exchange facility providers, and software development companies in order to understand the young generation of Malaysia consumer concerns and issues when using e-payment. As we are aware young generations in Malaysia have the high purchasing power that is more significant and relevant to this research.

This will provide understandings which will effect on broader e-payment acceptance and use as young adults is potential customer which e-payment method eventually is becoming a favoured medium for economic businesses exchange in Malaysia as specifically stated in the Financial Sector Blueprint 2011-2020 (Central Bank of Malaysia, 2012a).

1.6 Chapter Layout

This research was divided into five chapters which is Chapter 1: Introduction, Chapter 2: Literature Review, Chapter 3: Research Methodology, Chapter 4: Data Analysis and Findings, and Chapter 5: Discussions and Conclusions.

Chapter 1 will state a brief introduction about the researching topic, which consists of a general background on e-payment and suggestion of factors that will accept the intention of adopt e-payment. This chapter will discussed the problem statement, research objectives, research questions, hypotheses and significance of study.

Chapter 2 is the chapter will discuss on literature review that is interrelated to the research topic and framework. In addition, this chapter is also will include the testing of the hypotheses developed and discuss all the variables in this research.

In Chapter 3 consists the data collection technique, research sample, measurement scales and approaches of analysing data that emphasis on the methodology of the study. This chapter is

discussing about the research setting of information and the approach of executing the research.

Chapter 4 consists of the results that collected and gained from the survey. All the valuable data that collected from the survey will be examined through Statistical Package for Social Science (SPSS) software. The results are portrayed in a table form for easy and better understanding.

Lastly, chapter 5 consists of the discussion and summarisation of the study results. This chapter will mention and conclude the implications, recommendations, implications for future reference and research. Besides, the limitations and brief summarised theses will be included and discussed under this chapter as well.

1.7 Conclusion

This chapter provides a summary of this study on factor influence on adoption of e-payment. Researcher will first examine in research background and problem statement, followed by the research objective and questions as well as hypotheses. Besides that, the contribution of the research is also mentioned in this chapter. Next chapter which is chapter 2 will further evaluated information provided in this chapter.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

This chapter provide a literature review of factors affecting adoption e-payment among private university students in Klang Valley context. This chapter includes the argument of observed literature review for the research that define the characteristics and term that related to the topic respectively. The first part begins with a discussion about intention that lead to adoption e-payment among private university students in Klang Valley context. From the second part, the theoretical framework of this study will be developed in a graphical way to summaries the variables' relationship and third parts is hypotheses developments.

2.1 Literature Review

2.1.1 Intention

Theory of Reason Action (TRA) was suggested by Fishbein and Ajzen (1975) that a behaviour is predicted by a person's intention to engage in a given intention that linking by two factors, the individual's attitude towards the given subjective norms and behaviour.

Intention is the component that expected actually influenced by the element of attitude of the individual and subjective norms. Besides that, intention can serve as motivational factors that influence behaviours on how much effort people are willing to try that resulted to carry out the behaviour. According to research by Sun (2003) which had proved that behavioural intention that use to measure of actual usage is valid and reliable. TRA theorizes that a particular behaviour is anticipated by an individual's intention to participate in.

Several studies have being theoretical to have better understanding the relationship between belief structures and backgrounds of intention by examining methods to decomposing attitudinal views (Chau & Hu, 2002; Taylor & Todd , 1995). According to Dahlberg and Holmberg (2014), Theory of Planned Behaviour (TPB) model had pointed out that diffusion or acceptance theories provide determinants in evaluating the payment habits. Other than that, TPB also is a model that measure intention to adopt payment habits based on evaluating beliefs.

Based on the research done by Norman and Conner (2006), variables consists in TPB success to prove that there is variance in intentions, 66 per cent with self-efficacy, attitude and perceived control over all significant variables. In addition, Venkatesh and Davis (2000) had stated that the intention will effect on the usage behaviour. There are certain users will likely more prefer convenient and user-friendly system as attribute of choices. Moreover, the intention to use may influence by other individual difference and system characteristics variables when users make decision to use.

In addition, information systems (IS) researchers had applied intention models from social psychology in forecasting an individual's intention to adopt the technology (Harrison, Mykytyn & Riemenschneider, 1997). Behavioural intention is affected by attitude based on performance, or subjective norm and also by perceived behavioural control (Chiou, 1998). Intentions are meant to affect by few determinants. Firstly, attitude is related to consequences of people's behaviour. Secondly, subjective norm is individual's enthusiasm of performance in accordance with the referents. The third determinants are perceived behavioural control of the important person in a decision making that might affect another's behavioural intentions.

2.1.2 Attitude

Attitude is a measurement toward behaviour refers to the level of positive or negative of evaluation or valuation on the behaviour. Davis, Bagozzi and Warshaw (1989) had proposed that an individual's overall attitude towards information technology and the applications is main factor define whether user uses that system. This is supported by the research done by Abrazhevich (2001) that users' perception on e-payment are highly depend on user's attitude that will effect on the acceptance. This also determines the perceived ease of use of the IT application based on attitude toward use.

According to Summers (1977), attitude is defined with three modern terms in which consist of cognitive, tendency of action, and emotional. Meanwhile, Cook, Kerr and Moore K (2002) had proposed the most important factor is attitude will effect on intention. This is further support with study done by Dejaeghere and Hooghe (2012) the measurements of attitudes implemented by social psychologists and social scientists are include to figure out the anticipate social behaviour. Social behaviour is included in behavioural component that how a person acts towards the attitude. In addition, cognitive component is indicate as what a person's think on and belief on handling the object and emotional is how a person feels toward attitude.

Fishbein and Aizen (1975) had stated attitude towards adopt a technology is through an individual evaluate shape of his attitude. Adopters seek enjoyment by using an appropriate technology when they are aware of their interests and needs (Bhattacherjee, 2000). According to Al-Gahtani (2001) had stated perceived usefulness is a main factor that influence of user attitude which revealed comparable findings. This is further explained that users would more enjoy using a technology or system if they were able freely access to the information and services.

Previous researcher had highlighted innovation opinions such as complexity and compatibility that were important to improve user attitude (Roger, 1995). Khalil and Pearson (2007) had further stated that findings that trust, complexity and trial ability will have significant influence user attitude.

Eastin (2002) had proved that customers will usually take on a new service that has similarity with what they had experienced before in the prior adoption of IT. In terms of feasibility if technology, security, trusts and efficiency will also influence adoption of e-payment.

2.1.3 Subjective Norms

Fishbein and Ajzen (2005) defined subjective norms as individual perceive that most people approve the behaviour that he should or should not perform. Subjective norms are considered as one of the essentials in social influence in form of social pressure (Albarracin, Fishbein, Johnson & Muellerleile, 2001; Ajzen & Fishbein, 2005; Fishbein & Stasson, 1990). Subjective norms are determined by the grouping of both individual's motivation to agree and follow the referents and also normative beliefs about the reference groups (Neighbors, Lee, Lewis, Fossos & Larimer, 2007). Bhattacherjee (2000) had categorized subjective norms into two which are interpersonal and external influence. The external influence example is the expert reviews and opinions or mass media and the interpersonal influence are family members, friend and relatives.

According to Azjen and Fishbein (1980) and Azjen (1991) findings that subjective norms had two dependent components that consists beliefs on how people whom they would like them to behave, which is also named as the normative beliefs that the motivation will fulfil with their thoughts.

Injunctive norms stated that an individual's beliefs about what have to be done (Azjen, 2002; 2006; Lapinski & Rimal, 2005). The norms are frequently found to have low inconsistency because others are usually perceived to agree of desirable behaviours while disagree of undesirable behaviours. Lapinski and Rimal (2005) had suggested implication of descriptive norms beliefs about what is really done by most others in social gathering to balance the injunctive norms.

Theory of Reason Action (TRA) model indicates individual should accomplish in some behaviour they would likely to comply that perceive on others. Therefore, this leads us to believe that subjective norms have a relationship that shows significant influence towards adoption of e-payment.

2.1.4 Perceived Ease of Use

Perceived ease of use is the point that in trust with utilizing a specific framework would be free from effort. (Davis, Bagozzi & Warshaw, 1989; Venkatesh & Davis, 2000). Gefen (2000) recommended perceive ease of use as an indicator of the cognitive effort that needed to exploit and learn new Information Technology. Many studies such as Legris, Ingham and Collerette (2003) and Zhu, Luo, Wang and Li (2011) have defined that a user-friendly technology or system which easier to use and apply are more likely beneficial.

In addition, Gao, Koufaris and Ducoffe (2004) findings shown perceive ease of use is categorized as the subjective understanding by the customers that required learning and utilizing the website. Thong, Hong, and Tam (2006) and Chiu, Chang, and Cheng (2009) had proved that perceived ease of use influence in repurchase intention. For the reason, Guriting

and Ndubisi (2006) found that in Malaysia context to use e-payment, perceived ease of use had a significant positive relationship on the behavioural intention of Malaysians.

According to Ainscough (1996), the good connection is an important measure that invites users in e-payment delivery in contact with customer interactivity. Jun and Cai (2001) findings that stated delay of service delivery or slow response time of the e-interaction lead consumers experience or felt uncertainty about whether or not the transaction is done. Abrazhevich (2001) had concludes that an effective design of e-payment systems in terms of usage is important to attract users' adoption towards e-payment. Hence, perceived ease of use is being said to have a significant relationship with the intention to adopt e-payments.

2.1.5 Perceived Usefulness

Many researchers defined that perceived usefulness in the extent to which an individual have confidence in that using an appropriate system would increase his or her job performance (Davis, Bagozzi, & Warshaw, 1989; Doll, Hendrickson, & Deng, 1998; Erikson, Kerem, & Nilsson, 2004; Henderson & Divett, 2003; Lee, Fiore, & Kim, 2006; McKechnie, Winklhofer, & Ennew, 2006). This is further support by Gefen and Straub (2003) that stated perceived usefulness is a measure in the brand new information technology in a precise task in related to the context that offered by of the individual's subjective appraisal of the value.

Perceived usefulness is a form of external motivation and encouragement that refers to the potential adopter perceives the use of certain system to be beneficial in enlightening his or her performance (Davis, Bagozzi, & Warshaw, 1989). Additionally, individual are more likely to adopt the technology if the overall improvement on job can result in usefulness in productivity and job efficiency.

In a previous study by Agarwal and Venkatesh (2002), usability indicates the quality of websites while from Szymanski and Hise (2000) study stated that usability factors like site design were strong indicators of satisfaction. The website design has connection with the

usability of the system that leads to ease of use. E-payment systems should made users felt impersonal about user friendliness and ease of navigation in order to increase usability. Hence, based on Davis, Bagozzi and Warshaw (1989) findings stated that e-commerce user's decision making on adoption the e-payment system is influenced by perceived usefulness. User's intentionally adopt on e-payment is influenced by perceived usefulness had been proposed in substantial amount of studies.

2.1.6 Perceived Security

Based on Grandinetti (1996), security is unofficial persons, or unlawful modifications or destruction that the protection of data is accidental or purposely disclosure to. Perceived security defines as the customer's subjective valuation of the e-payment system's security (Linck et al. 2006). This study is even supported by Stroborn et al. (2004) that e-payment systems meet the users' security requirements in all aspects.

Users are most likely refuse involve in transactions that the level of perceived security is too low (Tsiakis & Sthephanides, 2005). This is also supported by Mukherjee and Nath (2003) findings that the unambiguous information especially in security statements will effect on users' perceptions on security. The descriptive contents concerning on security in e-payment system should construct more details to users such as security-policy statements, statements of data protection and privacy as well as statements of security features (Friedman et al.,2002).

Many researchers had stated that the important of e-payment system that transaction procedures such as authentication, modification and confirmation (Tsiakis & Sthephanides, 2005; Linck et al., 2006; Hwang et al., 2007; Kousaridas et al., 2008) that focused on the technical details of protection that are privacy and integrity. The availability, comprehensibility, and accessibility of security statements are the e-payment transactions listed important components (Mukherjee & Nath, 2003; Cotteleer et al., 2007; Lim, 2008) as

users are sensitive when come to involvement of personal information privacy and security. The quality of security statements will influence the users' decisions in implementing the e-payment system (Hegarty et al., 2003; Lim, 2008). All phases of e-payment transactions process are only considered as confidential when can meet users' needs and expectations on security (Baddeley, 2004). Abrazhevich (2004) supported these findings that security is most critical areas of study in e-payment systems. Kurnia and Benjamin (2007) recognise the security concerns of users will affect the adoption of e-payment systems. Furthermore, respondents mentioned that they would reject to use online transactions if they encountered any breach of security. However, the significant relationship in between security and intention of using e-payment systems was substantially perceived in a particular study. Therefore, by enhancing and developing better and safer security level in the systems could conveniently encourage customers to begin with switching to an e-payment system.

2.1.7 Trust

Trust explained as the degree of risk in financial transactions that the consequence of the trust is reduced perceived risk and thus this will lead users to positive intentions toward use of e-payment (Yousafzai et al., 2003). E-payment transactions are performed within users' expectations that explain users' trust (Tsiakis & Sthephanides, 2005; Mallat, 2007). Linck et al. (2006) and Kousaridas et al. (2008) had mentioned that trust can obtain higher gains in the outcome while distrust can avoids potential losses in future. Users can make their own choices or decisions on trust or not trust.

This is proven in previous studies from Hoffman et al. (1999), Friedman et al. (2000), Jarvenpaa et al. (2000), Gefen (2003) and Wang et al. (2003) had stated trust involve in online exchanges of money have significant that determinant influencing customers' willingness to adopt e-commerce transactions. Many researchers such as Abrazhevich (2001) and Chou et al. (2004) stated that trust is important for understanding interpersonal behaviour and business term in economic exchanges which will affects users' opinion toward e-payment systems.

According to Gefen (2000), is extremely important users' trust in an internet environment is safety with a little more guarantee that the online seller will not perform any unethical and undesirable behaviour such as offering incorrect information, unfair pricing, issuing individual data, and purchase activities without any users' prior permission. Studies done by Zhou (2011) due to the high degree of uncertainty and risk present in lots of online transactions, this will more emphasize on the importance of trust in e-payment. Without trust in the system, it will be very difficult for e-payment to achieve broader usage (Lim et al., 2006).

Abrazhevich (2004) had further stated that implementation of imperfect system, users' will still believe credit card companies, vendors and banks and will not misuse their personal information. Another study Kniberg (2002) had proved that adoption of e-payment system is reliable if trustworthiness is there. Users' confidence that their personal information and money will not been used without their permission or acknowledgement or against their personnel interest.

According to Kniberg (2002), consumers and merchants are more willing to use an unstable payment system that provided by a trusted company more than an untrustworthy company. Study's results from current survey are lightly inconsistent to the past statistical evidence. Hence, trust alone is not sufficient enough to persuade consumers to switch to e-payment with the existence of various critical factors (Hoffman et al., 1999). Therefore, the current study had state the results that trust is not the only motivator that will influence in adoption of e-payment.

2.1.8 Benefit

Chou et al. (2004) proposed the benefits as significantly important component for e-payment systems usage and adoption. Users only need to pay minimum online transactions fees to the particular banks that offer the services. This is one of the benefits that online transaction is

low cost (Gerrard & Cunninghamm, 2003; Sonia San-Martı´n et al., 2012; San-Martin & Lo´pez-Catala´n, 2013).

According to Eastin (2002), who proposed four e-commerce online activities such as in the area shopping, banking, investing, as well as e-payment systems had found that convenience and financial benefits in term cost will influence on the adoption decision. This is further support by the researchers Gerrard and Cunningham (2003) that view perceived benefits in term economic that include fixed and transaction costs in implementing e-payment. Chou et al. (2004) had further explained fixed costs as cost of installing e-payment equipment such as the readers and software and this cost of transaction need to bear by the merchant and customers in every single business transaction.

Chakravorti (2003) stated that important of users' to keep, spend and transfer the money value in a convenient way through payment systems that save more cost and time. Nevertheless, some researchers claim that e-payment is costly in terms time and cost develop new technology (Kim et al., 2009). Hataiseree (2008) found that consumers tend to choose cash and cheques as common payment modes due to consumers are not convince in the benefits of adopt e-payment. According to the 2016 Visa Consumer Payment Attitudes survey, there are 73 per cent Malaysian from urban area are reported with cash pay for personal expenses, regardless of high level of internet or mobile penetration across the area. According to the research done by Teoh, Chong and Chua (2013), statistics of e-payment usage in Malaysia has showed that Malaysians are aware of gradually adoption from using cash payment to e-payment due to various reasons. The report show that convenient use of credit that involve transactions and minimize the users' cash balances are the main reason user convert to e-payment.

2.1.9 Self-Efficacy

Self-efficacy is consequential by the experience of one's individual mastery (Bandura, 1986). According to Dinev, Goo, Hu, and Nam (2009) and Schunk (2000), self-efficacy is an

individual's ability to succeed at a suitable level .The beliefs on self-efficacy are based on responses from few sources information. They are previous experience that indicates success and failure. The vicarious experience in the form of verbal persuasion that influence come from peers, relative and colleagues as well as affective state which are observing others' successes and failures is describe on emotional stimulation such as anxiety.

Besides that, Bandura (1986) have proposes if one had the abilities in increase the possibility in order to successfully complete the task. This suggestion is support by Dory et al. (2009) that they sharing same thought in define self-efficacy. Many previous studies stated that self-efficacy has a significant positive influence on perception and intention to adopt information systems (IS) (Hill et al., 1987; Luarn & Lin, 2005).

According to research done by Burton-Jones and Hubona (2006) and Li et al. (2011), users that involve in more various kinds of communication media and function tend to have higher self-efficacy if compare to individual with lower self-efficacy . Hence, self-efficacy is finding that will influence the use in e-payment perspective.

This study defines self-efficacy as confidence in an individual capability to use e-payment services. According to Schunk (2000), individual's self-efficacy can increase by learning from users or individual that successful used the web technology. Biggs and Moore (1993) and Dinev et al. (2009) stated that self-efficacy will influenced by the user opinions of task difficulty. New users that have particular knowledge of using an online service tend to have more confidence in using the information technology (Dinev et al., 2009). The users have greater confidence in adopt new services or system such as e-payment. According to Chan and Lu (2004), individual with great confidence on their computer efficacy is due to perception of ease of use about the system.

Use of internet is influenced by the past experience (Wong et al., 2003). This is supported by finding of Motter (1995) that satisfying computer experience improved participants' confidence towards computers and boosted self-esteem that also will improve the level of success of adoption of the technology. Martinez (2006) had proposed that slow learners tend to have more strong relationship between self-efficacy and adoption of technology. Furthermore, an e-payment usage helps in promotes consumer confidence and increases access to acknowledgement for the population.

2.2 Review of Relevant Theoretical Models

2.2.1 Information System Acceptance Model

Consumer acceptance of a technology is used to evaluate from many well-established theoretical models. Theory of reasoned action (TRA), theory of planned behaviour (TPB), and technology acceptance model (TAM) are commonly used in theoretical model. According to Kim and Malhotra (2005), over the past 20 years these few models are used as the theoretic basis of informative system acceptance.

2.2.1.1 Theory of Reasoned Action (TRA)

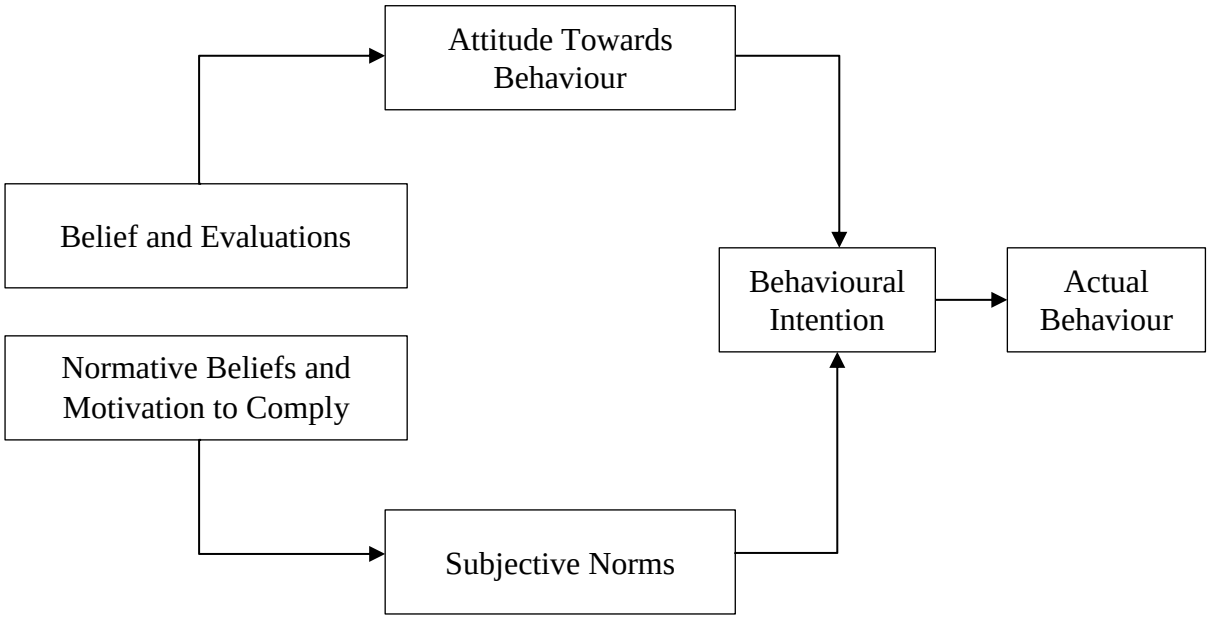

Figure 1: Theory of Reason Action

The TRA model was proposed by Ajzen & Fishbein (1980) explain user behaviour and consider wisely before take part in an activity or implementing a new technology. This model aim is to study the relationship of attitudes, subjective norms and behavioural intention.

TRA is implemented to explain that his or her feeling to engage in a given behaviour will influence the behaviour of a person (Ok and Shon, 2006). This model had concluded that a person action is direct element toward the behavioural intention that there are two independents variables, attitude and subjective norms, influenced the behavioural intention.

According to Loiacono et al. (2007) that developed TRA can be used to measure consumers' opinions towards a particular web site. Attitude that will lead to action such as use and subjective norms affected by an individuals' intention to share knowledge had proven by Bock, Zmud, Kim and Lee (2005). TRA has been extended in the Theory of Planned Behaviour (TPB) and adopt broadly in many previous studies (Ajzen, 1991).

2.2.1.2 Theory of Planned Behaviour (TPB)

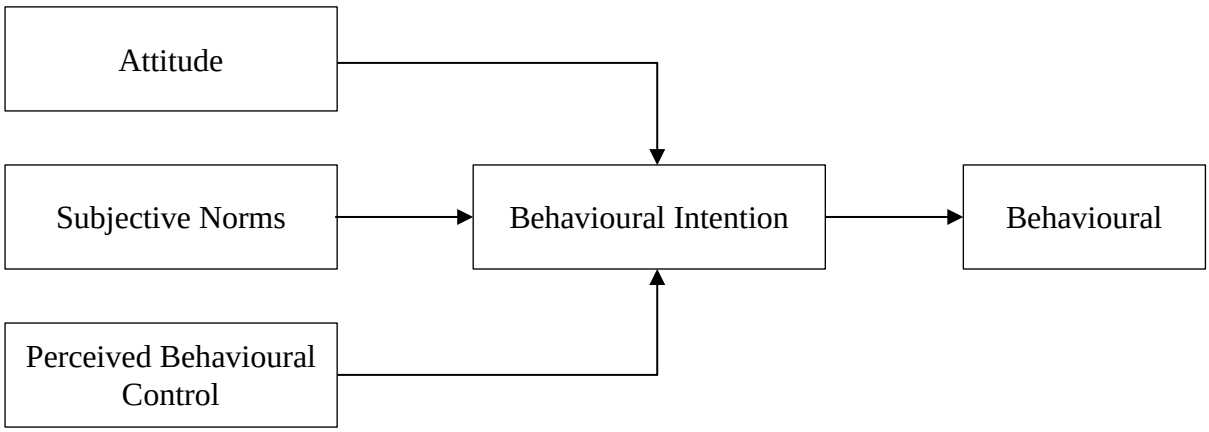

Figure 2: Theory of Planned Behaviour

The TPB model (Ajzen, 1991, 2001) is development of the TRA model (Fishbein & Ajzen, 1975). It introduces an extra variable known as perceived behavioural control (PBC) as a factor of both behaviour and intention.

According to Ajzen & Madden (1986), Sparks, Hedderly, and Shepherd (1992), the positive link between PBC and control beliefs has been validated by previous study literature. Ajzen and Madden (1986) had further explain that the presence of adequate resources is to execute a specific behaviour are found in perceived behaviours control. TPB model is determined by subjective norms, attitude and PBC that all component will influence on behavioural intention. Hsu et al. (2006) found that the key influence on the preference whether to continue use a technology, the satisfaction on user's expectation is important when engaged to the TPB model.

2.2.1.3 Technology Acceptance Model (TAM)

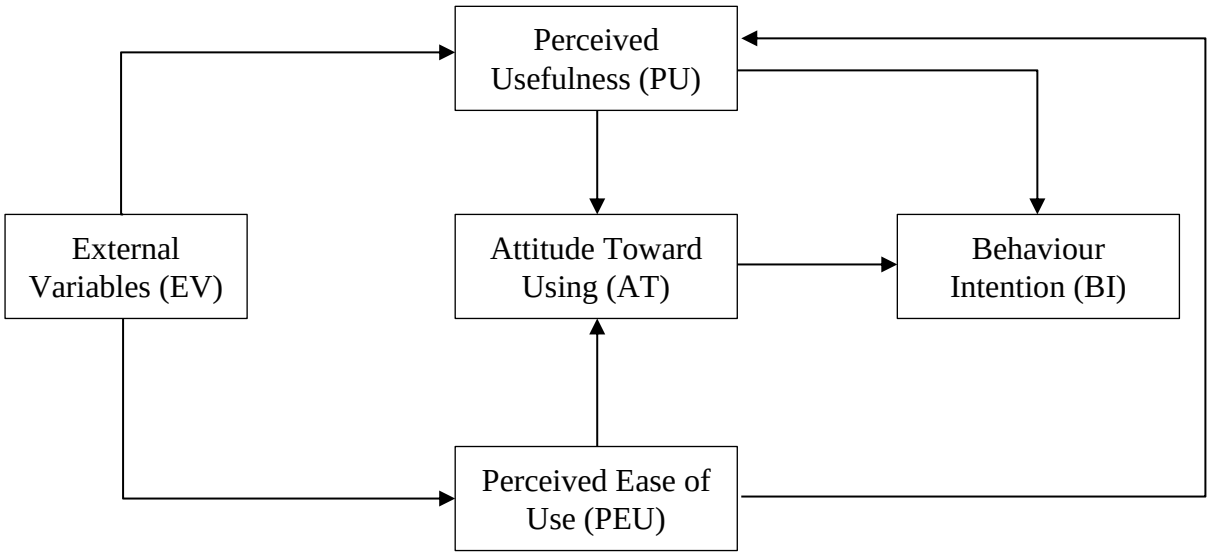

Figure 3: Technology Acceptance Model

The technology acceptance model (TAM) has been used to decide the decisions to adopt on various e-commerce activities and to understand technology acceptance behaviour (Abrazhevich, 2004; Khalifa & Ning Shen, 2008). Davis, Bagozzi and Warshaw (1989) studies on perceived usefulness and ease of use are consistent and relevant with many studies on TAM model that will be the important reasons for the expansion use of e-payment systems.

Individual see the implementation of technology differently in perceived usefulness and perceived ease of use. Individual perception on improvement in career achievement for perceived usefulness while perceived ease of use is how least effort to use a technology (Davis, 1993).

TAM model have better capability to explain attitudes towards using an information system compared to TRA model and TPB model (Mathieson, 1991).TAM model is a precise research framework (King & He, 2006).In order to study user acceptance of different technologies, TAM model had been applied based on a variation of variables.

2.3 Proposed Theoretical/Conceptual Framework

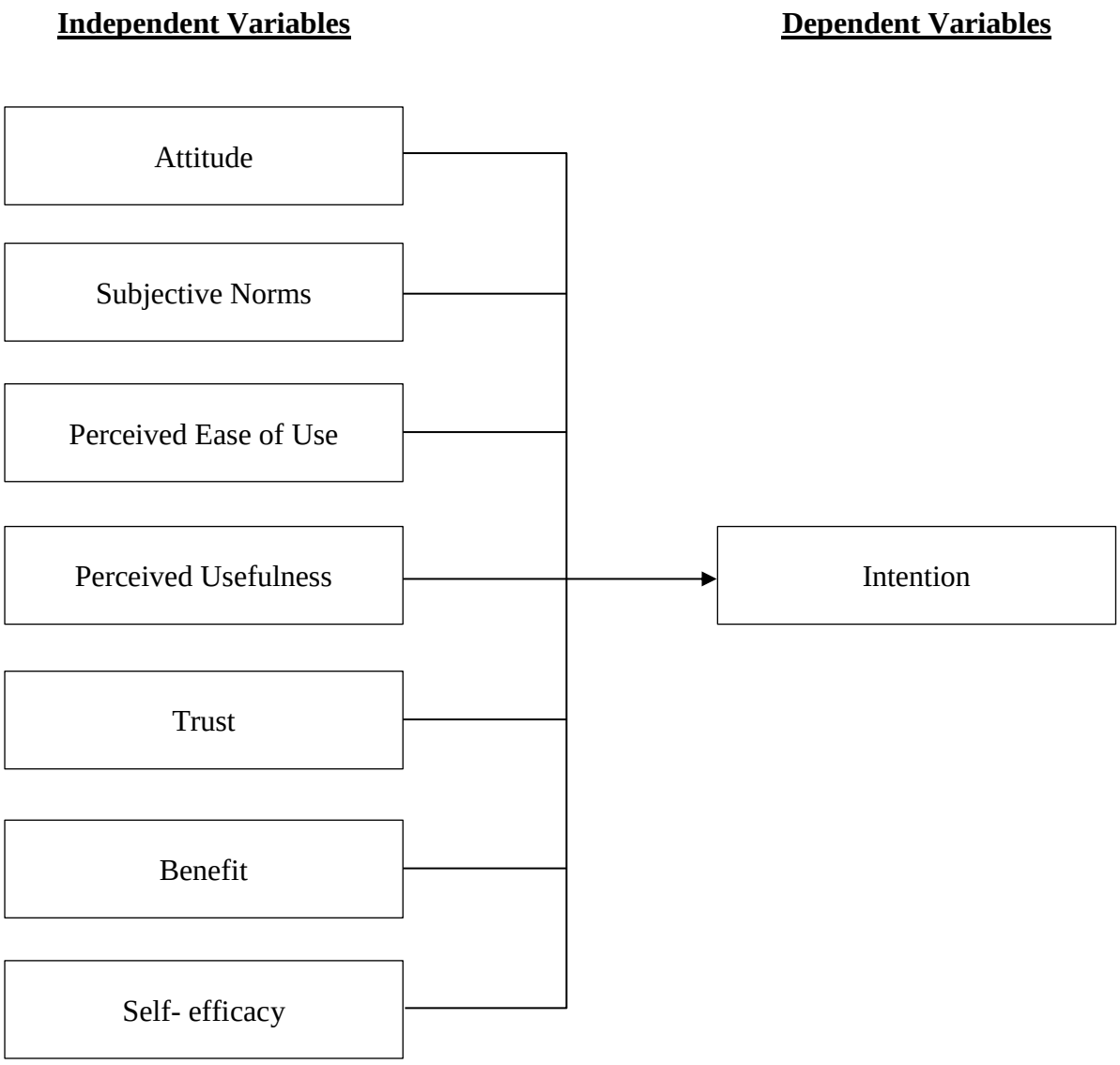

Figure 4: Proposed Conceptual Framework

The table show the conceptual framework is the essential basis of this research project. TPB and TAM model are implemented in this research to form the research framework. The figure above is to study the relationship between dependent and independent variables for the conceptual framework.

2.4 Hypothesis Development

- H1: There is a significant relationship between attitude and intention adopt e-payment.
- H2: There is a significant relationship between subjective norm and intention adopt e-payment.
- H3: There is a significant relationship between perceived ease of use and intention adopt e-payment.
- H4: There is a significant relationship between perceived usefulness and intention adopt e-payment.
- H5: There is a significant relationship between perceived security and intention adopt e-payment.
- H6: There is a significant relationship between trust and intention adopt e-payment.
- H7: There is a significant relationship between benefit and intention adopt e-payment.
- H8: There is a significant relationship between self-efficacy and intention adopt e-payment.

2.5 Conclusion

This chapter had discussed the literature review of dependent and independent variables. Overall, this chapter the theoretical models was developed by researches and proposed conceptual models as well. Chapter 3 will focus on the research methodology.

CHAPTER 3

RESEARCH METHODOLOGY

3.0 Introduction

In this chapter will test on the significance of the hypothesis and answer the research questions. This will focus on the research design, the method of methodology data collection, as well as sampling design. Pilot test, research instrument will be presented under this section. In addition, construct measurement as well as scale of measurement and methods of analysis will be discussed in this chapter.

3.1 Research Design

Based on the research finding on Cooper and Schindler (2006), research design is used for gather and analysing the information by state the methods and procedures. This is a framework that indicated the procedures that are necessary to acquire information needed to structure the marketing research problem in marketing research project (Malhotra, 2006). Thus, it is important the data collection processes are in order to avoid error occurred.

3.1.1 Quantitative Research

According to Aliaga and Gunderson (2000), quantitative research apply mathematically based methods to understand the phenomena by focus on gathering and examine numerical, which means that the measurement is statistically and quantitative valid. According to Zikmund (2003), this research can applied to study that consist of large amount of respondents through structured questions. As such, this supported in the study done by Sinkovics and Alfoldi (2012) it can be viewed as distinctive from particular types of text-based study such as content analysis.

3.1.2 Descriptive Research

Descriptive research are suitable in this study because researchers could survey a representative sample to expand understanding of factors affecting private university student to use e-payment in Klang Valley context. Besides, relationships among variables are also being examined in this study. According to Burns and Bush (2006), descriptive research is appropriate for large population study's finding that that recognizes the cause of phenomena that will help in defines the variability in dissimilar phenomena during the research. The main purpose of the descriptive research is verify current situation through developed hypothesis.

3.2 Data Collection Method

Data collected are based on two categories, primary data and secondary data in this research. Primary data is obtained through questionnaires while secondary data is through online databases such as journals.

3.2.1 Primary Data

Primary data as the data gathered through a research study which the aim is to solve a specific problem (Malhotra, 2006). According to Zikmund (2003), the data for the specific research projects are usually obtained and developed. Primary data obtained via survey method in this study as it is more reliable and objective. Questionnaires are distributed to a sample of people that based on the characteristics of the population to make conclusion. Since this method is relatively low and simple (Hair, Wolfinbarger, Bush & Ortinau, 2006), collection of data are based on self-administered survey from respondents. There are total of 500 sets of questionnaires will distribute to respondents.

3.3 Sampling Design

The sampling process is that use subgroup of population that will represent the entire populate. This enable researcher to make assumptions on some unknown populations characteristics (Zikmund, 2003).

3.3.1 Target Population

A group of people that intended to a study in order to make right implication are named as target population. The aim of this research is to study the factors affecting e-payment intention in Klang Valley's private universities' student context. This targeted respondents are chosen is because the older generation such as Baby Boomers are getting closer to their retirement and student which are their children are the policy makers with high purchase decision. In addition, the term private universities student helps me narrow down the scope of thisresearch.

There are two main reasons that we adopt universities' student as target population in this research. Firstly, based on a research conducted by Farag, Schwanen, Dijst and Faber (2007), young consumers towards internet experience and online shopping will have more positive

attitude compare to aging consumers. Young people are more internet and technology savvy that will not easy get dissatisfaction if face any challenges during using e-payment. Secondly, universities students are heavy users of mobile devices which are one of the technology gadgets in the market (Burns & Bush, 2005). Students are highly relying on these technology gadgets for their daily routine and activities. Malaysia's population can represent by university students at a certain point with the support of the above factors.

3.3.2 Sampling Frame and Sampling Location

According to Zikmund (2003) findings, sampling frame is listed with element that where sample can be drawn. However, is non-probability samplings which is snowball sampling, are used in this study for further understanding.

Researcher need to ensure that the collection of data is up to date, complete and accurate. Hence, the questionnaires were distributed to the respondents at private universities at Klang Valley because the number of private universities is more than others states in Malaysia. Therefore, the population is more condense that convenient researcher in both delivery and collection of questionnaires. The questionnaire were distributed equally at five selected universities at the sampling location, private universities in Klang Valley such as Universiti Tunku Abdul Rahman (UTAR), Multimedia University (MMU), Taylor's Universities, UCSI University and Sunway University.

3.3.3 Sampling Elements

The respondents are foundation, undergraduate and postgraduate students currently pursuing studies within sampling locations will participate in this research. This group of respondents has generation cohort as regular internet users. Besides that, students have basic knowledge of Internet operation and e-commerce (Dan, Xu & Liu, 2012).

3.3.4 Sampling Technique

In this study, snowball sampling that is non-probability method is used to collect the samples but not every individual have equal chances because chosen individual is unknown. However, researchers often will come out acceptable results even though this method save the cost and time. Snowball sampling is based on the idea of rolling snowball which is also known as reputational sampling. The sample spreads out that links to initial sampled people (Neuman, 2005). Snowball sampling is cheaper and easier to conduct in this study, as the conduct of individual usually differs from others but students or young adults are easily get peer influence. Hence, this method of sampling is extensively used and low cost that using the "snowball" sampling approach and the sampled people personal networks (Zikmund, 1994).

3.3.5 Sampling Size

The research with sample size that more than 30 and less than 500 are suitable for most of the researchers (Roscoe, 1975). According to Thompson (2004), it is advisable that more than 200 respondents must be sampled in order to obtain stability in factor analysis. MacCallum , Widaman, Preacher and Hong (2001) support the statement that adequate sample size require more than 400 and above. 500 questionnaires are equally distributed to five private universities and there are eight variables to be tested in this study. The method of data were collected is using a structured questionnaires from January 2017 until March 2017. Out of the 500 questionnaires, 58 sets were incomplete, therefore, not used in any of the analyses. Finally, a total of 442 sets questionnaire are completely collected.

3.4 Research Instrument

Appropriate research instrument that achieve objective of the research through questionnaires which my research instrument is self-administered questionnaire. Self-administered

questionnaire is the process to gather data through the respondents that can understand and answer the survey questions without the existing of trained interviewer (Hair et al., 2006).

According to Burns and Bush (2006), questionnaire is an important to get public feedback for a research. Zikmund (2003) had mentioned that questionnaire should use simple and unambiguous word is design the questions. In other words, standardised questions able come out with more accurate measurement by enforced a standardised definition upon target respondents. Besides that, questionnaire can reduce the low response rate problem and help researcher to speed up data analysis process.

3.4.1 Questionnaire Design

Respondents' answers are choose from response options on the questionnaire as the closed-ended questions were used in the survey. The simplification of the process for interprets data from large numbers of respondents given that the responses were constant. In addition, it takes less time consuming for respondents to answer that they only be rating the answer according to the question questioned. This will benefit the participant and the researcher.

The questionnaire are categories into two parts, which is Section A (demographic factors) and B (factors adoption). In Section A, demographic profile such as gender, age, race, education level, course of study, monthly income and year of study are required in this section. Normally, the question is design with a series answer that requires respondents to select one that best describe themselves. This enable researcher to collect precise data. Questions are implemented and changed from the previous research which piloted by other researchers. Simple English is used to carry out the questionnaire which allows a better understanding question requirement and input the accurate answer.

3.4.2 Pilot Test

Track collection of data to identify weakness in the instrumentation and the design also to provide alternative data for selection of a probability sample is defined as pilot test (Cooper& Schindler, 2006). According to Taylor-Powell and Hermann (2000), several pilot tests needed for satisfactory questionnaires. Pilot test should be carrying out with a small number of respondents which are similar as possible to the potential respondents.

Based on Lackey and Wingate (1998), 10 per cent of the final study size will suitable for pilot testing. Therefore, approximately 50 sets of questionnaire will be distributed throughout the pilot test stage on December 2016 in, which is 10 sets in each selected private universities in Klang Valley. Selected respondents are encouraged to provide comments on any enquiries or statements which are unclear to them. There were 50 sets of questionnaire were collected that will then conduct a reliability test through SPSS software. In order to examine internal reliability of pilot test, Cronbach's alpha was used. The results show is consider weak when alpha coefficient is below alpha 0.6 , alpha 0.6 – 0.8 consider to be moderate strong, and very strong when alpha is between 0.8 – 1.0 (Malhotra, 2006).

3.5 Constructs Measurement

Questionnaires in this study consist of two parts which is the first section demographic profile that type of scale measurements used are nominal scale.

Nominal Scale is the selection given for each questions are separated to represent the different group of categories. According to Garland (1991), five point Likert scale is the mid-point and where mid-point is with "neither….nor", unclear etc.

Rating scale purpose is to let the respondents to state the direction and strength of their judgment about a given topic. Besides, mid-point is one of the most individual researcher preferences. The past researchers such as Adelson and McCoach (2010), Ogden and Lo (2012), and Wakita, Ueshima and Noguchi (2012) has conducted their research using five point Likert scale where the context is relevant to our studies.

Hence, for the second section of the questionnaire, interval scale is implemented where the questions are planned by using 5-Likert scale. Respondents need to recognise the level of agreement or disagreement in each of a series of statement in the survey.

3.5.1 Origin of Constructs

The questionnaires used in this study were adopted from Har Lee, Cyril Eze and Oly Ndubisi (2011) and Teoh, Chong, Lin and Chua (2013). Table below showed all the questions will be asked in each variables:

Factor Adopt E-Payment	Questions Asked	Source
Attitudes	1. I intend to use e-payment because it is very convenient. 2. I intend to use e-payment because it provides a wide range of products. 3. I am likely to use e-payment because I think it is beneficial to me.	Har Lee, Cyril Eze and Oly Ndubisi (2011)
Subjective Norms	1. Most people who are important to me think that I should use e-payment. 2. It is expected of me that I should use e-payment. 3. I think it is important that everyone in the society should use e-payment.	Har Lee, Cyril Eze and Oly Ndubisi (2011)
Perceived	1. I do not get frustrated when use e-payment.	Har Lee, Cyril Eze and

Ease of Use	2. E-payment is easy to learn and use. 3. I feel flexible in performing e-payment. 4. E-payment provides various payment channels that ease my online shopping process. 5. Less effort is needed when I perform e-payment.	Oly Ndubisi (2011)
Perceived Usefulness	1. E-payment improves my search for mode of payment that I desired. 2. E-payment minimize the time I usually spent on payment. 3. E-payment helps me in terms of making better payment decisions. 4. E-payment makes it easier for me to make products comparison among payment modes.	Har Lee, Cyril Eze and Oly Ndubisi (2011)
Perceived Security	1. Most e-payment provides adequate payment security. 2. E-payment has minimum financial risk. 3. I am willing to use e-payment if the software is protected by the latest know- how (ingenuity, aptitude or skill). 4. I would assume e-payment is safe as if security verified by third party. 5. I prefer to use e-payment that provides security insurance.	Har Lee, Cyril Eze and Oly Ndubisi (2011)
Trust	1. A trustable software will ensure payment modes available is reliable. 2. A software that wants to keep promises and obligations will attract me to use e-payment more often. 3. I will use e-payment the terms and conditions are clear.	Teoh, Chong, Lin and Chua (2013)
Benefit	1. It save my time and cost for using an e-	Teoh, Chong, Lin and

	payment system. 2. E-payment system is convenient for me. 3. The billing and transactions process are accurately handled. 4. Speed of e-payment system flow faster than traditional payment system. 5. I find that it is easier to conduct my financial transaction.	Chua (2013)
Self-efficacy	1. I will only use an e-payment system if I heard it before. 2. The comments other people will influence my intention to use an e-payment system. 3. I will use an e-payment system when my friends introduce it to me.	Teoh, Chong, Lin and Chua (2013)
Intention	1. Because my friends and family are using e-payment. 2. Because I like the feeling of using e-payment. 3. Because I don't want to be the only one who does not use e-payment.	Teoh, Chong, Lin and Chua (2013)

Type of measurement that use in the first section, demographic profile is nominal scale which is the simplest type of scale (Zikmund, 2003). The letters or numbers allocated in each questions represent the different group of categories. In addition, nominal scale does not require any sequences between the responses. Second part of this study used interval scale are best for opinion measurement in these type of scales. Past researchers such as Zikmund (2003) and Ogden and Lo (2012) had conducted their research using Likert scale rank from "Strongly Agree" to "Strongly Disagree" are applied in this part to analyses the level of agreement of disagreement on both dependent and independent variables.

3.6 Data Processing

3.6.1 Descriptive Checking

Data checking is conducted to go through once and check complete questions in questionnaires (Malhotra, 2006). It use to ensure data were entered correctly and completely returned by respondents. Any occurrence of error such as incomplete and misplaced from the reverted questionnaire can be detected will be eliminated automatically.

3.6.2 Data Editing

Data editing includes reviewing of the questionnaires with the aims to increase the accuracy, completeness and precision. The incomplete answer and missing value can be rejected throughout process of data editing.

3.6.3 Data Coding

According to Malhotra (2006), data coding helps in classifying for each item in questionnaire, as the code or number being assigned represent the likely response to each questions. Researcher have assign a series number for categorized all categories in the questionnaires. In this study, “Male” is assigned as 1 and “Female” is represents with 2. This will save time and ease the process of data entry.

3.6.4 Data Transcription

Coded data will be transferred from questionnaire that key in directly into computer SPSS version 22 software to execute the eventual cross tabulation. Data results for evaluation will be obtained after all data had absolutely successful entered into software for analyse.

3.6.5 Data Cleaning

Data cleaning performs to ensure no missing responses that key in and double check using computer. Consistency in checking data can prevent that data is out of range or value. Besides that, SPSS software can use to identify extreme range value.

3.7 Data Analysis

Data analysis is the process that processes the collected information to form some finding or conclusion. The analysis such as descriptive analysis, factor analysis, reliability test and inferential analysis are used to examine the data in this study.

3.7.1 Descriptive Analysis

According to Trochim (2008) and Zikmund (2003), the process of transformation raw data into easier understand and interpret form is descriptive analysis. The statistics issue to summarize the characteristics of the data.

Frequency distribution analyses will summary the data on demographic of the sample. Frequency distribution is suitable for nominal or ordinal scale which that summarizing the particular value which the number of times of a variable occurs (Zikmund, 2003). Hence, all information gathered will be listed in form of table after all the analyses are done.

3.7.2 Factor Analysis

Factor analysis allows various inter-correlated variables to be summarised into few factors. This analysis helps in study whether different variables are correlated to other variables.

Kaiser and Rice (1974) suggest Kaiser-Meyer-Olkin (KMO) measurement more than 0.5 is acceptable.

3.7.3 Reliability Test

Zikmund (2003) had stated that reliability test is used consistency with characteristics that made on repeated measurement that adopt the degree of stability. Cronbach's alpha reliability coefficient is range between zero to one. The higher the value of Cronbach's alpha, the test results is more reliable.

3.7.4 Inferential Analysis

Inferential statistics is conclusion through analyses and observation on a sample that draw from a population. In this study, SPSS is implying to conduct the following analysis: Pearson's Correlation Analysis and Multiple Regression.

3.7.4.1 Pearson's Correlation Analysis

Pearson's correlation mainly is 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. The coefficient is range from negative 1 to positive 1 (Hair, Wolfinbarger, Bush & Ortinau, 2008). For example, this test is to measure the relationship between attitude and adoption of e-payment.

Below table explain strength of the correlation between two variables:

Table 2: Rules of Thumb of Pearson's Correlation

Coefficient Range	Strength of Association
± 0.91 to ± 1.00	Very Strong
± 0.71 to ± 0.90	High
± 0.41 to ± 0.70	Moderate
± 0.21 to ± 0.40	Small but definite relationship
± 0.00 to ± 0.20	Slight, almost negligible

Adopted from: Hair et al. (2008)

3.7.4.2 Multiple Linear Regressions

Multiple linear regressions (MLR) are used to determine whether the dependent variables (Y) are correlated with the independent variable (X) as well as other variables (Suki & Suki, 2011). It is to check which factors influences have relationship between uses of e-payment. In addition, square of multiple R studies the percentage of variation that independent variables can explain the dependent variable.

The multiple regression models in this study are shown as follows:

$$Y= a + b1X1 + b2X2 + b3X3 + b4X4 + b5X5+ \ldots + bkXk$$

Equation:

$$IAEP = a + b_1A + b_2SN + b_3PEOU + b_4PU+ b_5PS+b_6T+b_7SE+b_8B$$

Whereby,

IAEP = Intention Adopt E-payment

A = Attitudes

SN = Subjective Norms

PEOU = Perceived Ease of Use

PU = Perceived Usefulness

PS = Perceived Security

T = Trust

SE = Self-efficacy

B = Benefit

Multiple regression equation enable researchers to come out with ideal prediction on which listed independent variables will have more impacts on dependent variable.

3.8 Conclusion

As conclusion, this chapter had outlined the method to carry out in this research. The next chapter will be focus on the result of analysis that through the methodologies discussed in this chapter.

CHAPTER 4

DATA ANALYSIS

4.0 Introduction

This chapter consists of the analysis of results and data that relevant to this study. The raw data collected will be analysed through SPSS version 22 software. This chapter consists of four main parts in this chapter which are descriptive analysis, factor analysis, reliability test, and inferential test to analysis this research data.

4.1 Descriptive Analysis

Descriptive analysis provides detailed information about the main characteristics of the sample used in this study. Key features of the data are described in table forms to enhance the understanding of the samples.

4.1.1 Respondents' Demographic Profile

Table 3: Respondents' Demographic Profile

Characteristics	Percent (%)
Gender	
Male	46.4
Female	52.5
Age	
19 – 21	69.5
22 and above	30.5
Cultural Heritage	
Chinese	76.2
Non – Chinese	23.8
Education Qualification	
Foundation	20.1
Degree and above	79.9
Monthly Allowance	
RM 500 or less	26.0
RM 501 - RM 1,000	34.4
RM 1,001 - RM 1,500	23.3
RM 1,500 and above	16.3
States	
Northern Region	56.6
East Coast Region	7.9
Central Region	37.6
Southern Region	12.7
East Malaysia	22.9

Course of Study	
Science	24.0
Social Science	76.0
Year of Study	
One	33.9
Two	44.1
Three and above	21.9
Total	100.0
Sample Size	442

Table 3 indicate the main characteristics of the targeted respondents from the private universities in Malaysia. Based on findings, majority of respondents are female which consists 52.5 percent out of 442 respondents whereas 46.4 percent are male.

On age group, there are 69.5 percent of respondents aged 19 – 21 years old and 30.5 percent respondents are aged 22 and above. Other than that, looking at the cultural heritage there are 76.2 percent respondents are Chinese and 23.8 percent are Non – Chinese.

In addition, the education qualification of the respondents is majority Degree holder and above, which is 79.9% and only 20.1 percent are Foundation holder out of 422 respondents.

By looking at the monthly allowance, most of the respondents fall in the range of RM 501 - RM 1,000, which is consists of 34.4 percent, follow by 26 percent respondents with allowance RM 500 or less. Meanwhile, around 23.3 percent respondents with allowance between RM 1,001 - RM 1,500 and there are 16.3 percent of respondents with allowance RM 1,500 and above.

Majority respondents are come from Northern Region (Perlis, Kedah, Penang and Perak), which consists of 56.6 percent of 422 respondents and follow by 37.6 percent of respondents that come from Central Region (Selangor, Negeri Sembilan, Wilayah Persekutuan Kuala Lumpur). In addition, there are 22.9 percent of respondents are come from East Malaysia (Sabah and Sarawak) while there are 12.7 percent and 7.9 percent respondents are come from Southern Region and East Coast Region respectively.

With regard to the course of study, there are 76 percent of respondents are from social science such as business administration, accounting and art. There are 24 percent are from science such as engineering, actuarial science and quantity surveying. In addition, most of the respondents are in second years of study which consists of 44.1 percent, follow by 33.9 percent first year of study and 21.9 percent of 422 respondents are third year and above.

4.2 Factor Analysis

This analysis is used to measure those inter-correlated variables into few factors through expose the relationships among variables. Therefore, it uses to examine whether there is correlation with each other within these number of variables. According to Pallat (2001), Kaiser-Meyer-Olkin (KMO) is an index used to study the relevance of factor analysis in order to measure sampling adequacy that the value must more than 0.6 is adequate. The KMO measure that closer to 1 indicates a sizeable sampling adequacy. Barlett's test is an indication of the strength of relationships between variables.

Table 4: Kaiser-Meyer-Olkin Measure of Smpling Adequacy

KMO Value	Interpretation
0..0 to 0.49	Unacceptable
0.50 to 0.59	Miserable
0.60 to 0.69	Mediocre
0.70 to 0.79	Middling
0.80 to 0.89	Meritorious
0.90 to 1.00	Marvellous

Note: Rovai, A. P., Bakar, J. D. & Ponton, M. K. (2013). *Social Science Research Design and Statistics: A Practitioner's Guide to Research Methods and IBM SPSS Analysis. 11.0 update (2nd ed).* Virginia Beach, VA: Watertree Press.

In this study, there are 28 items out of 34 items will be used in factor analysis due to Principal Components Analysis (PCA). The results of factor analysis as per table below:

Table 5: Factor Analysis

KMO and Bartlett's Test		Total Variance Explained (Initial Eigenvalues)		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	(Bartlett's Test of Sphericity) Sig.	Component	Total	% of Variance
0.919	0.000	1	9.620	34.358
		2	1.665	5.945
		3	1.469	5.248
		4	1.362	4.866
		5	1.195	4.268
		6	1.065	3.804
		7	0.971	3.468
		8	0.872	3.114
		9	0.856	3.056
		10	0.759	2.711
		11	0.686	2.450
		12	0.666	2.380
		13	0.627	2.238
		14	0.604	2.158
		15	0.577	2.060
		16	0.549	1.961
		17	0.508	1.814
		18	0.481	1.718
		19	0.443	1.582
		20	0.426	1.523
		21	0.413	1.475
		22	0.378	1.351
		23	0.352	1.257
		24	0.336	1.200
		25	0.324	1.155
		26	0.283	1.011
		27	0.272	0.972
		28	0.240	0.857

Table 6: Rotated Component Matrix

Rotated Component Matrix (Component)						
	1	2	3	4	5	6
BE4: Speed of e-payment system flow faster than traditional payment system.	0.721					
BE3: The billing and transactions process are accurately handled.	0.701					
BE2: E-payment system is convenient for me	0.633					
BE1: It save my time and cost for using an e-payment system.	0.590					
BE5: I find that it is easier to conduct my financial transaction.	0.549					
TR2: A software that wants to keep promises and obligations will attract me to use e-payment more often.		0.717				
TR1: A trustable software will ensure payment modes available is reliable.		0.682				

PS5: I prefer to use e-payment that provides security insurance		0.656				
SE2: The comments other people will influence my intention to use an e-payment system.		0.525				
TR3: I will use e-payment the terms and conditions are clear.		0.515				
PS4: I would assume e-payment is safe as if security verified by third party.		0.501				
PS3: I am willing to use e-payment if the software is protected by the latest know-how (ingenuity, aptitude or skill).		0.476				
PEOU2: E-payment is easy to learn and use.			0.771			
PEOU1: I do not get frustrated when use e-payment.			0.684			
PEOU3: I feel flexible in performing e-payment.			0.671			
PEOU4: E-payment provides various payment channels that ease my online shopping process.			0.578			

PEOU5: Less effort is needed when I perform e-payment.			0.476			
INT3: Because I don't want to be the only one who does not use e-payment.				0.766		
INT1: Because my friends and family are using e-payment.				0.634		
SE3: I will use an e-payment system when my friends introduce it to me.				0.564		
INT2: Because I like the feeling of using e-payment.				0.544		
PU3: E-payment helps me in terms of making better payment decisions.					0.720	
PU4: E-payment makes it easier for me to make products comparison among payment modes.					0.628	
PU2: E-payment minimize the time I usually spent on payment.					0.604	
PU1: E-payment improves my search for mode of payment that I desired.					0.474	
ATT3: I am likely to use e-payment because I think it is beneficial to me.						0.749

ATT2: I intend to use e-payment because it provides a wide range of products.						0.701
ATT1: I intend to use e-payment because it is very convenient.						0.578

In the table 4, the KMO measure is 0.919 which is considered as Marvellous. This KMO results indicates that the sampling identify in this study is agreeable for factor analysis to proceed. In Barlett's test, a significant level of 0.000 shows that is non-identity matrix that needs to reject null hypothesis. Therefore, there are some relationships between each variable.

Based on the table above, all the measurable variables can be group into six components as all the six components are greater than one. The Eigenvalues connected with each factors represents the variance explained by the linear components and also display in terms of percentage of variance. According to the table, component 1 stated 34.4 per cent of total variance followed by component 2 which is 5.9 per cent and component 3 is 5.2 per cent of variance. Besides that, component 4 and component 5 have respectively 4.9 per cent and 4.3 per cent of variance while component 6 is 3.8 per cent of variance. The analysis clearly stated that the first component relatively larger percentages of variance compare with other five components.

Rotated component matrix in table above shown that all twenty eight items are grouped into six factors. The factor loading of variables that equal or greater than 0.7 will depends on the highest factor loading allocate by each of them. Based on Table 3, BE4 and BE3 are loading high in Factor 1 follow by components BE2, BE1 and BE5. These five items measure on the benefits of private university student in adopting e-payment. In addition, items TR2, TR1 and SECU5 are loading high in Factor 2 follow by components SE2, TR3, SECU4 and SECU3 that use to measure the perceived security and trust of private universities student is adopting e-payment. In addition, there are five items in Factor 3 consists of PEOU2, PEOU1, PEOU4, PEOU3 and PEOU5 that indicate the perceived ease of use of adopting e-payment among private universities' student. Besides, Factor 4 consist of four items such as INT3, INT1, SE3 and INT2 that explain intention of private universities' student in use of e-payment. In addition, PU3, PU4, PU2 and PU1 are measure on perceived of use on Factor 5. The last is Factor 6 that is measure on attention of private universities' student on using e-payment that consists of 3 items that are ATT3, ATT2 and ATT1, items ATT3 and ATT2 are loaded high.

4.3 Reliability Analysis

According to Hair et al. (2006), Cornbach's Alpha Reliability is testing on the reliability of the research that allow researcher to come out with consistent results. The measurement of Cronbach's Alpha is specified as number 0 and 1. Hence, Cronbach's Alpha have better consistency within items in the scale if coefficient that closer to 1.

Schuessler (1971) had stated acceptable and reliable an alpha value must greater than 0.6. The table below show the reliability test result for each variable:

Table 7: Internal Reliability Test

Variables	Cronbach's Alpha	No. of items
Attitudes	0.765	3
Subjective Norms	0.659	3
Perceived Ease of Use	0.793	5
Perceived Usefulness	0.694	4
Perceived Security	0.677	5
Trust	0.739	3
Benefits	0.840	5
Self-Efficacy	0.608	3
Intention	0.650	3

Based on the results above, all variables are considered variable as alpha value are more than 0.6.

The independent variable, benefits has the highest alpha value of 0.840 with 5 items so this means that benefits is the most reliable variable. Perceived ease of use has the second highest alpha value of 0.793 with 5 items. Followed by attitudes and trust, it has the alpha value of 0.765 with a total of 3 items and alpha value of 0.739 with 3 items. In addition, perceived usefulness have alpha value of 0.694 which consists of 4 items and perceived security with alpha value 0.677 with 5 items. Besides, the variable with 3 items are subjective norms with

alpha value 0.659, intention with alpha value 0.650 and lastly self-efficacy with alpha value 0.608. For testing the reliability of the test, can conclude that the test is reliable with independent variables achieved and fulfilled the level of reliability which was measured by Cronbach's Alpha.

4.4 Inferential Analysis

4.1.1 Pearson Correlation Coefficient

Correlation matrix is use to check the pattern of relationship in Pearson Correlation Coefficient. This is to ensure all variables in this study have determine strength of linear relationship. Preliminary analysis was conducted before multiple regression analysis to ensure the regression model does not consists of any serious violation. Below is the rules of thumb of correlation coefficient, assume correlation coefficient is statistically significant:

Table 8: Rules of thumb about Correlation Coefficient size

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

Hair.et.al (2006).

By refer to the table 8, correlation matrix represents that all variables is positively and significantly connected to one another variables. There are five variables are within the range of 0.41 - 0.70 which have moderate relationship while there are only two variables are have small but define relationship, that are perceived ease of use (0.366) and trust (0.354). All variables correlation coefficients is less than 0.9. Hence, multicollinearity does not exist in these data.

Variables	Correlation Coefficients	P-value
Intention vs Attitude	0.419	$p<0.05$
Intention vs Perceived Ease of Use	0.366	$p<0.05$
Intention vs Subjective Norms	0.498	$p<0.05$
Intention vs Perceived Usefulness	0.451	$p<0.05$
Intention vs Perceived Security	0.436	$p<0.05$
Intention vs Trust	0.354	$p<0.05$
Intention vs Benefit	0.442	$p<0.05$
Intention vs Self-efficacy	0.500	$p<0.05$

Table 9: Correlation Coefficient

Correlation coefficient allows us to select "best" independent variables. The higher the correlation coefficient, the greater the accuracy and stronger the relationship with correlated variables. Table above shown the correlation between variables and intention adopt e-payment are categories into two categories, which is moderate relationship and small but have relationship. Positive moderate relationship consists of self-efficacy ($r=0.500$), follow by subjective norms ($r=0.498$), perceived usefulness ($r=0.451$), benefit ($r=0.442$) and perceived security ($r=0.436$). This means that self-efficacy, subjective norms, perceived usefulness, benefit and perceived security are significant related to the intention adopt e-payment. Therefore, self-efficacy, subjective norms, perceived usefulness, benefit and perceived security are supported.

In addition, the correlation results between perceived ease of use and trust with intention adopt e-payment is at $r=0.366$ ($p<0.05$) and $r=0.354$ ($p<0.05$), which is consider small but these two variables have significant relationship. Hence, trust and perceived ease of use are supported because it is significantly related to intention adopt e-payment.

4.1.2Multiple Regression Analysis

Table 10: Multiple Regression Result

Independent Variables	Unstandardised Coefficients (B)	Standardised Coefficients (Beta)	t-stat	p-value	VIF	Tolerance
(Constant)	-0.090		-0.435	0.664		
attitude	0.044	0.041	0.836	0.404	1.825	0.548
PEOU	-0.065	-0.057	-1.093	0.275	2.008	0.498
SN	0.321	0.304	7.037	0.000	1.388	0.720
PU	0.153	0.129	2.632	0.009	1.790	0.559
SECURITY	0.167	0.137	2.775	0.006	1.817	0.550
TRUST	-0.014	-0.014	-0.268	0.789	1.899	0.527
BENEFIT	0.093	0.083	1.490	0.137	2.310	0.433
SE	0.269	0.239	5.009	0.000	1.693	0.591
R				0.646		
R2				0.417		
Adjusted R2				0.407		
F-test				38.779		
Sig				0.000		
Std. Error of the Estimate				0.519		
Durbin-Watson				2.072		

Dependent Variables: Intention of private universities student adopt e-payment in Klang Valley

Multiple regression analysis is conducted to examine the eight independent variables; attitude, perceived ease of use, subjective norms, perceived usefulness, perceived security, trust, benefits and self-efficacy, significantly explain the intention of private universities' student in Klang Valley. The regression model contains the eight independent variables are statistically significant (F=38.799, p-value<0.05). Therefore, the study show that the factors influence will significantly explain the private universities' student intention in using e-payment. The R^2 which consists 0.646 show that is small but is evidence to define relationship between these eight variables and dependent variables. The adjusted R^2 with the value 0.407 show that 40.7 percent of the variation in intention of adopts e-payment is explained by the factors influence and the rest 59.3 percent is explained by other factors. In addition, the

multicollinearity value that lesser than 10 shows that all independent variables are uncorrelated with other independent variables.

Multicollinearity is important is interpret whether there is correlation of regression among independent variables. Based on table 7, the regression result show no multicollinearity that the tolerance value is greater than 0.2 and the Variance Inflation Factor (VIF) values are all fall between the ranges 0 to 10. This also meant that predictors in this study must be highly correlated. The result for VIF showing that the variables can be used in the regression analysis and multicollinearity is minimized (Chatterjee, Haidi & Price, 2000; Kleinbaum, Kupper, Nizam & Rosenberg, 1988).

Shape of data that is normally distribution for a single metric variable is refer to the normality test. In Appendix 2 and 3, both frequency distributions and normal P-P plots of regression show that are normally distributed.

Scatterplot in Appendix 1 show the residuals fall within a generally random pattern as it does not exhibit any nonlinear pattern to the residuals. This finding shows that homoscedasticity in the multivariate independent variable set that each value of the predictors should be constant. In addition, the error terms for any pair of observations should be uncorrelated.

The Durbin Watson Test that is also called as serial correlation in residuals that measure the autocorrelation from the regression analysis. According to Field (2009), test statistic consider normal in values that ranges between 1.5 to 2.5. In this study, the Durbin Watson statistic value is 2.072. Hence, it is consider relatively normal.

Based on the regression equation, the statistical results as below:
Y = - 0.090 + 0.044 (ATT) – 0.065 (PEOU) + 0.321 (SN) + 0.153 (PU) + 0.167 (PS) – 0.014 (TR) + 0.093 (BE) + 0.269 (SE)

Y = Intention
ATT = Attitude
PEOU = Perceived Ease of Use
SN = Subjective Norms
PU = Perceived Usefulness

PS = Perceived Security

TR = Trust

BE = Benefit

SE = Self-Efficacy

Table 11: Summary of Hypotheses Testing

Hypotheses	**Results**	**Supported or not supported**
H1: There is a significant relationship between attitudes and intention adopt e-payment.	P>0.05	Not supported
H2: There is a significant relationship between perceived ease of use and intention adopt e-payment.	P>0.05	Not supported
H3: There is a significant relationship between subjective norms and intention adopt e-payment.	P<0.05	Supported
H4: There is a significant relationship between perceived usefulness and intention adopt e-payment.	P<0.05	Supported
H5: There is a significant relationship between perceived security and intention adopt e-payment	P<0.05	Supported
H6: There is a significant relationship between trust and intention adopt e-payment.	P>0.05	Not supported
H7: There is a significant relationship between benefit and intention adopt e-payment.	P>0.05	Not supported
H8: There is a significant relationship between self-efficacy and intention adopt e-payment.	P<0.05	Supported

From the results, it shows decrease of 0.065 (PEOU) and 0.014 (TR) and increase of 0.044 (ATT), 0.321 (SN), 0.153 (PU), 0.167 (SECU), 0.093 (BE) and 0.269 (SE) in order to increase 1 unit of intention of adoption e-payment. Besides that, subjective norms consider as main predictor that has the strongest influence on intention to adopt e-payment where the

standardised beta is equal to 0.304, follow by self-efficacy (0.239), perceived security (0.137), perceived usefulness (0.129), benefit (0.083) , attitude (0.041), trust (-0.014) and lastly perceived ease of use (-0.057).

H_1: There is positive relationship between attitudes and intention adopt e-payment.

Table 10 show that the p-value is 0.404 ($p>0.05$). Hence, do not reject null hypothesis with at most 5 per cent error and conclude that there is no significant relationship between attitudes and intention adopt e-payment. Al-Gahtani (2001) findings where attitude on users would enjoy more if they were able freely access to the information and services in a technology but security concern will lead to reduce users' enjoyment.

H_2: There is positive relationship between perceived ease of use and intention adopt e-payment.

Table 10 show that the p-value is 0.275 ($p>0.05$). Hence, do not reject null hypothesis with at most 5 per cent error and conclude that there is no significant relationship between perceived ease of use and intention adopt e-payment. Respondents may feel the instruction given is ambiguous and therefore the steps to perform transaction become more difficult. This will lead inconvenient to users as well.

H_3: There is positive relationship between subjective norms and intention adopt e-payment.

Table 10 show that the p-value is 0.000 ($p<0.05$). Hence, reject null hypothesis with at most 5 per cent error and conclude that there is a significant relationship between subjective norms and intention adopt e-payment. Nysveen, Pedersen and Thorbjørnsen, (2005) had significantly proved that the influence of elders or friends will lead to social pressure that will result the individual will possible to adopt the certain system.

H_4: There is positive relationship between perceived usefulness and intention adopt e-payment.

Table 10 show that the p-value is 0.009 ($p<0.05$). Therefore, reject null hypothesis with at most 5 per cent error and conclude that there is a significant relationship between perceived usefulness and intention adopt e-payment. The result is consistent with the study done by Davis, Bagozzi and Warshaw (1989) that perceived usefulness will influence e-commerce customer's decision making in adopting the e-payment system.

H_5: There is positive relationship between perceived security and intention adopt e-payment.

Table 10 show that the p-value is 0.006 ($p<0.05$). Therefore, reject null hypothesis with at most 5 per cent error and conclude that there is a significant relationship between perceived security and intention adopt e-payment. Kurnia and Benjamin (2007) findings had stated that security concerns of users will effects the decision on adoption of e-payment and this is consistent with this research results as well.

H_6: There is positive relationship between trust and intention adopt e-payment.

Table 10 show that the p-value is 0.789 ($p>0.05$), the result is not significant. Hence, do not reject null hypothesis with at most 5 per cent error and conclude that there is no significant relationship between trust and intention adopt e-payment. This result is consistent with previous studies done by Kim et al. (2009) and Pavlou (2001) which indicate that trust is not related with the intention to perform transactions online. Trust is not sufficient to motivate user to adopt e-payment due to other factors.

H_7: There is positive relationship between benefit and student's intention.

Table 10 show that the p-value is 0.137 ($p>0.05$). Hence, do not reject null hypothesis with at most 5 per cent error and conclude that there is no significant relationship between benefit and intention adopt e-payment. The results is consistent with previous results that Kim et al. (2009) stated with the time that need to learn how to implement new technology and internet in adoption of e-payment will be more costly.

H_8: There is positive relationship between self-efficacy and intention adopt e-payment.

Table 10 show that the p-value is 0.000 ($p<0.05$). Therefore, reject null hypothesis with at most 5 per cent error and conclude that there is a significant relationship between self-efficacy and intention adopt e-payment. This result is significantly with research done by Bandura (1986) and Eastin (2002), the majority of respondents have experienced using e-payment that their positively encounters agree them to continue adopting e-payment. Direct influence from peers, friends, family, and other people who have experience in using the e-payment services would further influence the respondents' perception.

4.5 Conclusion

In this chapter, factor analysis and reliability test had been applied by using SPSS software for data analysis. The results of dependent and independent variables had been determined for further discussions in next chapter.

CHAPTER 5

DISCUSSION AND CONCLUSION

5.0 Introduction

This chapter is focusing on the results of statistical findings in detailed in order to validate the hypotheses. Therefore, the statistical research results are accompanied with the analysis results limitation and future study recommendation.

5.1 Summary of Statistical Analysis

5.1.1 Descriptive Analysis

In the demographic profile, the results shows that there are female respondents are more than male respondents. There are 52.5 per cent of female respondents and percentage of male respondents is 46.4 per cent. Most of the respondents are falling into the age category of between 19 to 21 years old that consists of 69.5 per cent and 30.5 per cent of respondents are 22 years old and above. Besides that, Chinese respondents, 76.2 per cent possess the highest portion in this while Non-Chinese consist of 23.8 per cent of the respondents. Based on the

analysis on education qualification, there are 79.9 per cent of the respondents pursuing their degree holder and above. Although some of the students currently pursuing foundation, but they are still is an existing university students. Hence, I am confident that the information provided by respondents in questionnaires is able to help me in my research work.

Moreover, majority of the respondents, 34.4 per cent will receive a monthly allowance of RM 501 – RM 1,000 per month. There are only 26 per cent of the respondents will receive less than RM500. Based on results of this data, I believe the respondents have quiet significant amount of purchasing power.

5.1.2 Scale Measurement

5.1.2.1 Reliability Test

Cronbach's Alpha is implemented to evaluate the reliability of the 34 items constructed to weigh the 8 independent variables (Attitude, Subjective Norm, Perceived Ease of Use, Perceived Usefulness, Benefit, Perceived Security, Trust and Self-Efficacy) and the dependent variable (Intention Adopt E-Payment). According to the construct variables, benefit has the highest alpha value of 0.840. Perceived ease of use has scored second highest alpha value 0.793, followed by attitudes (0.765), trust (0.739), perceived usefulness (0.694), perceived security (0.677), subjective norms (0.659) and intention (0.650). The lowest value of Cronbach's Alpha is 0.608. In other words, all variables have good internal consistency as all the Cronbach's Alpha value fall between 0.608 to 0.840, which indicated that the reliability analysis s consistent and acceptable.

5.1.3 Inferential Analysis

5.1.3.1 Pearson Correlation Coefficient

Based on the Pearson Correlation analysis in previous chapter that p-value is less than 0.01 for all the independent variables are indicating all the variables are important. Nonetheless, although all the variables are significant but the p-value for multiple regression analysis should be imply when it comes to the decision of rejecting or accepting the hypothesis. Self-efficacy has the highest correlation towards intention adopt e-payment followed by subjective norms, perceived ease of use, perceived usefulness, benefit, perceived security, attitude, benefit, and trust.

5.1.3.2 Multiple Regression Analysis

Based on the Multiple Regression Analysis summarized that the R square of 0.646 shows that 65% of the response variable variation on intention adopts e-payment can be explained through the factor influence. In addition, the adjusted R^2 is equal 0.417 which implicit that about 41.7 per cent of the variation in the intention adoption of e-payment is explained by the factor influence. Besides that, ANOVA test with F-value that indicate 38.779 and significant level $p<0.05$ show that at best one of the predictors can take advantage of the intention of the model intention adoption of e-payment by private universities students Klang Valley. As a result, proposed hypotheses are accepted (H1, H2, H3, H4, H5, H6, H7 and H8). The regression equation has shown as below:

$$Y = - 0.090 + 0.044 (ATT) – 0.065 (PEOU) + 0.321 (SN) + 0.153 (PU) + 0.167 (PS) – 0.014 (TR) + 0.093 (BE) + 0.269 (SE)$$

The equation formed show every units increase of attitude, subjective norms, perceived usefulness, perceived security, benefit and self-efficacy, there will be an increase 0.044, 0.321, 0.153, 0.167, 0.093 and 0.269 respectively intention of adoption in e-payment.

5.2 Discussion of Major Findings

5.2.1 Test of Significant

This subtitle will test the correlation between dependent variables and independent variables.

H_3: There is a significant relationship between subjective norms and intention adopt e-payment.

Refer to the results of the test shows that there is a relationship with significant value related between attitude and intention adopt e-payment by private universities' student in Klang Valley. Hence, H_3 is not rejected with r=0.498 at a significant level of 0.000. The individual's intention of adoption e-payment is influenced by externally and internally. This include the influence from friend and family, relative, social media, professional opinion and etc. This result is significant with Nysveen et al. (2005) that the individual will possibly accept a certain systems when the individual felt the force of social pressure subsequently from influences by elders or friends.

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Peer influence that also important as our target respondents is students that spend most of the time with their close friends. These group of people will influence each other's through positive word of mouth that passed positive comment on e-payment. As the e-payment is easy to learn, respondents will encounter that they have capabilities to complete any single transactions by using e-payment.

H_4: There is a significant relationship between perceived usefulness and intention adopt e-payment.

The results showed that there is significant relationship between perceived usefulness and intention use e-payment. Hence, H_4 is not rejected with r=0.451 at a significant level of 0.009. The results is consistent with the study done by Davis, Bagozzi and Warshaw (1989) that the customer made decision in adopting the e-payment system will influence by perceived

usefulness will influence e-commerce. Providers should offer tutorials or guidance of various e-payment channels for consumers that will able to ease of navigation when use the e-payment system. The website design should prioritizes on ease of use and also the usability of the system. Impact on the perceived usefulness can be conceived and it will lead along of increasing intention of adoption among consumers. Banking and financial institutions can stress on the usefulness of adopting e-payment through marketing campaign.

H_5: There is a significant relationship between perceived security and intention adopt e-payment.

The results presented that there is significant relationship between perceived security and intention adopt e-payment. Hence, H_5 is not rejected with r=0.436 at a significant level of 0.006. The result is supported with the findings done of Kurnia and Benjamin (2007) that security concerns of users will effects the decision on adoption of e-payment. Retailers can assure with consumers that website is a safer and secure area to build and maintaining a long-term relationship where leaving the impression of trustable company to the consumers. This can be done through educating students about safety and secure features availability of their secure transactions which web are safe to surf on with digital certificates and secure servers. Banks and financial facility providers should consistently create awareness to inform and remind users of any existence of fraud.

H_8: There is a significant relationship between self-efficacy and intention adopt e-payment.

The results shows that there is a significant relationship between self-efficacy and intention adopt e-payment. Therefore, H_8 is not rejected with r=0.500 at a significant level of 0.000. This outcome is supported by Bandura (1986) and Eastin (2002), majority of respondents are having positive experiences by using e-payment that their positively encounters set them to continue adopting e-payment. Delightful and confident comments from family, friends, peers and other users who have experienced the e-payment services further influence the respondents' perception. Users will based on the comments and self-evaluate on the ability and capability that whether they can complete the financial transaction through e-payment system.

5.3 Managerial Implication

This research has contributed in terms of theoretical points to the existing body of knowledge. In order to predict the overall adoption of technology in terms of private universities' student, TAM and TPB model have less determinants to predict as there are only consists of six determinants.

With the expansion of the model, in this study that offer understandings on consumer intention to adopt the three new constructs, namely benefit and self-efficacy that also been adopted by previous researcher using different models. Therefore, this study suggested that better and precise predictions of consumers' intention of adopting e-payment for private universities' student in Klang Valley, which have yet to receive the developed on private universities' student context. It has advanced the majority literature concerning e-payment acceptance, particularly from a country which has resulted promising growth in e-payment use.

Generally, the data findings have ensure all of the eight factors investigated. Thus, this allows the practical implications from the perspective of strategies to recommend in order improve use of e-payment.

From the study, it suggests that Malaysian online transaction facility providers and banks should continually enhance their e-payment services to meet customers' expectation in the view of the promising growth rate.

E-payment systems have to be proven itself that it is simply convenient and usage effectively in the real world for gaining larger market shares from cash (Böhle, Krügeret, Herrmann, Carat and Maghiros, 2000). In order to have further improvements of e-payments systems where providing lower and cheaper transaction costs for businesses and consumers, consistently maintaining competitive environment is essential. These findings could be used as a guide for service providers to update accordingly and as well as proper strategies

enhancements for e-payment services to be developed especially targeted on consumer's awareness.

Subjective norms, perceived usefulness, perceived security and self-efficacy seem to be significant factors and therefore marketer should not oversee this as an opportunity in term understanding what the customer needs and want therefore extra attention from the banking institutions or online transaction facility providers in order to expand the use of e-payment.

Researchers and development team should have collaborated with programmers to identify and analyse the core and additional benefits that can be provided for users besides ensuring clear instructions and beneficial contents of e-payment systems.

This finding of self-efficacy and perceived usefulness show that educating consumers on guiding them steps to use various e-payment channels are essential. Bank representatives are playing important role of educating and advising the e-payment facilities to consumers. Basic information such as term and conditions for policies, warranty and payment must be included.

Bank branches can carry out demonstrations via video presentations to gain confidence and delivers quality information on the features of e-payment services. Besides, the operating procedures should re-examine the collected feedbacks from consumers constantly and consistently as subjective norms show significant with this study that users are easily influence by the people close to them.

The important of e-payment systems security should not be neglected. Government needs to take precaution to protect consumers by continues stabilize and enhance financial reliability by controlling e-payment services.

Online transaction facility providers, policy makers and banking institutions are playing important role to ensure the flawless security of the systems in order to gain consumers trust

and confidence. Developer should take note on the same as they design the e-payment features.

5.4 Limitation of Study

There are few limitations relate and revealed in this research. Firstly, the samples were collected from Klang Valley that the main limitation is on the geographical bias. Even though Klang Valley have more condense population compare to other states, but the finding in this study may not represent whole view of intention of private university in adoption of e-payment. Hence, the results cannot be generalised and representing Klang Valley as a whole and other nationalities.

Secondly, this study also limits the adoption of e-payment with the perspective of theory of planned behaviour and technology acceptance model. This study data collected at one point of time that consumers' intention are very volatile and dynamic fields of study like intention to adopt e-payment which has been studied for many years yet still lack of predictive accuracy. There are less documented studies concerning the predictive measure. Thus, the pattern of intention to adopt e-payment may be inappropriate based on results of these findings.

Thirdly, the overall consumers are highly educated. About 79.9 per cent of respondents are holding high educational qualification such as bachelor of degree or professional. Nevertheless, consumers with lower educational qualification might have different intentions to adopt e-payment. The findings will provide better generalisation if targeted on respondents from wider range of education qualification in future research.

In this research, the measures of constructs are study only conducted from a quantitative perspective. Therefore, individual's intention to adopt e-payment may change over time for better or worst. Nevertheless, in order to have a better promising result that suggests incorporation of qualitative methods is advisable.

5.5 Recommendation for Future Research

Researcher proposed some opinions and suggestions that can overcome the limitation that mentioned. Firstly, researchers should include the broader range of age category or geographical coverage in order to collect variety of perspectives. In order to have further improvement to examine the hypotheses accurately and specifically, increase and expanding the total of sample size will result on the hypotheses without difficulty. Besides that, it is recommended future research to build results that is feasible to challenge the currently adopted practices. New research is encouraged to use more others analytical tools such as qualitative to be carry out in exhaustive finding.

In addition, , future researches are suggested to use longitudinal research to collect even more precise than accurate and most updated results as the intention of adoption on e-payment among private universities student may change over time due to the technologies advancement. Thus, it is very important to study the intention to adopt e-payment at different point of time throughout the decision making process.

There is a need to understand the intention on adoption of e-payment should be developed wisely so more research can be done in this particular field in others countries in order to provide better data and finding. Therefore, other models and factors should be considered as another possibility that to be examined the contrasting experiences between consumer's expectations and e-payment in real market thus gap analysis can be considered and conducted in future.

5.6 Conclusion

In this research, eight independent variables includes attitude, subjective norm, , perceived usefulness, perceived security, perceived ease of use, benefit, self-efficacy and trust are validated to have significant relationship with intention to adopt e-payment. Based on the coefficient value, all variables are positively related. Concluded and discussed that inferential analysis, descriptive analysis, managerial implications and limitation in this chapter, as well as recommendations were explained and future research has been provided.

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Appendix A: Questionnaire

Questionnaire
Factors Affecting Adoption of E-Payment Among Private University in Klang Valley Context

Dear respondents,
I am a final year postgraduate student of Master of Business Administration, from University Tunku Abdul Rahman (UTAR). The **purpose** of this survey is to evaluate the factors affecting adoption e-payment among private university students in Klang Valley.
Thank you for your participation.

Instruction:

1. There are SIX (6) pages in this questionnaire. Please answer ALL questions which are needed in ALL pages.

2. Completion of this questionnaire will take you approximately 10 to 15 minutes.

3. Please feel free to share your information in the space provided. The content of this questionnaire will be kept strictly confidential and will be used only for academic research purpose.

Section A: Demographic Profile

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

1. Gender : ☐ Male ☐ Female

2. Age : ☐ Below 18 years old ☐ 19 - 21 years old ☐ 22 – 24 years old

☐ Above 24 years old

3. Cultural Heritage : ☐ Malay ☐ Chinese ☐ Indian

☐ Others (Please Specify) _____

4. Educational Qualification :

☐ Foundation

☐ Degree

☐ Master

☐ PhD

Others (Please Specify) : _____

5. How much is your monthly allowance?

☐ RM500 or less

☐ RM501-RM1,000

☐ RM1,001 – RM1,500

☐ RM1,500 and above

6. Which states are you from?

☐ Wilayah Persekutuan KL ☐ Sabah

☐ Selangor ☐ Sarawak

☐ Perak ☐ Johor

☐ Kelantan ☐ Terengganu

☐ Perlis ☐ Pulau Penang

☐ Pahang ☐ Melaka

☐ Kedah ☐ Negeri Sembilan

7. Please indicate your current course of study/ programmes?

_____

8. Please indicate your year of study:

☐ 1

☐ 2

☐ 3

☐ 4

☐ Others (Please Specify) _____

9. Have you heard of e-payment? Yes ☐No ☐

10. Have you use e-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) = Neither agree nor disagree;
(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. Attitudes

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

Q1. For me to do / perform e-payment is:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. I intend to use e-payment because it is very convenient.	1	2	3	4	5
b. I intend to use e-payment because it provides a wide range of products.	1	2	3	4	5
c. I am likely to use e-payment because I think it is beneficial to me.	1	2	3	4	5

2. Subjective Norms

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. Most people who are important to me think that I should use e-payment.	1	2	3	4	5
b. It is expected of me that I should use e-payment.	1	2	3	4	5
c. I think it is important that everyone in the society should use e-payment.	1	2	3	4	5

3. Perceived Ease of Use

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. I do not get frustrated when use e-payment.	1	2	3	4	5
b. E-payment is easy to learn and use.	1	2	3	4	5
c. I feel flexible in performing e-payment.	1	2	3	4	5
d. E-payment provides various payment channels that ease my online shopping process.	1	2	3	4	5
e. Less effort is needed when I perform e-payment.	1	2	3	4	5

4. Perceived Usefulness

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. E-payment improves my search for mode of payment that I desired.	1	2	3	4	5
b. E-payment minimize the time I usually spent on payment.	1	2	3	4	5
c. E-payment helps me in terms of making better payment decisions.	1	2	3	4	5
d. E-payment makes it easier for me to make products comparison among payment modes.	1	2	3	4	5

5. Perceived Security

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. Most e-payment provides adequate payment security.	1	2	3	4	5
b. E-payment has minimum financial risk.	1	2	3	4	5
c. I am willing to use e-payment if the software is protected by the latest know- how (ingenuity, aptitude or skill).	1	2	3	4	5

d. I would assume e-payment is safe as if security verified by third party.	1	2	3	4	5
e. I prefer to use e-payment that provides security insurance.	1	2	3	4	5

6. Trust

	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 e-payment more often.	1	2	3	4	5
c. I will use e-payment the terms and conditions are clear.	1	2	3	4	5

7. Benefit

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. It save my time and cost for using an e-payment system.	1	2	3	4	5
b. E-payment system is convenient for me.	1	2	3	4	5
c. The billing and transactions process are accurately handled.	1	2	3	4	5
d. Speed of e-payment system flow faster than traditional payment system.	1	2	3	4	5
e. I find that it is easier to conduct my financial transaction.	1	2	3	4	5

8. Self-efficacy

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. I will only use an e-payment system if I heard it before.	1	2	3	4	5
b. The comments other people will influence my intention to use an e-payment system.	1	2	3	4	5
c. I will use an e-payment system when my friends introduce it to me.	1	2	3	4	5

9. 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 describes your response to each statement.

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

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
a. Because my friends and family are using e-payment.	1	2	3	4	5
b. Because I like the feeling of using e-payment.	1	2	3	4	5
c. Because I don't want to be the only one who does not use e-payment.	1	2	3	4	5

Adopted from: Har Lee, C., Cyril Eze, U., & Oly Ndubisi, N. (2011). Analyzing key determinants of online repurchase intentions. *Asia Pacific Journal of Marketing and Logistics*, *23*(2), 200-221.

Teoh, Wendy M.Y., Chong, S.C., Lin, B., & Chua, J.W. (2013). Factors affecting consumers' perception of e-payment: an empirical analysis. *Internet Research*, *23*(4), 465-485.

Appendix B: SPSS Output

Frequency Table: Demographic Profile

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	205	46.4	46.4	46.4
	Female	237	53.6	53.6	100.0
	Total	442	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19-21 years old	307	69.5	69.5	69.5
	22 years old and above	135	30.5	30.5	100.0
	Total	442	100.0	100.0	

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	337	76.2	76.2	76.2
	Non-Chinese	105	23.8	23.8	100.0
	Total	442	100.0	100.0	

Monthly Allowance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	RM 500 or less	115	26.0	26.0	26.0
	RM 501 - RM 1,000	152	34.4	34.4	60.4
	RM 1,001 - RM 1,500	103	23.3	23.3	83.7
	RM 1,500 and above	72	16.3	16.3	100.0
	Total	442	100.0	100.0	

Education Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Foundation	89	20.1	20.1	20.1
	Degree and above	353	79.9	79.9	100.0
	Total	442	100.0	100.0	

States

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Central Region	166	37.6	37.6	37.6
	Northern Region	84	19.0	19.0	56.6
	East Coast Region	35	7.9	7.9	64.5
	East Malaysia	101	22.9	22.9	87.4
	Southern Region	56	12.7	12.7	100.0
	Total	442	100.0	100.0	

Year of Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	One	150	33.9	33.9	33.9
	Two	195	44.1	44.1	78.1
	Three and above	97	21.9	21.9	100.0
	Total	442	100.0	100.0	

Course of Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Science	106.0	24.0	24.0	24.0
	Social Science	336.0	76.0	76.0	100.0
	Total	442	100.0	100.0	

Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.919
Bartlett's Test of Sphericity	Approx. Chi-Square	5161.144
	df	378
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.620	34.358	34.358	9.620	34.358	34.358	3.293	11.760	11.760
2	1.665	5.945	40.304	1.665	5.945	40.304	3.174	11.335	23.095
3	1.469	5.248	45.551	1.469	5.248	45.551	3.098	11.064	34.159
4	1.362	4.866	50.417	1.362	4.866	50.417	2.343	8.369	42.528
5	1.195	4.268	54.685	1.195	4.268	54.685	2.237	7.988	50.516
6	1.065	3.804	58.489	1.065	3.804	58.489	2.232	7.973	58.489
7	.971	3.468	61.957						
8	.872	3.114	65.071						
9	.856	3.056	68.127						
10	.759	2.711	70.838						
11	.686	2.450	73.288						
12	.666	2.380	75.668						
13	.627	2.238	77.906						
14	.604	2.158	80.064						
15	.577	2.060	82.124						
16	.549	1.961	84.085						
17	.508	1.814	85.899						
18	.481	1.718	87.617						
19	.443	1.582	89.200						
20	.426	1.523	90.722						
21	.413	1.475	92.197						
22	.378	1.351	93.548						
23	.352	1.257	94.805						
24	.336	1.200	96.005						
25	.324	1.155	97.160						
26	.283	1.011	98.171						
27	.272	.972	99.143						
28	.240	.857	100.000						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix[a]

	Component					
	1	2	3	4	5	6
benefit4	.721					
benefit3	.701					
benefit2	.633					
benefit1	.590					
benefit5	.549					
trust2		.717				
trust1		.682				
security5		.656				
SE2		.525				
trust3	.465	.515				
security4		.501				
security3		.476	.412			
PEOU2			.771			
PEOU1			.684			
PEOU3			.671			
PEOU4			.578			
PEOU5	.407		.476			
intention3				.766		
intention1				.634		
SE3				.564		
intention2				.544		
PU3					.720	
PU4					.628	
PU2					.604	
PU1			.427		.474	
attitudes3						.749
attitudes2						.701
atttudes1						.578

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 7 iterations.

Reliability Test: Attitude

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.765	.766	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
atttudes1	7.19	1.831	.609	.372	.672
attitudes2	7.38	1.786	.603	.365	.678
attitudes3	7.45	1.772	.581	.337	.704

Reliability: Subjective Norms

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.659	.660	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SN1	6.59	1.952	.462	.213	.575
SN2	6.39	1.993	.468	.219	.568
SN3	6.45	1.781	.483	.234	.546

Reliability: Perceived Ease of Use

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.793	.796	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PEOU1	15.26	5.624	.523	.330	.774
PEOU2	14.91	5.770	.643	.459	.731
PEOU3	14.97	5.693	.679	.478	.720
PEOU4	14.82	6.056	.545	.332	.762
PEOU5	14.93	6.261	.491	.280	.778

Reliability: Perceived Usefulness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.694	.695	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PU1	10.81	3.438	.429	.192	.660
PU2	10.58	3.128	.493	.247	.621
PU3	10.97	3.076	.483	.241	.628
PU4	10.86	3.213	.511	.262	.610

Reliability: Perceived Security

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.677	.681	5

Inter-Item Correlation Matrix

	security1	security2	security3	security4	security5
security1	1.000	.354	.327	.301	.253
security2	.354	1.000	.214	.265	.149
security3	.327	.214	1.000	.358	.374
security4	.301	.265	.358	1.000	.392
security5	.253	.149	.374	.392	1.000

Reliability: Trust

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.739	.739	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
trust1	7.59	1.849	.574	.346	.642
trust2	7.65	1.679	.610	.380	.596
trust3	7.49	1.888	.509	.261	.716

Reliability: Benefit

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.840	.841	5

Inter-Item Correlation Matrix

	benefit1	benefit2	benefit3	benefit4	benefit5
benefit1	1.000	.660	.552	.430	.493
benefit2	.660	1.000	.572	.494	.548
benefit3	.552	.572	1.000	.487	.465
benefit4	.430	.494	.487	1.000	.449
benefit5	.493	.548	.465	.449	1.000

Reliability: Self-efficacy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.608	.609	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SE1	7.15	1.774	.402	.172	.529
SE2	7.16	1.647	.468	.220	.433
SE3	7.38	1.738	.382	.152	.559

Reliability: Intention

Reliability Statistics

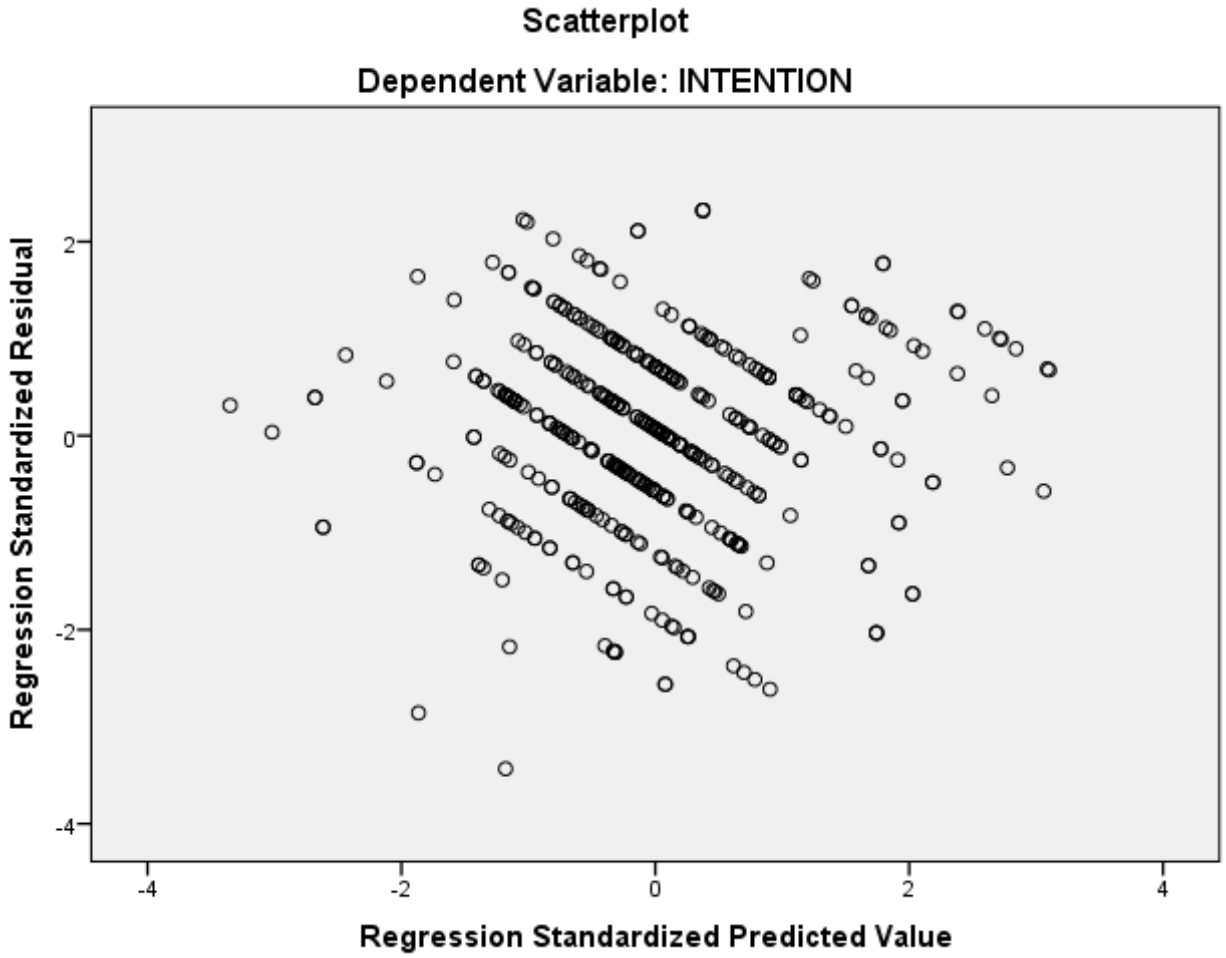
Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
.650	.653	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
intention1	6.36	2.423	.437	.194	.588
intention2	6.45	2.270	.451	.206	.567
intention3	6.97	1.718	.513	.263	.486

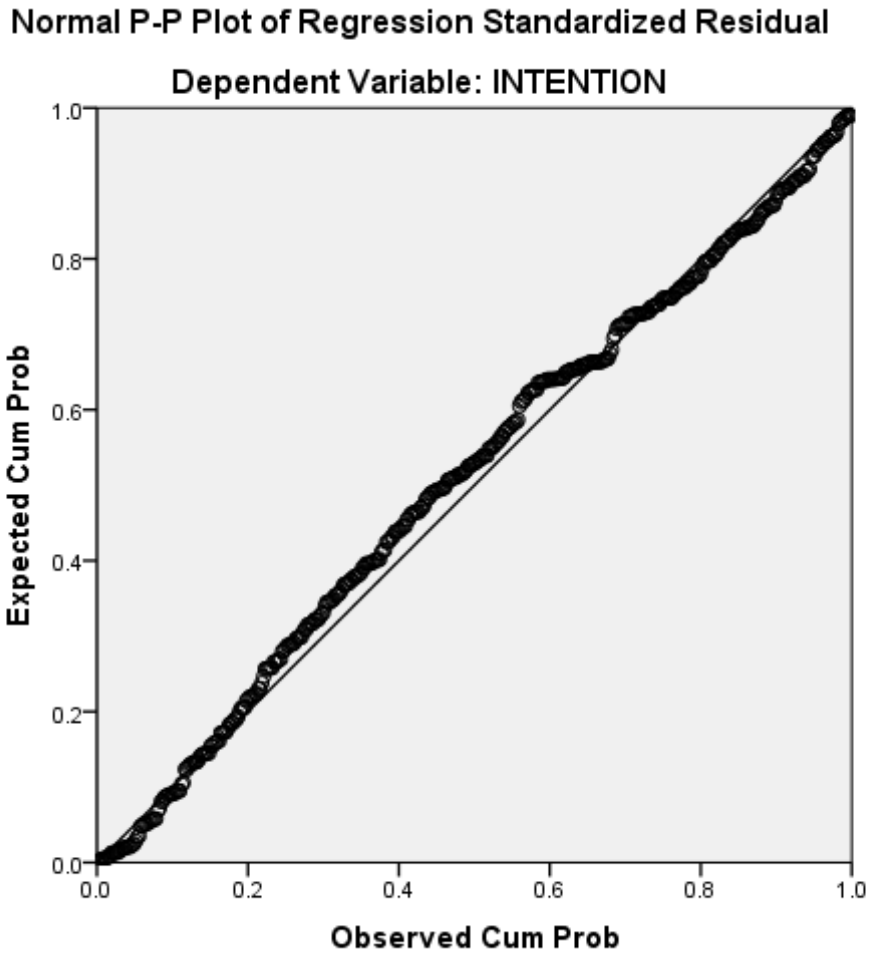
Test of Normality: Scatterplot

Appendix 1



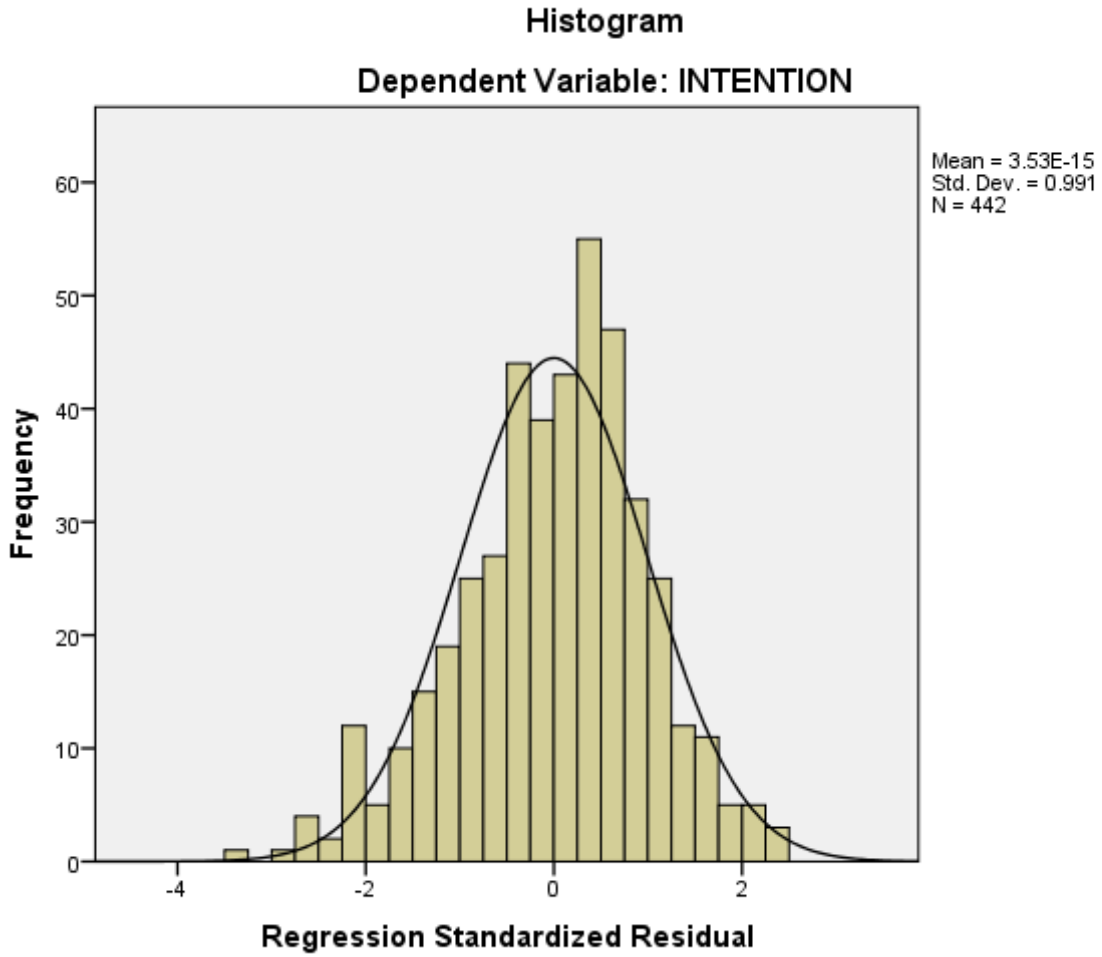
Test of Normality: Normal P-P Plot

Appendix 2



Test of Normality: Histogram

Appendix 3



Correlation

Correlations

		INT	ATT	PEOU	SN	PU	PS	TRUST	BENEFIT	SE
Pearson Correlation	INT	1.000	.419	.366	.498	.451	.436	.354	.442	.500
	ATT	.419	1.000	.522	.436	.477	.436	.472	.576	.468
	PEOU	.366	.522	1.000	.424	.503	.548	.479	.606	.367
	SN	.498	.436	.424	1.000	.344	.368	.226	.350	.328
	PU	.451	.477	.503	.344	1.000	.471	.482	.580	.502
	PS	.436	.436	.548	.368	.471	1.000	.556	.503	.437
	TRUST	.354	.472	.479	.226	.482	.556	1.000	.566	.505
	BENEFIT	.442	.576	.606	.350	.580	.503	.566	1.000	.532
	SE	.500	.468	.367	.328	.502	.437	.505	.532	1.000
Sig. (1-tailed)	INT		.000	.000	.000	.000	.000	.000	.000	.000
	ATT	.000		.000	.000	.000	.000	.000	.000	.000
	PEOU	.000	.000		.000	.000	.000	.000	.000	.000
	SN	.000	.000	.000		.000	.000	.000	.000	.000
	PU	.000	.000	.000	.000		.000	.000	.000	.000
	PS	.000	.000	.000	.000	.000		.000	.000	.000
	TRUST	.000	.000	.000	.000	.000	.000		.000	.000
	BENEFIT	.000	.000	.000	.000	.000	.000	.000		.000
	SE	.000	.000	.000	.000	.000	.000	.000	.000	
N	INT	442	442	442	442	442	442	442	442	442
	ATT	442	442	442	442	442	442	442	442	442
	PEOU	442	442	442	442	442	442	442	442	442
	SN	442	442	442	442	442	442	442	442	442
	PU	442	442	442	442	442	442	442	442	442
	PS	442	442	442	442	442	442	442	442	442
	TRUST	442	442	442	442	442	442	442	442	442
	BENEFIT	442	442	442	442	442	442	442	442	442
	SE	442	442	442	442	442	442	442	442	442

Regression

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.646[a]	.417	.407	.51943	2.072

a. Predictors: (Constant), SE, SN, PEOU, TRUST, PU, attitude, SECURITY, BENEFIT

b. Dependent Variable: INTENTION

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	83.704	8	10.463	38.779	.000[b]
	Residual	116.828	433	.270		
	Total	200.532	441			

a. Dependent Variable: INTENTION

b. Predictors: (Constant), SE, SN, PEOU, TRUST, PU, attitude, SECURITY, BENEFIT

Coefficients[a]

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.090	.208		-.435	.664
	ATT	.044	.053	.041	.836	.404
	PEOU	-.065	.059	-.057	-1.093	.275
	SN	.321	.046	.304	7.037	.000
	PU	.153	.058	.129	2.632	.009
	PS	.167	.060	.137	2.775	.006
	TRUST	-.014	.054	-.014	-.268	.789
	BENEFIT	.093	.062	.083	1.490	.137
	SE	.269	.054	.239	5.009	.000

a. Dependent Variable: INTENTION