FACTORS THAT IMPACT THE LEVEL OF ACCEPTANCE OF END-USER ON USING E-PAYMENT SYSTEM IN MALAYSIA

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BY

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A final year project submitted in partial fulfilment of the requirement for the degree of

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- (3) Sole contribution has been made by me in completing the FYP.
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DEDICATION

This research is especially dedicated to: Mr. Mark Louis and Ms. Angelina, my supervisor and co-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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LIST OF ABBREVIATIONS

SPSS Statistical Package for the Social Sciences

IAEP Intention Adopt E-payment

PEOU Perceived Ease of Use

T Trust

SE Self-Efficacy

B Benefit

TRA Theory of Reasoned Action

TPB Theory of Planned Behaviour

TAM Technology Acceptance Models

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PREFACE

The purpose of this research project is to evaluate the Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia. 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 and the effect of the pandemic. Therefore, retailers and marketers are keen to find out the factors that affect level of acceptance of end-user on using E-payment.

Besides, this study examines how the independent variables (Perceived Ease of Use, Trust, Benefit and Self-efficacy) will affect the dependent variable (Intention of end-user using E-payment). The researcher for this project would like to evaluate the e-payment intention of end-user in Malaysia. Therefore, this research project would be able to provide a better understanding to the retailers and marketers regarding the Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia.

Finally, I hope this research project will give readers a better understanding and understanding of e-payment intentions across all age groups.

ABSTRACT

This research paper aims to examine the Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia. This research paper has determined the relationship between the independent variables and dependent variable and also explains the dependent variable and each independent variable by reviewing previous research literature. The independent variables are Perceived Ease of Use, Trust, Benefit and Self-efficacy and the dependent variable is Intention of end-user using E-payment.

This research paper aims to examine the Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia. This research paper has determined the relationship between the independent variables and dependent variable and also explains the dependent variable and each independent variable by reviewing previous research literature. The independent variables are Perceived Ease of Use, Trust, Benefit and Self-efficacy and the dependent variable is Intention of end-user using E-payment.

In this research questionnaires and secondary data are based on journals and online databases were used to collect data. For the respondents are e-payment end-users in Malaysia. A total of 120 sets of questionnaires were successfully collected. The results for descriptive analysis, reliability test, and inferential analysis were obtained through the IBM SPSS software.

After the analysis, the result shows that all the independent variables have a positive relationship with intention of end-user using E-payment and Benefit has the strongest relationship with intention of end-user using E-payment. Lastly, the limitations encountered and the recommendations for future studies have been discussed in the last chapter of this research.

CHAPTER 1: INTRODUCTION

Introduction

The purpose of this research is to determine the factors that impact the level of acceptance of end users in Malaysia using e-payment systems. This chapter considered into five parts to clarify and describe the clear thinking of the entire research project. This chapter have explained all parts in detail, including research questions, research objectives, problem statements, research background and research significance.

1.1 Research Background

Electronic payment (e-payment) has become a popular payment method for online shopping today. The development of the internet has boosted the popularity of this payment tool, as e-commerce has created new financial demands (Wendy Ming-Yen Teoh, Siong-Choy Chong, Binshan Lin, Jiat Wei Chua, 2013). In some cases, traditional payment systems cannot be effectively meet these needs. Since then, different e-payment systems and providers have emerged, with the increasing complexity of e-commerce transactions (Wendy Ming-Yen Teoh, Siong-Choy Chong, Binshan Lin, Jiat Wei Chua, 2013).

E-payment systems have many limitations that hinder consumers from adopting them. Based on Yuntsai Chou, Chiwei Lee, Jianru Chung (2004) and Linck, K. and Pousttchi, Key and Wiedemann, Dietmar Georg (2006) pointed out compare with traditional payment methods, e-payment systems on the market have few constructive features, including security, convenience, reliability, anonymity, acceptability, scalability, effectiveness, and privacy. These have also been explained in several previous research.

According to Hord (2005), E-payments represent the types of cashless payment that does not include paper checks (Hord, 2005). The e-payments are widely use in the

digital environment which is e-shopping or online shopping, e-banking, and e-learning involving Internet connections (Yun Tsai Chou,Chi Wei Lee, Jian Ru Chung, 2004). Some researchers call e-payments a financial transaction (Ravi Kalakota, Andrew B. Whinston, 1997). The objective of e-payments is to act as an e-bank, which may include payment methods for electronic purchases. Those who can use electronic value instead of paper cheque to conduct all transactions remotely.

These studies show that trust, security, ease of use, benefit, and self-efficacy are important factors influencing the acceptance of e- payments. To date, only some researches have tried to research these factors in a one single environment. (for example, Haque, A., Tarofder, A.K, Rahman, S. Raquib, M.A., 2009; Sevgi Özkan, Gayani Bindusara, Ray Hackney., 2010), and related researches have been conducted outside of Malaysia (Haque, A., Tarofder, A.K, Rahman, S. Raquib, M.A, 248-259) (Sevgi Özkan, Gayani Bindusara, Ray Hackney, 2010).

1.2 Problem Statement

For the purpose of this research is to demonstrate the identification of factors that influence the use of e-payments by end users.

According to the analysis by Jacquelyn Yow Hui Li shows that the growth of e-payment usage in 2020 has increased by 48.9% year-on-year and year-to-date by 51.4% year-on-year (Li, 2020). Most importantly, Malaysia plans to issue digital bank licenses in 2022, which may help indirectly develop the exclusive market for e-payment providers, especially in the field of micro-SMEs where digital bank license holders are tasked to penetrate. This is also conducive to the country's rapid increase in the acceptance of e-payments.

Malaysia is becoming more and more popular in adopting e-payments (Ramalingam, 2012). However, face some challenges which are less understanding of the Internet and mobile phones, Malaysians still rarely participate in e-payments, which leads to insufficient confidence in e-payment systems (PinLuarn, Hsin-HuiLin, 2005) (John Paynter, Jackie Lim, 2001). Some people still use cash and cheque because

they have doubts about the benefits of e-payments. (Hataiseree, 2008) The research concentrates on investigating intention of end users to use e-payments as payment instruments for transactions in exchange for products or services.

Many researches have shown that security, trust and low merchant acceptance are the main reasons and concerns for people's reluctance to use e-payments in Malaysia. Several researches have been conducted in the field of e-payments, Majority of the countries in this research are foreign countries which consist US, Ireland and other European countries. Therefore, Malaysia has less research in this regard compared to other countries.

Unfortunately, there are stills have insufficient finding to support the research on the factor that impact the level of acceptance of end-user on using e-payment system in Malaysia. Majority of the research predict that have an increase in the use of e-payment in the future. In addition, this research will enable few financial and banking sectors or providers to better understand customer needs and concerns when using e-payments. In addition, it will also help software developers or suppliers to deal with the problems that users face in e-payment systems. This research will propose a conceptual model to discover the factors that impact the level of acceptance of end-user on using E-payment system in Malaysia.

1.3 Research Objective

The research objective of this research is to identify the factors that influence the level of acceptance of e-payments by end-users in Malaysia.

1.3.1 General Objective

For the general objective of this research is to identify the factors that influence the level of acceptance of e- payment systems by end users in Malaysia. The research will examine four factors, perceived ease of use, trust, benefit, and self-efficacy.

1.3.2 Specific Objective

The specific objectives are listed as below:

- 1. Determining the relationship between perceived ease of use and end-users using e-payments.
- 2. Investigate the relationship between trust and end user using e-payment.
- 3. Determine the relationship between the benefits and end user using epayment

4. Examine the relationship between self-efficacy and e-payment end users.

1.4 Research Questions

For the research, the research question is set as follows:

- 1. How does the perceived ease of use influence the level of acceptance on using e-payment?
- 2. How does the trust influence the level of acceptance on using e-payment?
- 3. What are the influence on the level of acceptance on using e-payment from benefits?
- 4. Is there any relationship between self-efficacy and the level of acceptance on using e-payment?

1.5 Significance of study

The research explores the factors that impact the level of acceptance of end-user on using e-payment system in Malaysia. The research is critical conducted to understand the what factors affect the end users 's intention to use e-payment system. The findings were used as supporting data to identify important factors to develop appropriate strategies to support marketers or financial institutions in facilitating the use of e-payments by end users in Malaysia.

In addition, the research results have also contributed to financial institutions, government of Malaysia and e-payment system developer to understand the factors and problems facing by the end user in Malaysia when using e-payment. This will provide merchants and companies with understanding, this will affect the larger acceptance of e-payments, as e-payment methods will eventually become the preferred medium of economic and commercial exchange in Malaysia as specifically stated in the Financial Sector Blueprint 2011-2020 (Malaysia, 2012). As the usage of the e-payment has increase, this is more relevant to this research.

1.6 Chapter Layout

The research arrangement is as follows: The first chapter introduces the research background of e-payment and the factors that impact the level of acceptance. The chapter also discusses the problem statement, research objectives, research questions, and significance. Chapter two have discussed literature reviews related to research topics and frameworks. Not only that, this chapter will include the proposed hypotheses and discuss all the variables in this research. Chapter three includes the methodology used in this research. The chapter discusses information research settings and methods for conducting research. In Chapter four, the results of the data collected from the survey will be checked using the Social Science Statistical Package (SPSS) software. Finally, chapter 5 will discuss and conclude the research results. This chapter also have mentioned the limitations, recommendations, and implications for future expansion.

1.7 Conclusion

This chapter summarizes research on factors influencing end-user acceptance of the use of e-payment systems in Malaysia. The researcher will examine the research background and problem statement, followed by the research problems and objectives. In addition, the chapter also mentions the significance of the research. The next chapter will further assess the information provided in this chapter.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter contain a literature review of the factors that impact the level of acceptance of end-users to use the Malaysian e-payment system. This chapter consist arguments for a literature review of the observations of the research, respectively defining features and terminology related to the topic. The first part is the review of the theoretical model and the theoretical framework will be developed graphically. The second part of this chapter is the empirical reviews of the factors. The last part will construct the conceptual framework and the hypothesis development.

2.1 Underlying Theory

2.1.1 Information System Acceptance Model

User acceptance of the technology is used to evaluate from a number of well-established theoretical models. Theory of reasoned action (TRA), Theory Planned Behaviour (TPB) and Technology Acceptance Model (TAM) are commonly used in theoretical models. According to Sung S. Kim and Naresh K. Malhotra (2005), these several models have been used as the theoretical basis for the acceptance of information systems over the past 20 years (Sung S. Kim, Naresh K. Malhotra, 2005).

2.1.2 Theory of Reasoned Action (TRA)

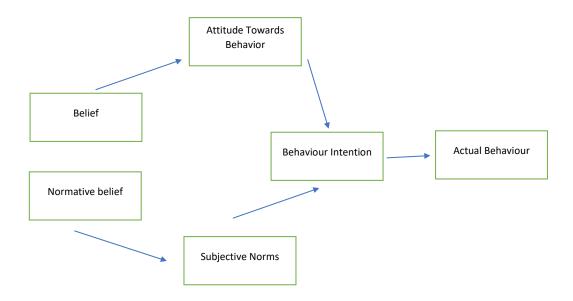


Figure 2.1.2: Theory of Reasoned Action (TRA)

The TRA model was proposed by Ajzen & Fishbein (1980), which explains user behaviour and makes informed considerations before engaging in activities or implementing new technologies (Ajzen, I., & Fishbein, M, 1980). The model aims to study the relationship between attitudes, subjective norms and behavioural intentions (Khalil Md Nor, Emad A. Abu Shanab, J. Michael Pearson, 2007).

Implemented TRA is to explain that his or her feelings of engaging in a particular behaviour affects a person's behaviour (Seok-jae Ok , Ji-hyun Shon, 2006). The model concludes that a person's behaviour is a direct influencing factor of behavioural intention, and there are two independent variables, subjective norm and attitude, that affect behavioural intention.

Following to some researchers, the developed TRA can be used to measure consumer opinion on a particular website (Khalil Md Nor, Emad A. Abu Shanab,J. Michael Pearson, 2007). Some of the researchers have shown behavioural-guiding attitudes, such as use and subjective norms, influenced by individuals' intentions to share knowledge (Gee-Woo Bock, Robert W. Zmud, Young-Gul Kim, Jae-Nam Lee, 2005). TRA has been extended in Theory of Planned Behaviour (TPB) and has been widely used in majority previous research (AJZEN, The Theory of Planned Behavior, 1991,2001).

Advantage of the TRA model is that it helps explain the reason of the different background factors are correlated (or not) with a given behaviour. On the other hand, the main shortcomings of TRA are the lack of investigations (respondents' attitudes, subjective norms and intentions) and moral factors to resolve the role of habit, cognition, deliberate, and misunderstanding. In addition, the use of voluntariness is a key issue for verifying TRA (Taherdoost, 2017).

2.1.3 Theory of Planned Behaviour (TPB)

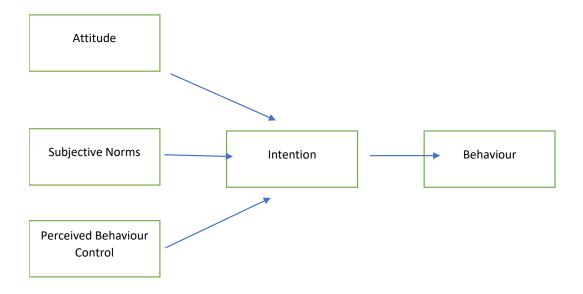


Figure 2.1.3: Theory of Planned behaviour (TPB)

The TPB model is an evolution of the TRA model. It introduces an additional variable called Perceived Behaviour Control (PBC) as a factor of behaviour and intention (AJZEN, The Theory of Planned Behavior, 1991,2001).

The positive association between PBC and control beliefs has been confirmed by previous research literature by citing several papers. Some researchers further explain that the presence of sufficient resources is the perceived behavioural control found in order to perform a particular

behaviour (Icek Ajzen, Thomas J Madden, 1986). The TPB model is determined by subjective norms, attitudes, and PBC, all components influencing behavioural intention. Some researchers have found a key influence on whether or not to continue to use technology preferences, and the satisfaction of user expectations matters when participating in a TPB model.

The TPB model can be used to make predictions. By treating variables as inputs to the model, this provides greater reliability for behaviour predictions, especially in terms of rational behaviour theory. Before risky investing changed, TPB models can used to collect data to help recognize the biggest barriers to changing behaviour. In some cases, the TPB model fails. Although there may be positive behavioural intentions, the model does not consider the gap between intentions and behaviours. Furthermore, the TPB model does not include emotional and other behavioural factors. Emotions affect our perceptions and beliefs and our propensity to take action (ExpertProgramManagement, n.d.).

2.1.4 Technology Acceptance Model

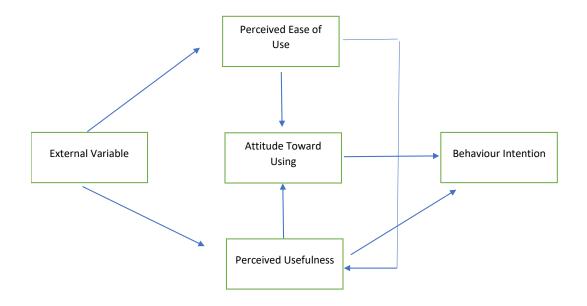


Figure 2.1.4: Technology Acceptance Model

Technology Acceptance Models (TAMs) have been used to determine decisions taken in various e-commerce activities and understand technology acceptance behaviours (Abrazhevich, Electronic Payment Systems: Issues of User Acceptance, 2001) (Mohamed Khalifa, Kathy Ning Shen, 2008). Some previous studies on perceived usefulness and ease of use are consistent with many researches on TAM models, which will be important reasons for expanding the use of e-payment systems. Individuals have different views on the implementation of technology in terms of perceived usefulness and perceived ease of use. Personally, feel that improving the usefulness and ease of use of professional achievement is the least effort to use technology (Fred D. Davis, Richard Bagozzi, PR Warshaw, 1989).

To match with the TRA and TPB model, the TAM model has a better ability to explain attitudes towards using information systems (Mathieson, 1991). The TAM model is an accurate research framework (William R. King, 2006). In order to study users' acceptance of different technologies, a TAM model based on variable changes is adopted.

2.2 Empirical Reviews of Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia.

2.2.1 Perceived Ease of Use

Many researches have confirmed that when a technology is easier to use, people think it is more useful (Paul Legrisa , John Inghamb, Pierre Collerettec, 2003) (Viswanath Venkatesh, Fred D. Davis, 2000) (Wenwu Zhu; Chong Luo; Jianfeng Wang; Shipeng Li, 2011). Carlos Flavián and Miguel Guinalíu (2006) stated that ease of use of computer systems contributes to increased trust (Carlos Flavián, Miguel Guinalíu, 2006). So, the higher availability reduces the possibility of errors, a key situation when providing financial services online. In addition, higher usability reduces

search costs and better understand the content and tasks in the website (Bakos, 1997). Therefore, Petrus Guriting and Nelson Oly Ndubisi (2006) mentioned that perceived ease of use has a positive effect on Malaysians' intention to use online banking services., so e-payment system is made in Malaysia (Petrus Guriting, Nelson Oly Ndubisi, 2006).

By referring Ainscough and Luckett (1996), providing customer interactivity is an essential standard for attracting users in e-payment delivery (Ainscough Thomas, Luckett, M, 1996). In many cases, slow response after any electronic interaction can also cause delays in service delivery, making consumers uncertain about whether the transaction is completed (Minjoon Jun, Shaohan Cai, 2001). These reasons that Abrazhevich (2001) expressed that successfully designing an e-payment system from the user's perspective is vital to attract users to accept e-payments. Speed, content, design, management and bank image are important characteristics that lead to perceived ease of use, which in turn affects consumers' perception of e-payment systems (Abrazhevich, Electronic Payment Systems: Issues of User Acceptance, 2001).

2.2.2 Trust

Trust explained act as the function of the level of risk in financial transactions. The result of trust is to reduce the perceived risk, which leads to the positive intention of adopting e-payments (Shumaila Y. Yousafzai, John G. Pallister, Gordon R. Foxall, 2003). Previous researchers have found that trust is a critical determinant of customers' intention to conduct e-commerce transactions and participate in online currency transactions (Shumaila Y. Yousafzai, John G. Pallister, Gordon R. Foxall, 2003) (Gefen, E-Commerce: the role of familiarity and trust, 2000) (Gefen, TAM or just plain habit: a look at experienced online shoppers, 2003) (Gefen, TAM or just plain habit: a look at experienced online shoppers, 2003) (Yi-Shun Wang, Yu-Min Wang, Hsin-Hui Lin, Tzung-I Tang, 2003) (Sirkka L. Jarvenpaa, Noam Tractinsky, Michael Vitale, 2000) (Donna L. Hoffman, Thomas P. Novak, Marcos Peralta, 1999). In fact, trust has long been a

catalyst for buyer-seller transactions, providing consumers with high expectations for fulfilling exchange relationships (Peha, J.M., Khamitov, 2004). Therefore, many researchers believe that trust is vital for understanding the interpersonal behaviours and economic exchanges that influence customers' perceptions of e-payment systems and subsequent success in adoption (Abrazhevich, Electronic Payment Systems: Issues of User Acceptance, 2001) (Benjamin Lim, Heejin Lee and Sherah Kurnia, 2006) (Patrick Y.K. Chau and Simpson Poon, 2003) (Kniberg, 2002) (Theodosios Tsiakis, George Sthephanides, 2005).

Customer trust in the internet environment is significant as there is no guarantee that online sellers will avoid bad, unethical and opportunistic practices such as unfair pricing, providing inaccurate information, distributing personal data and buying activities without prior permission (Gefen, E-Commerce: the role of familiarity and trust, 2000). Therefore, the trust in e-payments has increased due to the high level of uncertainty and risk in most online transactions (Zhou, 2011). If there isn't an adequate system that users can trust, it will be difficult for e-payments to achieve wider use (Benjamin Lim, Heejin Lee and Sherah Kurnia, 2006).

Abrazhevich (2004) further pointed out that with defective system implementation, users also trust credit card companies, providers and banks not to misuse their personal information (Abrazhevich, Electronic payment systems: a user-centered perspective and interaction design, 2004). The research made by Kniberg (2002) stated that if there is trustworthiness, the use of e-payment systems is reliable. Users feel confident that their personal information and money will be used without their permission or approval or against their personal interests (Kniberg, 2002).

In fact, Kniberg believes that users and merchants are more prefer to use insecure payment systems from trusted companies than secure payment systems from untrusted companies. Therefore, it can be concluded that credibility is essential to the success of e-payments. (Abrazhevich, Electronic payment systems: a user-centered perspective and interaction

design, 2004) Therefore, research have shown that trust will affects the level of acceptance of e- payments.

2.2.3 Benefit

Yun Tsai Chou, Chi Wei Lee and Jian Ru Chung (2004) identified income as major driver of acceptance and use of e-payment systems (Yun Tsai Chou, Chi Wei Lee, Jian Ru Chung, 2004). Gerrard and Cunningham (2003) argue that perceived economic benefits include the fixed and transaction costs of using e-payments. Hence, users can enjoy the benefit of low cost when participating in online transactions as they only need to pay a nominal fee to their respective banks to use the services, they use (Philip Gerrard, J.Barton Cunningham, 2003) (Sonia San Martín, Blanca López-Catalán, María A. Ramón-Jerónimo, 2012) (Sonia San-Martin, Blanca Loʻpez-Catalaʻn, 2013).

According to the four major e-commerce online activities proposed by Eastin (2002), such as research in the fields of shopping, banking, investment, and e-payment systems, it is found that the financial benefits of convenience and long-term costs will affect the adoption decision. This is supported by Gerrard and Cunningham (2003), who looks at perceived benefits from an economic perspective, including the fixed and transaction costs of implementing e- payments. Chou et al. (2004) further interprets fixed cost as the cost of installing e-payment devices. This transaction cost needs to be borne by the merchant and the customer in every commercial transaction.

In order to provide consumers with convenient payment methods, including the capability for users to spend, store, and transmit monetary value through payment systems (CHAKRAVORTI, 2003), other major benefits of e-payments include time and cost savings. However, whether e-payments can save time and costs remains a problem. Kim et.al (2009) believes that the cost of using e-payments may be high in terms of the time it takes to learn to use the Internet and new technologies. By looking to the research of Teoh,

Chong and Chua (2013), statistics on the use of e-payments in Malaysia show that Malaysians are aware of the shift from cash payments to e-payments for various reasons. The report shows that facilitating access to the credits involved in transactions and minimizing users' cash balances are the main reasons why users are turning to e-payments.

2.2.4 Self-Efficacy

Based on Bandura (1986), self-efficacy comes from personal experience. According to some of the researches, Self-efficacy is an individual's ability to succeed at suitable level. Self-efficacy beliefs are based on responses to information from less sources (Tamara Dinev, Jahyun Goo, Qing Hu, Kichan Nam, 2009) (Schunk, 2000). They are past experiences that indicate success and failure. Alternative experiences of verbal persuasion in the form of influence from peers, relatives, and colleagues and emotional states of observing the success and failure of others are described as emotional stimuli, such as anxiety.

Self-efficacy represents the understanding and belief of the person in their own skills and abilities to accomplish a given task (Valérie Dory, Marie-Dominique Beaulieu, Dominique Pestiaux, 2009). Therefore, Bandura (1986, 1997) shows that the perception of a person ability to perform a task increases the likelihood of successful task completion. Many researchers have found that self-efficacy has a significant positive impact on the perception and behavioural intention of using information systems (Thomas Hill, Nancy D. Smith, Millard F. Mann, 1986) (PinLuarn, Hsin-HuiLin, 2005) (Thomas Hill, Nancy D. Smith, Millard F. Mann, 1987).

2.2.5 Intention

Fishbein and Ajzen (1975) proposed the rational behaviour theory (TRA), behaviour is predicted by an individual's intention to engage in a specific intention, which is related to both the individual's attitude and behaviour toward a given subjective norm.

Intention is the actual expected component affected by individual attitude elements and subjective norms. In addition, intention can serve as a motivational factor that affects behaviour, that is, how much effort people are willing to put in to perform that behaviour. Research by Sun (2003) shows that behavioural intentions used to measure actual use are valid and reliable (SUN, 2003). TRA's theory is that certain behaviours are expected by the individual's intention to participate. Some research has become theoretical research, which can better understand the relationship between belief structure and intention context by examining and disaggregating attitude viewpoints (Patrick Y.K. Chau, Paul Jen-Hwa Hu, 2002) (Shirley Taylor, Peter A. Todd, 1995). According to the Planned Behaviour Theory (TPB) model of Stefan Dahlberg and Sören Holmber (2014), diffusion or acceptance theory provides determinants for evaluating payment habits. In addition, TPB is also a model to measure intention to adopt payment habits based on evaluative beliefs (Stefan Dahlberg, Sören Holmber, 2014).

Paul Norman and Mark T Conner (2006) noted that variables including TPB successfully demonstrated differences in intention, 66% related to self-efficacy, attitude, and perceived control over all important variables (Paul Norman, Mark T Conner, 2006). In addition, Viswanath Venkatesh and Fred D. Davis (2000) mention that schematic diagrams affect usage behaviour. Several users may prefer a convenient and user-friendly system as an option attribute. In addition, when users decide to use, use intentions may be affected by other individual differences and system characteristic variables (Viswanath Venkatesh, Fred D. Davis, 2000).

2,3 Conceptual Framework

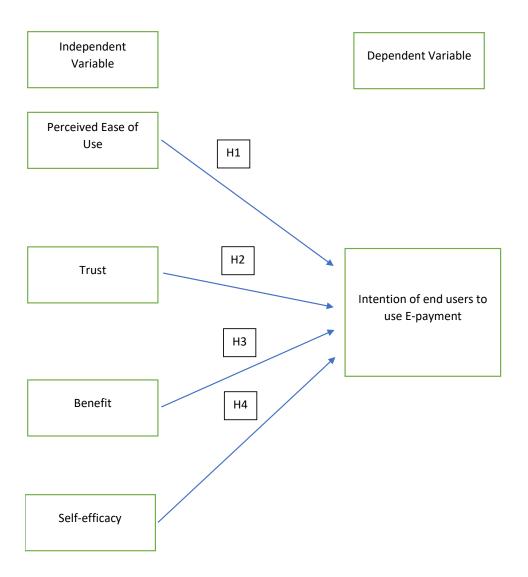


Figure 2.3: Conceptual Framework

The Conceptual Framework shown in the figure is necessary basis for this research. This research uses the TPB and TAM models to formulate the framework. The figure above is for the conceptual framework to study the relationship between dependent and independent variables. The reasons of using TPB and TAM are the TPB is to determine all components affect behavioural intentions which suitable to this research and TAM is an accurate research framework in adopting e-commerce activities (William R. King, 2006).

2.4 Hypothesis Development

Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia.

H1: There is a positive relationship between perceived ease of use and intention of end user to use e-payment.

H2: There is a positive relationship between trust and intention of end user to use e-payment.

H3: There is a positive relationship between benefit and intention of end user to use e-payment.

H4: There is a positive relationship between self-efficacy and intention of end user to use e-payment.

2.5 Conclusion

This chapter have stated the literature reviews of dependent and independent variables. Overall, the theoretical models in this chapter have been developed through research and conceptual models presented.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

This chapter will focus on research design, methodological data collection methods, and sampling design. This section describes the pilot and research instruments. And also, the hypothesis will be tested from the answered research questions. In addition, this chapter will discuss constructing measurements as well as measurement scales and analysis methods.

3.1 Research Design

Based on the findings of Cooper and Schindler (2006), the research was designed to collect and analyse information by describing methods and procedures (DR Cooper, PS Schindler, 2006). It is a framework that shows the procedures required to obtain the information needed to construct a marketing research question in a marketing research project. Therefore, it is significant to design the data collection process to avoid errors (Malhotra, 2006).

3.1.1 Quantitative research

Based on Aliaga and Gunderson (2000), quantitative research applies mathematics-based methods to understand the phenomenon by focusing on collecting and examining numerical values, meaning that measurements are statistically and quantitatively valid (Aliaga, M., & Gunderson, B., 2000). Zikmund (2003) noted that structured questions can be applied to research with large numbers of respondents (Zikmund, W. G., 2003). Thus, this is supported in the research done by Rudolf R. Sinkovics and Eva A. Alfoldi (2012), which can be viewed as distinct from certain types of text-based research such as content analysis (Rudolf R. Sinkovics, Eva A. Alfoldi, 2012).

3.1.2 Descriptive research

Descriptive research is suitable for this research as researchers can investigate the sample to broaden the understanding of the factors that impact the level of acceptance of end-user on using E-payment system in Malaysia. In addition, this research also investigated the relationship between variables. Burns and Bush (2006) identify that descriptive studies apply to results of large population studies, that is, to acknowledge the causes of phenomena (AC Burn, RF Bush, 2006). This can determine the uncertainty of different phenomena during the research period. The purpose of descriptive research is to test the status quo through the proposed hypothesis.

3.2 Sampling Design

The sampling process is to use population subgroups that represent the entire population. This allows researchers to make assumptions about some unknown demographic characteristics (Zikmund, W. G., 2003).

3.2.1 Target Population

The aim of this research is to study the factors that impact the level of acceptance of end-user on using E-payment system in Malaysia. These targeted respondents are chosen is E-payment user with different races in Malaysia.

3.2.2 Sampling frame and sampling position

According to the findings of Zikmund (2003), the sampling frame is listed along with the elements from which the extractable samples. However, for

further understanding, this research uses non-probability sampling, known as snowball sampling.

The data collected must be assure that is current, complete and accurate. Therefore, the questionnaire was distributed to respondents of Malaysia Therefore, both the distribution of the questionnaires and the collection of the questionnaires, the population is more concentrated than the convenient researchers. The questionnaires were evenly distributed among the whole Malaysia by google form.

3.2.3 Sampling Elements

The respondents are Malaysian with three races of Malay, Chinese and Indian, currently conducting research at the sampling sites, will participate in the research. This group of respondents has generation cohort as regular internet users. Besides that, respondents have basic knowledge of Internet operation and e-commerce (Bin Dan, Guangye Xu, Can Liu, 2012).

3.2.4 Sampling techniques

The sample of this research will be pick only e-payment user in Malaysia. As such, this research is using non-probability sampling method.

3.2.5 Sampling Size

According to the Roscoe (1975) telling that the research with sample size that more than 30 and less than (Roscoe, 1975) 500 are suitable for most of the researchers. Thompson (2004) has mention that the research advisable to collect more than 200 respondents in order to obtain stability in all the analysis (Thompson, 2004). 300 questionnaires are equally distributed and there were four variables to be tested in this research. Data was collected using a structured questionnaire from January 2022 to March 2022. Of the 300 questionnaires, 100 were incomplete and 80 were not filled in. Finally, a total of 120 questionnaires were collected.

3.3 Data Collection Method

The data collected in this research are divided on two categories of primary data and secondary data. The primary data is obtained through questionnaires, while the secondary data is obtained through online databases.

3.3.1 Primary data

Raw data is data collected through research designed to address a specific problem. It is common to acquire and develop data for specific research projects. Main data obtained through the survey method in this research is trustworthy. Questionnaires were distributed to a sample of the population based on demographic characteristics to draw conclusions. Due to the relatively low cost and simplicity of this method, data collection is based on respondents' self-administration surveys. A total of 120 questionnaires will be distributed to respondents.

3.4 Research Instruments

Suitable research tool for conducting research through questionnaires, my research tool is a self-administered questionnaire. Self-administered questionnaires are the process of collecting data through respondents who can understand and answer survey questions. (Hair, J., Money, A., Samouel, P., & Page, M., 2006)

By follow to the Burns and Bush (2006) shows that, questionnaires are important for obtaining public feedback on research (AC Burn, RF Bush, 2006) Zikmund (2003) mentioned that the questionnaire should be designed with simple and clear words. In other words, standardized questions lead to more accurate measurements by enforcing standardized definitions on target respondents. Therefore, questionnaires are used to reduce low response problem and increase the efficiency the data analysis process.

3.4.1 Questionnaire Design

The survey used closed-ended questions; respondents' answers have been chosen from the questionnaire's response options. Simplification of the data interpretation process given that the response is constant, it comes from a large number of respondents. Additionally, respondents spent less time answering that they rated their answers based only on the questions asked.

The questionnaire is having two parts which are Part A (demographic factors) and Part B (factor adoption). In Part A, demographic information such as gender, age, race, education qualification, monthly income, E-payment use and frequent utilize e-payment. Typically, questions are designed with a range of answers, and respondents are asked to choose the one that best describes themselves. This enables researchers to collect precise data. Questions were implemented and changed from previous studies piloted by other researchers. The questions were implemented and different from previous research. The questionnaire is conducted in plain English to makes the respondent easy to understand the question and enter accurate answers.

3.4.2 Pilot test

According to Ellen Taylor-Powell and Carol Hermann (2000), several pilot tests are required to obtain a satisfactory questionnaire (Ellen Taylor-Powell, Carol Hermann, 2000). Pilot testing should be among a small number of respondents.

Therefore, approximately 30 questionnaires will be distributed throughout the pilot testing phase in March 2022. A total of 30 questionnaires were collected and then tested for reliability by SPSS software. The results show that alpha coefficients below alpha 0.6 are considered weak, alphas 0.6 –

0.8 are considered moderately strong, and alphas between 0.8 - 1.0 are considered very strong (Malhotra, 2006).

Table 3.4.2: Pilot test Result

Variable	Number	Cronbach	Reliability
	of Items	Alpha	Level
Perceived	5	0.846	Very
Ease of Use			strong
Benefit	5	0.952	Very
			strong
Self-	3	0.393	Weak
efficacy			
Trust	3	0.824	Very
			strong
Intention	10	0.832	Very
			strong

Based on the table above, four of the variables are very strong reliability level except the variable self-efficacy is considered weak but still reliable.

3.5 Constructive Measurement

The questionnaire in this research consists of two parts, the first part is demographic profile, and the type of scale measurement used is nominal scale and ordinal scale.

The rating scale is to allow respondents to indicate the direction and strength of their judgments about a given topic. Past researchers such as Adelson and McCoach (2010), Ogden and Lo (2012), Takafumi Wakita, Natsumi Ueshima, and Hiroyuki Noguch (2012) conducted their study using a five-point Likert scale, where the context was relevant to our study (Jane Ogden, Jessica Lo, 2012) (D. Betsy McCoach, Jill L. Adelson, 152-155) (Takafumi Wakita, Natsumi Ueshima, and Hiroyuki Noguch, 2012).

Therefore, section B of the questionnaire using the 5-likert scale plan implemented an interval scale. Respondents need to recognize the level of agreement or disagreement with a range of statements in the survey

3.5.1 Origin of Construct

The questionnaires used in this research were from Chai Har Lee, Uchenna Cyril Eze, Nelson Oly Ndubisi (2011), Teoh, Chong, Lin, and Chua (2013), H. Kusuma ,D. Susilowati (2007), G. Rigopoulos,D. Askounis. (2007), Yahyapour, N. (2008), Y. Mohd Yusoff, Z. Muhammad, M. S. M. Zahari, E. S. Pasah, E. Robert (2009) and K. Eriksson, K. Kerem, D. Nilsson (2005). The following table shows all the questions that will be asked in each variable:

Table 3.5.1: Origin of Construct

Factor impact	Question Asked	Source
the level of		
acceptance of		
E-Payment		
Perceived	1. It's easy to learn and	Chai Har Lee,
Ease of Use	use e-payment. 2. I do not get frustrated	Uchenna Cyril
	when using e-	Eze, Nelson Oly
	payment. 3. When I perform e- payments, less effort	Ndubisi. (2011)
	is required. 4. I feel flexible when it comes to implementing e-	
	payments. 5. E-payment provides various type of payment channels to simplify my online shopping process.	
Benefit	1. It enables me to save	Wendy Ming-
	my time.	Yen Teoh,

	2. The E-payment	Siong-Choy
	system is very	Chong, Binshan
	convenient for me.	
	3. E-payment system	Lin,Jiat Wei
	are accurately handled namely	Chua (2013)
	billing and	
	transaction process.	
	4. The speed of E-	
	payment system is	
	faster than the	
	traditional payment	
	system. 5. I find it easier to	
	make financial	
	transactions.	
Self-Efficacy	1. I will only use an e-	Wendy Ming-
	payment system if I	Yen Teoh,
	heard it before.	ĺ
	2. Other people's comments will affect	Siong-Choy
	my intention to use	Chong, Binshan
	the e-payment	Lin,Jiat Wei
	system.	Chua (2013)
	3. I will use an e-	Chut (2013)
	payment system when my friends	
	introduce it to me.	
Trust	1. I feel that the risks	Wendy Ming-
	associated with the e-	Yen Teoh,
	payment system are	,
	very low.	Siong-Choy
	2. I believe that the e-payment system can	Chong, Binshan
	protect my privacy.	Lin,Jiat Wei
	3. I believe e-payment	,
	system that will not	Chua (2013)
	cause transaction	
Intention	fraud.	Wondy Mina
memion	E-payment system is better than traditional	Wendy Ming-
	payment channels.	Yen Teoh,
	2. E-payment system is	Siong-Choy
	more efficient than	Chong, Binshan
	traditional payment channels.	
	3. I will choose a	,
	trusted e-payment	Chua (2013)
	system for	
	transactions.	

Table 3.4: Construct Measurement

3.6 Data Processing

3.6.1 Descriptive Checking

Data checks were performed to pass once and to check the complete questions in the questionnaire (Malhotra, 2006). It is used to ensure that the data is correct and fully returned by the respondents. Any errors in the questionnaire where responses can be detected, such as incompleteness and misplacement, will be automatically excluded.

3.6.2 Data Editing

Data editing is to review the questionnaire for looking the accuracy, completeness, and precision. Incomplete answers and missing values may be rejected throughout the data editing process.

3.6.3 Data Coding

Data coding helps to classify the questionnaire by the assigned code or number represents the possible answer to each question. The researchers assigned a serial number to all categories in the questionnaire. In this study, "male" was assigned 1 and "female" was assigned 2. This saves time and simplifies the data entry process (Malhotra, 2006).

3.6.4 Data Transcription

The coding data will be transferred from questionnaires entered directly into the computer SPSS software to perform final tabulations. After all data is successfully entered into the software for analysis, the results of the evaluation data can be obtained.

3.6.5 Data Cleaning

Data cleaning is to prevent that no-lose typing and double-check responses with your computer. Checking data for consistency prevents data from going out of range or value. In addition to this, SPSS software can be used to identify extreme value ranges.

3.7 Data Analysis

Data analysis is to analyse the information collected and compose into some findings or conclusions. This research uses descriptive analysis, reliability test and inferential analysis to test the data.

3.7.1 Descriptive Analysis

According to Trochim (2008) and Zikmund (2003), the process of changing the raw data into an easier understanding and interpret form is descriptive analysis. Statistical questions summarize the characteristics of the data (Trochim, 2016) (Zikmund, W. G., 2003).

Frequency distribution analysis will aggregate sample demographic data. Frequency distributions are applied to nominal or ordinal scales that summarize specific values of the number of occurrences of a variable (Zikmund, W. G., 2003). Therefore, after all analyses are completed, all collected information will be presented in table form.

3.7.2 Reliability Testing

Zikmund (2003) has mentioned that reliability testing for consistency with characteristics obtained using repeated measurements of stability levels. Cronbach's alpha reliability coefficient is in the range of 0 and 1. The higher the Cronbach's alpha, the high reliable the test results.

3.7.3 Inferential Analysis

Inferential statistics are conclusions drawn from the analysis and observations of a sample drawn from a population. In this research, SPSS implied the following analyses: Pearson's correlation analysis and multiple regression.

3.7.3.1 Pearson Correlation Analysis

Pearson correlation is primarily used to measure the linear association of the strength of two variables with the relationship. The degree of change in another variable is measured using correlation analysis. Coefficients range is between negative one to positive one (JF Hair, MF Wolfinbarger, DJ Ortinau, RP Bush, 2008). The following table explains the level of the correlation between the two variables:

Table 3.7.3.1: Pearson's Correlation Rules

Coefficient Range	Level of Association
$\pm 0.91 \text{ to } \pm 1.00$	Very Strong
$\pm 0.71 \text{ to } \pm 0.90$	High
$\pm 0.41 \text{ to } \pm 0.70$	Moderate
$\pm 0.21 \text{ to } \pm 0.40$	Small but definite
	relationship
$\pm 0.00 \text{ to } \pm 0.20$	Slight, almost
	negligible

Adopted from: (JF Hair, MF Wolfinbarger, DJ Ortinau, RP Bush, 2008)

3.7.3.2 Multiple Linear Regression

Multiple linear regression was used to determine whether the dependent variable (Y) was related to the independent variable (X) as well as other variables (Norazah Mohd Suki and Norbayah Mohd Suki, 2011). It is to examine the relationship between which factors impact the level of acceptance of end-user on using e-payment system. In addition, Square root of R of multiple of the independent variables explain the percentage of variation in the dependent variable. The equation is shown as follows:

$$Y = a + b1C1 + b2C2 + b3C3 + b4C4 + b5C5 + ... + bkCk$$

Equation: IAEP = a + b1PEOU + b2T + b3SE + b4B

Whereby,

IAEP = Intention Adopt E-payment

PEOU = Perceived Ease of Use

Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia.

T = Trust

SE = Self-efficacy

B = Benefit

3.8 Conclusion

This chapter provides an overview of how this research was conducted. The next chapter will focus on the analysis results through the methods mentioned in this chapter.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

This chapter will show all the analysis results in this research. This chapter consists of three main parts of this chapter, namely, descriptive analysis, reliability test, and inferential test, to analyse the data of this research.

4.1 Descriptive Analysis

Descriptive analysis provides details about the characteristics of the samples used in this research. Describe the main features of the data in tabular form to enhance understanding of the sample.

Table 4.1: Respondent Demographic Profile

Characteristics	Percentage (%)
Gender	
Male	47.5
Female	52.5
Age	
Below 20	7.5
20-29	60
30-39	10
40-49	15.84
50-59	5.84
Above 60	0.83
Races	
Malay	10

Chinese	79.2
Indian	10.8
Education Qualification	
SPM	28.3
Degree	54.2
Master	2.5
Others	15
Monthly Income (RM)	
Less than 1000	37.5
1001-2000	11.7
2001-3000	17.5
3001 and above	33.3
Which E-payment system do you use most?	
E-wallet	40.8
FPX online	40
On-site payment	16.7
Others	2.5
How frequent do you utilize online purchases	
systems?	
Weekly	44.2
Monthly	41.7
Yearly	6.7
Others	7.8
Total	100
Sample size	120

The table shows that the features of the respondents from the e-payment user in Malaysia. Based on the result, most of the respondents are female which consist of

52.5 % and male is 47.5%. For the age group, the highest percentage age group is 20-29 which consist 60%, follow by the age group 40-49 (15.84%), 30-39 (10%), below 20 (7.5%),50-59 (5.84%). The lowest is the age group above 60 consist 0.83%. Chinese is the highest in the races categories which consist 79.2%, India consist 10.8% and Malay is 10%.

In addition, education qualification of the respondent majority on degree, which is 54.2% and SPM is 28.3%. The Master holder only consist 2.5% and others such as Diploma, UEC and professional course total is 15%. For the monthly income, most of the respondents are in the range of less than RM 1000, which is consists 37.5%, follow by the income RM3001 and above consists 33.3%, monthly income between RM2001-3000 consists 17.5% and monthly income between RM1000-2000 consists 11.7%.

For the e-payment use, E-wallet is the highest most usage rate with 40.8%, FPX online have 40% usage rate. On-site payment has 16.7% and others such as online banking and Alipay total is 2.5%. By looking the frequency of the utilize online purchases system, most of the respondent is using weekly which is consist 44.2%, follow by monthly is 41.7%, yearly is 6.7%, others included daily and sometime is total 7.8%.

4.2 Reliability Analysis

According to Hair, J., Money, A., Samouel, P., and Page, M., Cronbach's Alpha Reliability is testing the reliability of research that makes the researchers to produce consistent results. Measurements for Cronbach's Alpha are in the range of 0 and 1. Therefore, Cronbach's Alpha has better agreement between items on the scale if the coefficient is close to 1. Schuessler (1971) stated that an acceptable and reliable alpha value must be greater than 0.6. The following table shows the reliability test results for each variable:

Table 4.2: Reliability Test Result

Variable	Number of Items	Cronbach Alpha
Perceived Ease of Use	5	0.892
Benefit	5	0.940
Self-Efficacy	3	0.778
Trust	3	0.924
Intention	10	0.935

The table shows that the tested variables of its alpha value are reliable. Benefit has the highest alpha value of 0.940 with 5 items so this means that benefits is considered as strong reliable. The second highest alpha value is trust which consist 0.924 with 3 items. Self-efficacy and perceived ease of use has the alpha value of 0.778 with a total of 3 items and alpha value of 0.892 with 5 items. Intention has the Cronbach alpha value 0.935 with 10 items. For the reliability testing. The result of this testing shows that the independent variables have achieved the level of reliability.

4.3 Inferential Analysis

4.3.1 Pearson Correlation Coefficient

Correlation matrices are used to examine patterns of relationships. This testing is to verify that all variables in this research have the strength of the relationship.

Based on the table above shows that the correlation matrix indicates that all variables are positively and significantly correlated with another variable. Two of the independent variables have within the range of high relationship while there is one variable have moderate relationship, that is self-efficacy. The variable of trust has small but define relationship with the independent variable. The correlation coefficients for all variables were less than 0.9. Therefore, there is no multicollinearity in these data.

Table 4.3.1: Result of Pearson Correlation Test

		PEOU	Benefit	Self-	Trust	Intention
				Efficacy		
PEOU	Pearson	1				
	Correlation					
Benefit	Pearson	0.838**	1			
	Correlation					
Self-	Pearson	0.437**	0.506**	1		
Efficacy	Correlation					
Trust	Pearson	0.418**	0.326**	0.359**	1	
	Correlation					
Intention	Pearson	0.794**	0.798**	0.570**	0.383**	1
	Correlation					

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

The correlation coefficient is to tested and allow to identify the "best" independent variable. The higher the level of coefficient, the higher the accuracy and relationship with the correlated variable. The above table shows the correlation between variables and intention. The use of e-payment is divided into three categories, the relationship is high, moderate and small but define relationship. The high relationship with intention is the variable of benefit (0.798) and perceived ease of use (0.794). Follow by self-efficacy (0.570) have the moderate relationship with intention and trust (0.383) has small but define relationship. This means that four of the variables are significant related to the intention. Therefore, benefit, perceived ease of use, self-efficacy and trust are supported.

4.3.2 Multiple Linear Regression

Table 4.3.2.1: Multiple Linear Regression Result

Independent	Unstandardised	Coefficient	Standardised	t-stat	p-value
Variable	Coefficients	Standard	Coefficients		
	(B)	Error	Beta		
Constant	0.517	0.212		2.443	0.016
Perceived	0.357	0.085	0.395	4.219	< 0.001
Ease of Use					
(PEOU)					
Benefit	0.335	0.090	0.352	3.737	< 0.001
Self-	0.166	0.046	0.209	3.578	< 0.001
Efficacy					
Trust	0.018	0.036	0.028	0.509	0.612
R					0.851
R2					0.725
Adjusted R2					0.715
Standard					0.36571
Error of the					
Estimate					
F					75.698
Durbin-					1.906
Watson					

Multiple regression analysis was performed to examine four independent variables; perceived ease of use, trust, benefit, and self-efficacy, which significantly explained Malaysian end-user intention. The regression model contained four independent variables and was statistically significant (F=75.698, p-value<0.01). Therefore, research shows that influencing factors will significantly explain end users' intentions to use e-payments. The R2 consisting of 0.715 shows that it is small but is evidence that defines the relationship between these four variables and the dependent variable.

The Durbin Watson test is used to measure autocorrelation in regression analysis. According to AP Field and J Miles (2009), values of the test statistic between the range of 1.5 and 2.5 are considered normal (AP Field,

J Miles, 2009). In this study, the Durbin Watson statistic was 1.906. Therefore, it is considered relatively normal. For the regression result, the equation results as below:

IAEP=0.517+0.357(PEOU)+0.335(B)+0.166(SE)+0.018(T)

IAEP = Intention Adopt E-payment

PEOU = Perceived Ease of Use

T = Trust

SE = Self-efficacy

B = Benefit

Table 4.3.2.2: Hypothesis Testing Result

Hypotheses	Results	Supported or Not
		Supported
H1: There is a positive relationship between	P<0.001	Supported
perceived ease of use and intention of end		
user to use e-payment		
H2: There is a positive relationship between	P>0.001	Not Supported
trust and intention of end user to use e-		
payment.		
H3: There is a positive relationship between	P<0.001	Supported
benefit and intention of end user to use e-		
payment.		
H4: There is a positive relationship between	P<0.001	Supported
self-efficacy and intention of end user to use		
e-payment.		

H1: There is a significant relationship between perceived ease of use and intention of end user to use e-payment.

Based on the table shows that, the p-value is smaller than 0.001 which reject null hypothesis. Hence, there is a significant relationship between perceived ease of use and intention of end user to use e-payment. Respondents may

find the instructions given to be simple and the trend makes them to learn faster, thus making the steps for the transaction are easier.

H2: There is a significant relationship between trust and intention of end user to use e-payment.

The table show that the p-value is 0.612 (p>0.001), do not reject null hypothesis. This result is consistent with previous studies by Kim (2009) and Pavlou (2001) show that trust is independent of the intention to execute transactions online. Due to other factors, trust is not enough to motivate users to adopt e-payments (Dan J. KIM, Donald L. FERRIN,H. Raghav RAO, 2009) (Pavlou, 2001).

H3: There is a significant relationship between benefit and intention of end user to use e-payment.

The table show that the p-value is smaller than 0.001, reject null hypothesis. Hence, there is a significant relationship between benefit and intention of end user to use e-payment. The results are different with previous results by Kim (2009) pointed out that over time, learning how to implement new technologies and the need for the Internet in the adoption of e-payments will be high cost. (Dan J. KIM, Donald L. FERRIN,H. Raghav RAO, 2009). As now the trend makes increasing of usage rate and of e-payment, the benefit is more than the time cost of learning.

H4: There is a significant relationship between self-efficacy and intention of end user to use e-payment.

The table show that the p-value is smaller than 0.001, reject null hypothesis. Hence, there is a significant relationship between self-efficacy and intention of end user to use e-payment. This result is notable from the research done by Bandura (1986) and Eastin (2002), where the majority of respondents had used e- payments and their positive experiences agreed that they would continue to use e-payments. Direct influence from peers, friends, family and others with experience using e-payment services will further influence respondents' perceptions (Bandura A., 1986) (S.Eastin, 2002).

4.4 Conclusion

This chapter has presented the result of descriptive analysis, Pearson's coefficient, reliability and multiple linear regression.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0 Introduction

This chapter will focus on detailed statistical results to test hypotheses. Therefore, the statistical findings are accompanied by limitations of the analytical results and recommendations for future research

5.1 Summary of Statistical Analysis

Based on the demographic profile, the result shows that female respondents are higher than male respondents. There are 52.5% of female respondents and the male respondents are 47.5%. Most of the respondent's age are in the range of 20-29 that consist 60%. The races of the respondents are more in Chinese which consist 79.2%. The education qualification of respondents is probably high, the highest is the degree holder which consist 54.2%. Hence, I think that the respondents are able to help my research well.

The most use e-payment system is E-wallet which consist 40.8% as E-wallet is more convenient for the user. Most of the user frequent use online purchase systems is weekly which consist 44.2%. Most of the respondent's monthly income is less than RM1000 which consist 37.5%. Based on this result, I think that the respondents are lack of purchasing power

5.2 Discussion of Major Findings

Reliability tests were performed on all variables with Cronbach's Alpha values between 0.778 and 0.940, all above the acceptable level. Whereas for Pearson correlation analysis, all independent variables are correlated with dependent variables, and also with other variables.

For the hypothesis, hypothesis 1, 3,4 were supported by this research. The result that support the hypothesis 1 is match with the conclusion drawing by Hoda Mashayekhi, Yoosof Mashayekhi(2017) and the hypothesis 3 is supported by Scott Nadler, Alexander N. Chen, Shuai-Fu Lin (2019). Lastly, the hypothesis 4 is match with the conclusion with the Bandura (1986) and Eastin (2002).

In this research, the not supported hypothesis statement is hypothesis 2. Kim (2009) and Pavlou (2001) telling that trust is independent of the intention to execute transactions online. Due to other factors, trust is not enough to motivate users to adopt e-payments.

5.3 Implication of The Research

This research contributes to the existing institutions of knowledge on the basis of theoretical points. To predict overall technology adoption among the e-payment user in Malaysia, the TAM and TPB models have less determinants.

With expand the framework model, this research has adopted both TAM and TPB model which different with previous researcher. In Addition, this research has better and accurate of user intention of adopting e-payment. It drives most of the literature on the acceptance of e-payments, especially from a country with good prospects for growth in the use of e-payments.

E-payment systems must prove themselves very convenient and efficient in the real world in order to gain a larger market share (Böhle, K., Krüger, M., Herrmann, C., Carat, G., & Maghiros, I, 2000). For the purpose of facilitate the e- payment systems and reduce the transaction costs for businesses and consumers, It is vital to maintain a competitive environment. These findings can be used as a guide for service providers, as well as the proper strategic enhancements to e-payment services developed specifically to increase consumer awareness.

Self-efficacy is one of the important factors, so marketers should not see this as an opportunity to understand customer needs and expect more attention from banking

institutions or providers of online transaction facilities to expand the use of epayments.

Not only that, but in addition to ensuring that e-payment systems are highly secure and beneficial, researchers and development teams should work with programmers to identify and analyse additional benefits that can be offered to users.

5.4 Limitation of Research

This research has a few of the relevant and revealed limitations. First, the collected sample by the google form that the main limitation is on the respondent races. Even though the Chinese respondent have higher than other races, But the findings of this research do not represent the overall intention of Malaysians to adopt e-payments. Therefore, this result cannot be very accurate to generalize and represent the endusers in Malaysia as a whole

.

Secondly, this research also limits the acceptance of e-payment from the perspective of planned behaviour theory and technology acceptance model. The collection of data for this research makes respondents' intentions changeful and dynamic area of research, such as intentions to adopt e-payments in the future, which has been studied for years but still lacks predictive accuracy. There are few literature studies on predictive measures. Therefore, based on these findings, an intentional model of e-payments may not be appropriate.

Third, overall consumers are highly educated. About 55% of respondents hold an advanced degree such as a bachelor's degree or higher education. However, consumers with less education may have different intentions to adopt e-payment. These findings will provide a better generalization if future research target respondents from a wider range of educational qualifications.

In this research, the measurement of structure was only studied from a quantitative point of view. As such, individuals' intentions and acceptance of adopt e-payments may change over time, for better or worse. However, for better results, it is recommended to combine qualitative methods.

5.5 Recommendation for Future Research

The researchers make some observations and recommendations that can encounter the above limitations. First, researchers should include wider age or ethnic categories to gather different type of data. To increase the accuracy and specificity of hypothesis testing, it is not difficult to increase and expand the effect of sample size on the hypothesis. Furthermore, future research is recommended to establish operational results to challenge currently employed practices. New research is encouraged to use more other analytical tools to complement the accuracy and feasibility.

Not only that, the technological advancements will cause the change of the intention of e-payment by end-user in Malaysia, so it is recommended for the future research to use long-term research to gather more precise results and up-to-date results.

Moreover, the researchers should develop a new research method to test the intention and acceptance of e-payments so that other countries can conduct more research in this particular area to provide greater data and result. Finally, the other models and factors other models and factors not previously used is encourage to use it as another possibility to examine consumer expectations and comparative experience of e payments in real markets for future consideration and gap analysis.

5.6 Conclusion

In this research, four independent variables including perceived ease of use, benefit, self-efficacy, and trust were verified to be significantly associated with intention to adopt e-payments. All variables are positively correlated based on coefficient values. The chapter's reasoning, descriptive, managerial implications and limitations, and recommendations for future research are summarized and discussed.

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APPENDIX

Additional Information Added

1.5 Significance of Study

as specifically stated in the Financial Sector Blueprint 2011-2020 (Malaysia, 2012)

2.1.2 TRA model

The TRA model was proposed by Ajzen & Fishbein (1980), which explains user behaviour and makes informed considerations before engaging in activities or implementing new technologies

3.1.1 Quantitative Research

Thus, this is supported in the research done by Rudolf R. Sinkovics and Eva A. Alfoldi (2012), which can be viewed as distinct from certain types of text-based research such as content analysis

3.2.5 Sample size

According to the Roscoe (1975) telling that the research with sample size that more than 30 and less than (Roscoe, 1975) 500 are suitable for most of the researchers. Thompson (2004) has mention that the research advisable to collect more than 200 respondents in order to obtain stability in all the analysis (Thompson, 2004).

Survey Questionnaire

Section 1 of 5

Factors that impact the level of acceptance X of end-user on using E-payment system in Malaysia



Dear Respondents,

I am Lee Feng Ming, a year 4 undergraduate student pursuing Bachelor of International Business (Hongurs) in Universiti Tunky Abdul Rahman (UTAR). I am currently conducting research on "Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia". I sincerely hope that you could do a favor to fill up this questionnaire for my academic purpose.

Note that all the responses will be kept PRIVATE and CONFIDENTIAL and to be solely for academic purposes only under the Personal Data Protection Act (PDPA) 2010. If you agree and consent to participate in this survey and data collection, you may proceed to answer. If you do not consent, then you may withdraw from the survey at any point of time.

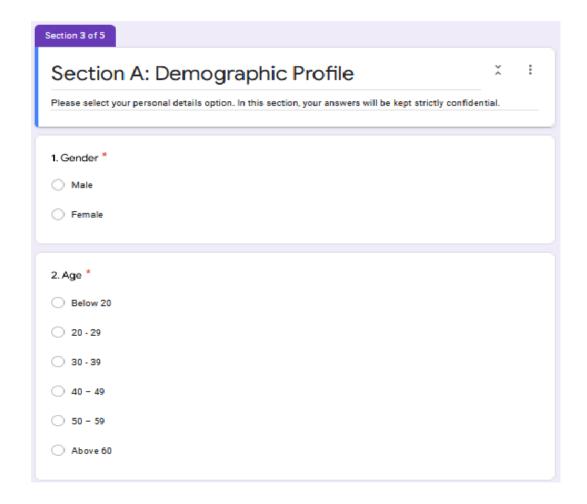
Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

There are THREE(3) section in this questionnaire. Please answer ALL questions in ALL sections. This survey may require you to spend approximately 10 to 15 minutes to answer. Highly appreciated for your kind cooperation and valuable time for complete the questionnaire. Thank you very much.

If you have any further enquire, please do not hesitate to contact me through email at leefengming@1utar.my Regards sincere,

Lee Feng Ming 18UKB05067

Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia.



Factors that impact the level of acceptance of end-user on using E-payment system in Malaysia. 3. Races * ○ Malay Chinese O Indian

Other
4. Educational Qualification *
○ SPM
O Degree
○ Master
Other
5. Monthly income * Less than RM1000
○ RM1001-RM2000
○ RM2001-RM3000
RM3001 and above
Which E-payment system do you use most? *
○ E-wallet
○ FPX online
On-site payment
Other
7. How frequent do you utilize online purchases systems? *
○ Weekly
O Monthly
O Yearly
Other

Section 4 of 5						
Section B: Independent Variable This section is seeking your opinion regarding the level of acceptance of end-user on using E-payment system in Malaysia. Each question is computed in 5 Likert-scale. Please select only ONE (1) answer that most come in your mind and describe you in each situation. There are no right or wrong for any answer selected. [1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree]						
Perceived Ease of Use Description (optional)						
1. It's easy to learn and u	ıse e-paym	ent. *				
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
2. I do not get frustrated when using e-payment. *						
	1	2	3	4	5	
Strongly Disagree	\circ	0	0	0	\circ	Strongly Agree

3. When I perform e-payr	ments, less	effort is r	equired. *			
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
4. I feel flexible when it co	omes to in	nplementin	ng e-payme	ents. *		
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
5. E-payment provides va process.	arious type	of payme	nt channel	s to simplif	y my online	e shopping *
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
Benefit Description (optional)						
1. It enables me to save m	ny time. *					
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
2. The E-payment system	is very co	nvenient fo	or me. *			
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
3. E-payment system are	accurately	/ handled r	namely billi	ng and trai	nsaction pr	ocess. *
	1	2	3	4	5	
Strongly Disagree	\circ	\circ	\circ	\circ	\circ	Strongly Agree

4. The speed of E-paym	ent system	n is faster ti	han the tra	ditional pay	yment sys	tem. *	
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
5. I find it easier to make financial transactions. *							
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
Self-efficacy							
Description (optional)							
1. I will only use an e- payn	nent syste	m if I heard	::: I it before.	*			
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
2. Other people's commer	nts will affe	ect my inter	ntion to us	e the e-pay	ment syst	tem. *	
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
3. I will use an e-payment system when my friends introduce it to me. *							
	1	2	3	4	5		
Strongly Disagree	\circ	\circ	\circ	\circ	\circ	Strongly Agree	

Trust							
Description (optional)							
1. I feel that the risks associated with the e-payment system are very low. *							
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
2. I believe that the e-pay	yment syst	em can pr	otect my p	rivacy. *			
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
3. I believe e-payment system that will not cause transaction fraud. *							
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	

Section 5 of 5							
Section C: Dependent Variable This section represents the dependent variables (Intention of end users to use E-payment). The following statements reflect a person's intention to do / perform e-payment. Please select one number of these statements that reflect your intention of perform e-payment.							
I have intention of performing e-payment in the future. Description (optional)							
1. E-payment system is t	E-payment system is better than traditional payment channels. *						
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	
E-payment system is more efficient than traditional payment channels. *							
	1	2	3	4	5		
Strongly Disagree	0	0	0	0	0	Strongly Agree	

3. I will choose a trusted	e-paymen	t system fo	or transacti	ons. *		
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
4. I think a user-friendly	electronic _l	payment s	ystem will a	affect me a	dopting th	e system. *
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
5. E-payment is fun to us	ie. *					
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
6. E-payment is a good in	dea. *					
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree

7. E-payment is needed to	o be used	to support	t transactio	n activitie:	s. *	
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
8. E-payment is used rep	eatedly. *					
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
9. I use e-payment for bu	siness tra	nsaction. *				
	1	2	3	4	5	
Strongly Disagree	0	0	0	0	0	Strongly Agree
10. I use e-payment for p	ersonal tra	ansactions	*			
	1	2	3	4	5	
Strongly Disagree	0	\circ	0	0	0	Strongly Agree

SPSS output

Cronbach's Alpha for Pilot Test Reliability

Perceived Ease of Use

Reliability Statistics

Alpha 846	Items	N of Items
Cronbach's	on Standardized	
	Cronbach's Alpha Based	

Benefit

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.952	.952	5

Trust

Reliability Statistics

Cronbach's	Cronbach's Alpha Based on Standardized	
Alpha	Items	N of Items
.824	.825	3

Self-Efficacy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.393	.385	3

Intention

Reliability Statistics

Alpha Based on Cronbach's Standardized Alpha Items N of Item	.832	.863	10
Cronbach's	Cronbach's Alpha	Alpha Based on Standardized	N of Items

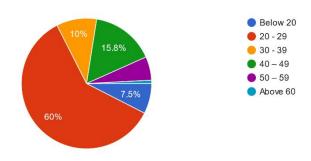
Demographic Profile

Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	63	31.5	52.5	52.5
	Female	57	28.5	47.5	100.0
	Total	120	60.0	100.0	
Missing	System	80	40.0		
Total		200	100.0		



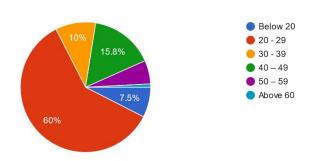


Age

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 20	9	4.5	7.5	7.5
	20 - 29	72	36.0	60.0	67.5
	30 - 39	12	6.0	10.0	77.5
	40 - 49	19	9.5	15.8	93.3
	50 - 59	7	3.5	5.8	99.2
	Above 60	1	.5	.8	100.0
	Total	120	60.0	100.0	
Missing	System	80	40.0		
Total		200	100.0		

2. Age120 responses

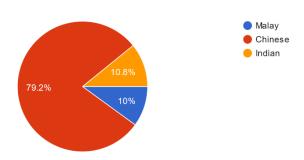


Races

Races

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	12	6.0	10.0	10.0
	Chinese	95	47.5	79.2	89.2
	Indian	13	6.5	10.8	100.0
	Total	120	60.0	100.0	
Missing	System	80	40.0		
Total		200	100.0		





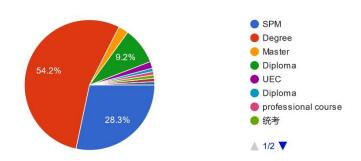
Education Qualification

Education Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SPM	34	17.0	28.3	28.3
	Degree	65	32.5	54.2	82.5
	Master	3	1.5	2.5	85.0
	Other	18	9.0	15.0	100.0
	Total	120	60.0	100.0	
Missing	System	80	40.0		
Total		200	100.0		

4. Educational Qualification

120 responses

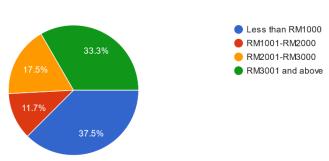


Monthly Income

Monthly Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than RM1000	45	22.5	37.5	37.5
	RM1001-RM2000	14	7.0	11.7	49.2
	RM2001-RM3000	21	10.5	17.5	66.7
	RM3001 and above	40	20.0	33.3	100.0
	Total	120	60.0	100.0	
Missing	System	80	40.0		
Total		200	100.0		

5. Monthly income120 responses

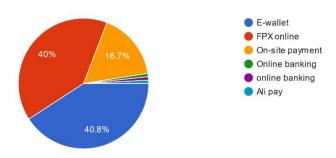


Which E-payment system do you use most?

Which Epayment system do you use most

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	E-wallet	49	24.5	40.8	40.8
	FPX online	48	24.0	40.0	80.8
	On-site payment	20	10.0	16.7	97.5
	Other	3	1.5	2.5	100.0
	Total	120	60.0	100.0	
Missing	System	80	40.0		
Total		200	100.0		

6. Which E-payment system do you use most? 120 responses

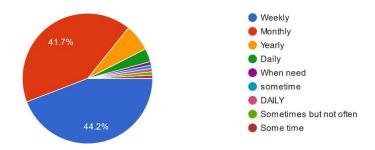


How frequent do you utilize online purchases systems?

How frequent doyou utilize online purchases systems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Weekly	53	26.5	44.2	44.2
	Monthly	50	25.0	41.7	85.8
	Yearly	8	4.0	6.7	92.5
	Other	9	4.5	7.5	100.0
	Total	120	60.0	100.0	
Missing	System	80	40.0		
Total		200	100.0		

7. How frequent do you utilize online purchases systems? 120 responses



Central Tendency

Statistics

		Gender	Age	Races	EducationQuali fication	Monthlyincome	WhichEpayme ntsystemdoyou usemost	Howfrequentdo youutilizeonline purchasessyst ems
N	Valid	120	120	120	120	120	120	120
	Missing	80	80	80	80	80	80	80
Mean		1.48	2.55	2.01	2.04	2.47	1.81	1.78
Mediar	1	1.00	2.00	2.00	2.00	3.00	2.00	2.00
Mode		1	2	2	2	1	1	1
Std. De	eviation	.501	1.083	.458	.956	1.296	.802	.874
Minim	ım	1	1	1	1	1	1	1
Maxim	um	2	6	3	4	4	4	4

Reliability Analysis

Perceived Ease of Use

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.892	.898	5

Benefit

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.940	.940	5

Trust

Reliability Statistics

Cronbach's	Cronbach's Alpha Based on Standardized	
Alpha	Items	N of Items
.924	.924	3

Self-Efficacy

Reliability Statistics

	Cronbach's Alpha Based on	
Cronbach's Alpha	Standardized Items	N of Items
.778	.778	3

Intention

Reliability Statistics

	Cronbach's Alpha Based	
Cronbach's Alpha	on Standardized Items	N of Items
.935	.940	10

Pearson Coefficient Analysis

Correlations

		Mean_PEOU	Mean_Intention
Mean_PEOU	Pearson Correlation	1	.794**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Intention	Pearson Correlation	.794**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_Benefit	Mean_Intention
Mean_Benefit	Pearson Correlation	1	.798**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Intention	Pearson Correlation	.798**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_SelfEffic acy	Mean_Intention
Mean_SelfEfficacy	Pearson Correlation	1	.570**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Intention	Pearson Correlation	.570**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_Trust	Mean_Intention
Mean_Trust	Pearson Correlation	1	.383**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Intention	Pearson Correlation	.383**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_PEOU	Mean_SelfEffic acy
Mean_PEOU	Pearson Correlation	1	.437**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_SelfEfficacy	Pearson Correlation	.437**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_PEOU	Mean_Trust
Mean_PEOU	Pearson Correlation	1	.418**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Trust	Pearson Correlation	.418**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_PEOU	Mean_Benefit
Mean_PEOU	Pearson Correlation	1	.838**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Benefit	Pearson Correlation	.838**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_Benefit	Mean_SelfEffic acy
Mean_Benefit	Pearson Correlation	1	.506**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_SelfEfficacy	Pearson Correlation	.506**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_Benefit	Mean_Trust
Mean_Benefit	Pearson Correlation	1	.326**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Trust	Pearson Correlation	.326**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Correlations

		Mean_SelfEffic acy	Mean_Trust
Mean_SelfEfficacy	Pearson Correlation	1	.359**
	Sig. (2-tailed)		<.001
	N	120	120
Mean_Trust	Pearson Correlation	.359**	1
	Sig. (2-tailed)	<.001	
	N	120	120

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

Multiple Linear Regression

Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.851 ^a	.725	.715	.36571	1.906

- a. Predictors: (Constant), Mean_Trust, Mean_Benefit, Mean_SelfEfficacy, Mean_PEOU
- b. Dependent Variable: Mean_Intention

ANOVA^a

Model	I	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.498	4	10.124	75.698	<.001 ^b
	Residual	15.381	115	.134		
	Total	55.879	119			

- a. Dependent Variable: Mean_Intention
- b. Predictors: (Constant), Mean_Trust, Mean_Benefit, Mean_SelfEfficacy, Mean_PEOU

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.517	.212		2.443	.016
	Mean_PEOU	.357	.085	.395	4.219	<.001
	Mean_Benefit	.335	.090	.352	3.737	<.001
	Mean_SelfEfficacy	.166	.046	.209	3.578	<.001
	Mean_Trust	.018	.036	.028	.509	.612

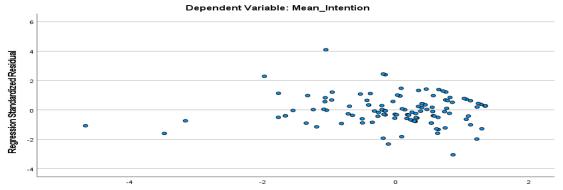
a. Dependent Variable: Mean_Intention

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.3940	4.8999	4.1133	.58337	120
Residual	-1.11737	1.49793	.00000	.35952	120
Std. Predicted Value	-4.661	1.348	.000	1.000	120
Std. Residual	-3.055	4.096	.000	.983	120

a. Dependent Variable: Mean_Intention

Scatterplot



Regression Standardized Predicted Value