




**FACTORS INFLUENCING THE USE OF ELECTRONIC WALLET  
PAYMENT SYSTEMS AMONG STUDENTS**



**UNIVERSITI TEKNIKAL MALAYSIA MELAKA (UTeM)**

## APPROVAL

I acknowledge that this thesis is the result of my own work except for the excerpts and summaries for each of which I have explained the source and this paper has been accepted as part of the requirements for the award of the Bachelor of Technopreneurship with Honours.

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## ABSTRACT

Technology is now increasingly sophisticated with the existence of smartphones that have multiple uses through the existence of various online applications. The e-wallet application (e-wallet) known as digital wallet is no exception as its use is becoming increasingly popular among the community regardless of age. In fact, some undergraduate students also use the e-wallet application in their daily affairs. Therefore, a study was conducted on undergraduate students of the Faculty of Management Technology and Technopreneurs of Universiti Teknikal Malaysia Melaka on the factors that influence the use of electronic wallet payment system among students based on the Technology Acceptance Model (TAM). This study has used primary data in the form of questionnaires analyzed using SPSS (Statistical Package for the Social Science) Version 26. The questionnaire has 25 question items. Study data were collected and analyzed using descriptive statistics. In chapter 5 discusses, comments and summarizes the entire data and information that has been analyzed and interpreted in chapter four, which is the research findings based on the research questions. The existing knowledge in this area is expanded by a study on the factors that influence student e-wallet usage. These findings offer empirical support for the association between the identified characteristics and the use of e-wallets, which is highly motivating and theoretically significant. There is a practical contribution for retail store owners and managers. The results of this study can be used by managers to boost their reputation and long-term competitive advantage. The study found that the factors of ease of use, usefulness, security and social influence are the factors that influence the use of electronic wallet payment system among students. This study is expected to be a guide and can provide information to all parties.

## ABSTRAK

Teknologi kini semakin canggih dengan kewujudan telefon pintar yang mempunyai pelbagai kegunaan melalui kewujudan pelbagai aplikasi dalam talian. Aplikasi e-wallet (e-wallet) yang dikenali sebagai dompet digital tidak terkecuali kerana penggunaannya semakin popular dalam kalangan masyarakat tanpa mengira usia. Malah, sebahagian pelajar prasiswazah turut menggunakan aplikasi e-wallet dalam urusan harian mereka. Oleh itu, satu kajian telah dijalankan ke atas pelajar ijazah pertama Fakulti Teknologi Pengurusan dan Teknousahawan Universiti Teknikal Malaysia Melaka terhadap faktor-faktor yang mempengaruhi penggunaan sistem pembayaran dompet elektronik dalam kalangan pelajar berdasarkan Model Penerimaan Teknologi (TAM). Kajian ini telah menggunakan data primer dalam bentuk soal selidik yang dianalisis menggunakan SPSS (Statistical Package for the Social Science) Versi 26. Soal selidik tersebut mempunyai 25 item soalan. Data kajian dikumpul dan dianalisis menggunakan statistik deskriptif. Dalam bab 5 membincangkan, mengulas dan merumuskan keseluruhan data dan maklumat yang telah dianalisis dan ditafsir dalam bab empat iaitu dapatan kajian berdasarkan persoalan kajian. Pengetahuan sedia ada dalam bidang ini diperluaskan dengan kajian tentang faktor-faktor yang mempengaruhi penggunaan e-dompet pelajar. Penemuan ini menawarkan sokongan empirikal untuk perkaitan antara ciri yang dikenal pasti dan penggunaan e-dompet, yang sangat bermotivasi dan signifikan secara teori. Terdapat sumbangan praktikal untuk pemilik dan pengurus kedai runcit. Hasil kajian ini boleh digunakan oleh pengurus untuk meningkatkan reputasi dan kelebihan daya saing jangka panjang mereka. Kajian mendapati faktor kemudahan penggunaan, kegunaan, keselamatan dan pengaruh sosial merupakan faktor yang mempengaruhi penggunaan sistem pembayaran dompet elektronik dalam kalangan pelajar. Kajian ini diharapkan dapat menjadi panduan dan dapat memberi maklumat kepada semua pihak.

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## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

In this chapter will discuss the factors that influencing the students to use e-wallet. Therefore, it is also followed by a description of the research objectives and research questions. Next, the importance of the scope of the study being evaluated and studied using appropriate solution methods. A result of this study, respondents can realize the importance of this research.

#### 1.2 Research Background

Rapid advances in the digital world are now leading to a variety of new inventions that simultaneously benefit the people. Among the most effective, time -saving and user -friendly inventions is the Electronic wallet payment system. Electronic wallet payment system is also known as e-wallet or digital wallet. E-wallets are applications that have the same functions as physical wallets such as storing money, debit cards, credit cards, and even bank account information in the form of digital applications. Users of e-wallets can also store their actual card details and bank account numbers so that they can make payments more quickly and easily (Ray, 2017). E-wallets also have the same functionality as debit cards, but what differentiates them is that all individuals can register online and for free. Furthermore, online banking and online shopping also led to a sharp increase in the use of e-payments (Wróbel-Konior, 2020).

In addition, e-wallet systems and applications are part of the payment facilities that have been developed and grown rapidly in most countries in the world. In 2017, the Malaysian government began introducing e-Wallet usage applications via smartphones that have the potential to replace cash payment methods. The Malaysian government also introduced the E-Tunai Rakyat Program on January 15, 2020, in collaboration with Malaysia's top three e-wallet providers, Grab, Boost, and Touch'n Go E-Wallet. Therefore, the Malaysian government is making an effort to increase the usage of cashless payments and encourage the general population, in particular young people, to actively participate in the use of electronic wallets (Ministry of Finance

Malaysia, 2020). The e-Tunai Rakyat programme seeks to promote e-payment acceptance among Malaysian consumers and small businesses.

The purpose of its creation is to replace physical wallets in order to free users from the burden of carrying cash or bags with them wherever they go. Also, as technology has changed the way people pay for goods and services online and offline, e-wallets are now seen growing in popularity among customers worldwide. Boost, GrabPay, WeChat Pay, Touch n Go Wallet (TNG), BigPay, Paypal, KiplePay, RazerPay and Set are some of the supported e-wallets in Malaysia. TNG e-wallet is one of the well-known and widely used applications in Malaysia. This is because, it is easy to use for payment especially for toll payment. The usage and production of each e-wallet is different. For example, GrabPay allows users to use their available balance to pay for Grab fares, while Boost allows users to buy anything at KK Speedmart. The millennial generation is one of the main consumer groups in Malaysia, and it has been determined that the beneficial development of cashless payment technology is happening extremely quickly, with usage rates exceeding double digits every year.

Next, the use of e-wallets has its own advantages and disadvantages. The advantage is that transactions become faster, you can keep records of expenses, there is no need to keep receipts and reduce the amount of cash that needs to be carried in your pocket, so it is safer because it is protected from thieves. On the other hand, the disadvantages are that it is difficult to use if the internet connection is less stable and not fast, and the risk of fraud, similar to the use of internet banking. However, the creation of e-wallets has greatly helped reduce the burden of some people in making payments by saving them time and energy. In addition, e-wallets also provide exclusive promotions and discounts to users that can attract more people to use e-wallets. Therefore, a research project was examine to determine which factors influence the use of electronic wallet payment systems among students in Malaysia.

### **1.3 Problem Statement**

According to Dato'Sri Dr Mohd Uzir Mahidin, 2020, only 8% of Malaysia's 29.4 million inhabitants use e-wallets. The majority of Malaysians choose for non-cash payment options including debit cards and online banking, according to Abdullah et al.(2020). Despite the fact that e-wallets have been around for a while in Malaysia,

usage is still in its early stages. Because most Malaysians are unaware of the advantages of mobile wallets, the adoption of digital wallet technology, which is now available to Malaysians, is still limited (Yuen, 2019).

According to Krishnan (2019), digital wallets will lead to “excessive choice issues” such as cash back, rewards, discounts, and so on. customers find it difficult to decide when to use a digital wallet. As a result, customers who use digital wallets will have a bad attitude. Customers prefer to use a credit card or debit card that is their habit. Nowadays, there are some people who prefer to use electronic wallets over paper money. In contrast to other nations, Malaysia still has a low acceptance rate for electronic wallets.

#### **1.4 Research Objectives**

This study focuses on the following objectives:

- i. To identify the factor of using electronic wallet payment systems among students.
- ii. To analyse the relationship between ease of use, usefulness, security and social influencing factors that influence the use of electronic wallet payment systems among students.
- iii. To evaluate the most significant factors that influencing the use of electronic wallet payment systems among students.

#### **1.5 Research Questions**

This study is designed to see the extent to which electronic wallet payment systems influencing consumers among students in Malaysia.

- i. What is the factor of using electronic wallet payment systems among students?
- ii. What is the significant relationship between ease of use, usefulness, security and social influence factors that influencing the use of electronic wallet payment systems among students?
- iii. What is the most significant factors that influencing the use of electronic wallet payment systems among students?

## 1.6 Scope of the proposed research

This study only focuses on the factors influencing the use of electronic wallet payment system among students semester 6 at Universiti Teknikal Malaysia Melaka (UTeM). This study only focuses on the factors that influence the use of electronic wallet payment system among students semester 6 students at Universiti Teknikal Malaysia Melaka (UTeM). Researchers chose this university because the university once organized a campus cashless campaign. Therefore, it is still not possible to increase the use of e-wallets among students. In addition, the respondents are comprised of some students at the university. Therefore, this study cannot be representative of all university students in the country and cannot be generalized.

## 1.7 Summary

This study is to examine the factors that influence the use of electronic wallet payment system among students. Having identified the background of the study, problem statement, determine the objectives, state the research questions and the scope of the study. Therefore, in chapter 2 will display the technology acceptance model, variable review, conceptual framework and research hypothesis.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter focuses on the literature review, the technology acceptance model, the review variable, the conceptual framework, and the research hypothesis. The dependent variable (students' use of an electronic wallet payment system) and the independent variable (perceived ease of use, perceived usefulness, perceived security, and social influence) are both discussed in this chapter. In addition, I also provide the relationship between the independent variable and dependent variables in the conceptual framework.

#### 2.2 Technology Acceptance Model (TAM)

Results Through TAM can provide a specific explanation in the acceptance and behavior of its use such as electronic wallets (Venkatesh and Morris, 2000). TAM too easy to use to measure the level of various technologies such as electronic wallets and so on.

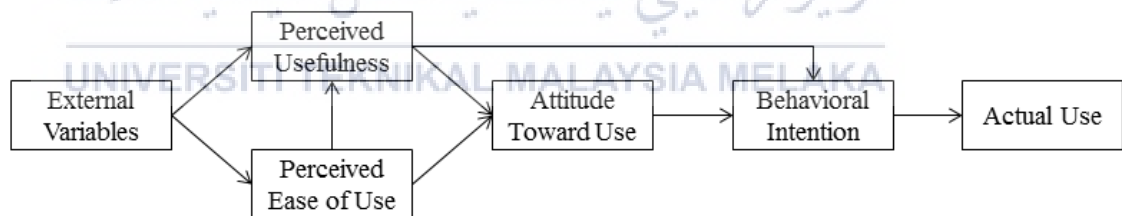


Figure 1 shows the Technology Acceptance Model

Davis et al. (1989) suggested that the Technology Acceptance Model (TAM) was to explain the effects of variables on user behavior and intent. He noted that TAM also considers behavioral intentions to be influenced by personal attitudes toward the use of information systems. TAM assumes that the main determinant of behavioral intention depends on a person's confidence about their own ability to use new technology and their subjective assessment of the use of that technology (Morgan &

Veloutsou, 2011). Based on this model, a person's recognised knowledge is how much he or she thinks that using a certain system will help him or her do a better job. On the other hand, consumers will like the new technology if they think it will help them. Then, the level of perceived comfort is how easy someone thinks it is to use new technology. When new technologies are seen by consumers to be easy to use and require less energy and time, then new technologies are more likely to be accepted by consumers. TAM has been used for this study since it is frequently used to determine the degree of user acceptance of a certain system.

## **2.3 Review Variable**

### **2.3.1 Dependent Variable: Acceptance of Electronic Wallet Payment System**

In this study, "use" means how the student uses the e-wallet based on the factors that were taken into account. E-wallets are a quick and easy way to keep the global payment system safe. A "personal banking system" with a number and a way to pay in makes it even more flexible. Carr Jr. (1999) says that the way an organisation or an individual uses technology is what makes them accept it. With the fast and advanced growth of technology today, the degree to which people accept new technologies depends on a number of factors. For example, consumer needs, the amount of technology available, and safety (Lai, 2017).

Wang and Gu (2017) say that people will accept more e-wallet such as boost, WeChat Pay, and touch and go e-wallet, by combining extended TAM theory. Additionally, a growing number of individuals everyday depend on these products and services across the globe. This is due to the fact that the e-wallet will provide consumers greater advantages and that most individuals are likely to use it frequently. According to Lella and Lipsman (2014), an increasing number of consumers utilise e-wallets as their primary method of payment.

In this study, the use of e-wallet are refers to the user's behaviour, attitude, or plan to use e-wallet. In this study, the Technology Acceptance Model (TAM) by Davis (1989) was proposed as a way to learn more about how consumers plan to use a certain technology. TAM measures how people feel about the technology that is made for them based on two main factors: how useful they think it is and how easy they think it is to use. TAM is a useful model that has frequently been used to explain how people

behave and react when new technologies are released. This study added perceived security factors to the TAM model to figure out how students feel about using e-wallets.

### **2.3.2 Independent Variable**

#### **Perceived ease of use**

Perceived ease of use is one of the TAM's proposed variables. Davis (1989) defines perceived ease of use as "the extent to which the usage of a specific system will be devoid of effort". Easy-to-use is also "relief from the complexity and struggle necessary while working with e-payment systems," according to Sunny and George (2018). If users perceive a system to be simple and devoid of complexity, they are more inclined to use it (Liu & Tai 2016). Users will be facilitated by e-wallets that appear simple to manage, use, and implement, and users will be less anxious to start the system (Makanyeza, 2017).

Additionally, perceptions of ease of use have a positive and considerable impact on behavioural intents to use technology (Jackson, Chow & Leitch, 1997). According to Venkatesh et al. (2002), there is a significant and favourable correlation between behavioural intentions for usage and perceptions of ease of use. As a result, it positively affects behavioural intent and perceived usefulness. Mun and Hwang (2003) found a strong correlation between intentions to use information systems and evaluations of ease of use.

#### **Perceived Usefulness**

One of the key elements of TAM is perceived usefulness. Perceived usefulness refers to the degree to which a person thinks using a specific information system would increase their productivity (Davis, 1989). There are several studies proving that usefulness influences consumer behavioral intentions in using the internet such as payment methods through e-wallets. The strongest element of TAM is usefulness which has a significant effect on behavioral intention (Davis, Bagozzi & Warshaw, 1989).

Furthermore, the usefulness demonstrated, according to Liu and Tai (2016), increased the study's strong association with the adoption of e-wallets. Al-Marroof and Al Emran (2018) found that when applying the TAM model, there is a substantial correlation between behavioural intention and the perception of usage of a specific technology. This is further supported can illustrate the usefulness of significantly influencing the level of user loyalty to the use of e-wallet services.

### **Perceived Security**

An individual's perception of a transaction made through a certain channel or platform feels safe and secure known as security perception. It has been shown that this directly affects a person's decision to use technology (Voronenko, 2018). According to Enck, Ongtang, and McDaniel (2009), when performing online transactions with digital wallets, consumers trust that their particular credentials will not be stolen, accessed, or modified by others such as unauthorised users. Security concerns are one of the key drivers behind the use of e-wallets for digital payment transactions (My Money Shop, 2019). Thus, e-wallets include Near Field Communications (NFC), which ensures a safe environment in which student may execute commercial transactions conveniently and efficiently.

Kumar (2018) asserted that security is an important signal that influences the use of mobile wallet payment methods, while Moradi (2013) claimed that perceived security has a favourable association with customers' behavioural intentions toward e-Banking. According to Enck, Ongtang, and McDaniel (2009), when performing online transactions with digital wallets, consumers trust that their particular credentials will not be stolen, accessed, or modified by others such as unauthorised users (Deepak & Joshi, 2020; Chyntia & Raden, 2020). Security is the notion of how internet users are protected from potential hazards (Mekovec & Hutinski, 2012). It can also be thought of as a consumer's subjective assessment of digital wallet security in relation to the security of electronic payment systems (Linck, Pousttchi, & Wiedemann, 2006). Gao, Waechter, and Bai (2015) corroborate that customer attitudes toward security are a significant factor in such conduct, asserting that consumer attitudes toward security are an important factor in such behaviour. Thus, understanding security is linked to the

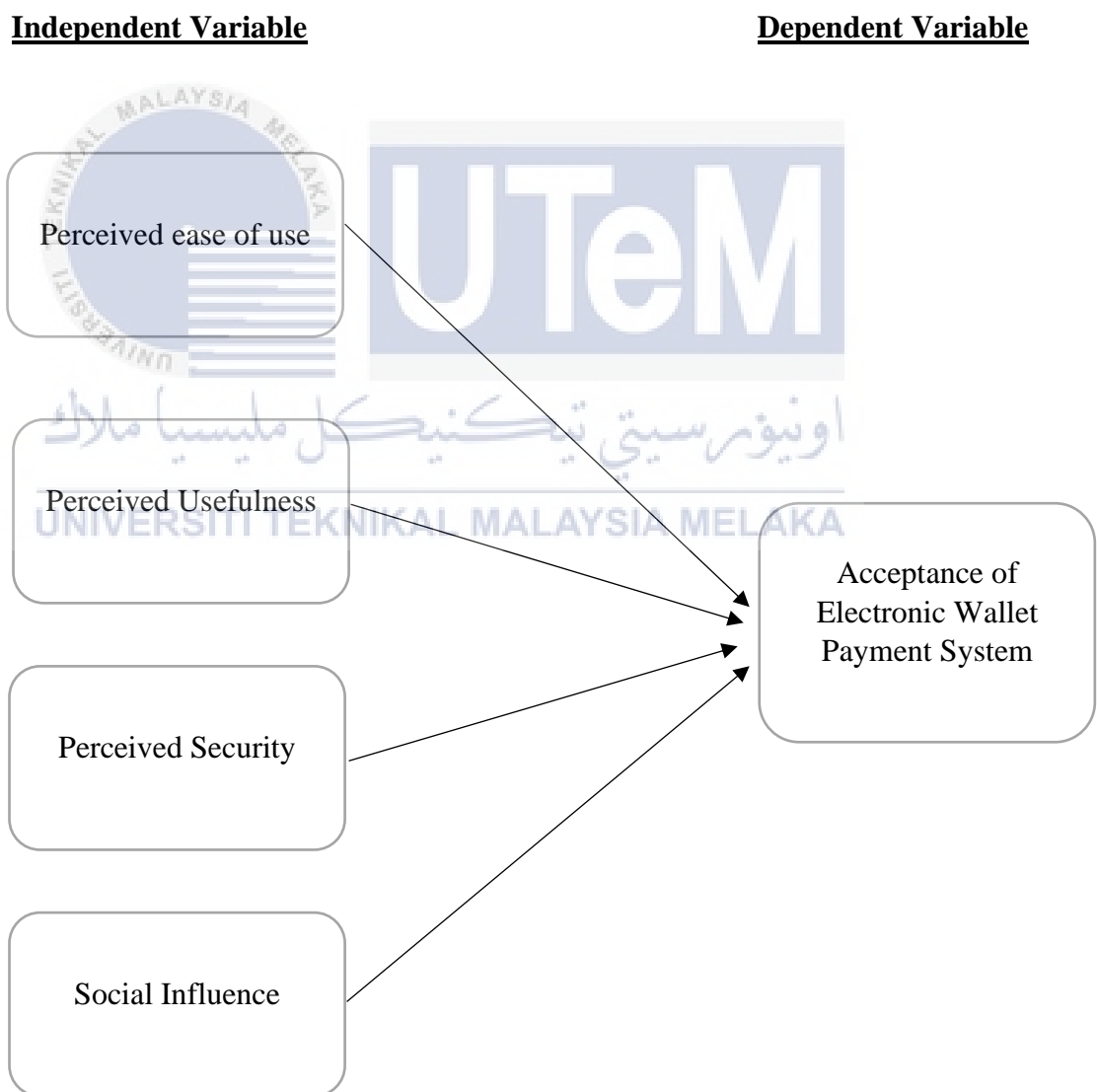


bad repercussions that consumers may face if they modify their intention to utilise it (Francisco, Iviane & Francisco, 2017).

### **Social Influence**

The phrase "social impact" describes how an individual feels under societal pressure to take part in a specific event (Fishbein & Ajzen, 1975). In addition to friends, family, educators, and celebrities, there are many other forms of social influence. Social pressure has an advantageous impact on consumer attitudes on the use of mobile wallets (Megadewandanu et al, 2017). Additionally, Cheng et al (2018) discovered that use of e-wallets among respondents was impacted by social impact.

### **2.4 Conceptual Framework**



**Figure 2: Conceptual Framework**

## 2.5 Research Hypothesis

The following are the null hypotheses for this study.

H1: There is a positive relationship between perceived ease of use factors and acceptance of electronic wallet payment system.

H2: There is a positif relationship between perceived usefulness factors and and acceptance of electronic wallet payment system.

H3: There is a positive relationship between perceived security factors and and acceptance of electronic wallet payment system.

H4: There a positive relationship between social influence factors and acceptance of electronic wallet payment system.

## 2.6 Summary

This chapter only presents a review of the literature on the factors that influence the use of electronic wallet payment system. Technology acceptance models are also discussed. In fact, there are also previous studies consisting of foreign and domestic are also mentioned in this chapter. These past studies help to determine the factors that influence the use of electronic wallet payment system among students.

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## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The research method is covered in chapter three of this study. The word "research methodology" is another name for this research method. Therefore, technique is a factor that needs to be taken into consideration in order to have a decent and trustworthy study outcome. This is because it ensures that the researcher's procedure for this study was appropriate for both the study's hypotheses and the variables to be examined.

This chapter will also explain about the methodology used by the researchers to complete this study. In this study, the researchers divided the research method into several studies. Among them, study design, study site, study population and sample, sampling methods, study instruments, study procedures, data analysis, and conclusions. This study is also to find out the factors that affect the use of electronic wallet payment systems among students.

#### 3.2 Study design

This study is a descriptive and inferential cross-sectional survey study. According to Badruzaman Baharom (2006), descriptive research is research that aims to explain a phenomenon that is happening or explore a field that has not been or less studied. This type of research is a cross-sectional type of study. According to Othman Talib (2011), cross-sectional studies involve the distribution of questionnaires only once in a given period, but against different groups of people.

This study aims to examine the factors that influence the use of electronic wallet payment systems among students. Data obtained through a questionnaire that was distributed to all populations used as respondents of the study, namely all students of the faculty of Technology Management and Technopreneurship. The cross-research type survey method uses questionnaires because it is a logical, scientific and specific form of instrument. Each piece of information was interpreted quantitatively. Questionnaires are a frequently used instrument in descriptive studies according to Mahadi Khalid (2007). A set of questionnaires was distributed to the students aimed

at obtaining feedback on the instruments desired by the researchers. The instruments used are in the form of.

### **3.3 Data collection Method**

The data collection methods that will be covered are mostly concerned with data sources. Primary data were the data source for this investigation. A questionnaire form, according to Uma Sekaran (2003), is a list of questions that have been created and given to respondents to be answered. When researchers are clear about their needs and how to gather the relevant data and questionnaires are a suitable method for data collection. To collect data for this study, the researcher handed questionnaire forms to the chosen respondents. This survey has questions that are arranged in an orderly manner for respondents to respond to.

#### **3.3.1 Primary Data**

One of the primary sources of information for this kind of data is primary data sources. It is one method by which researchers gather information for a specific study project (Salkind, 2010). There are numerous ways to gather primary data. However, self-governance surveys, interviews, and other methods are most frequently used. In order to reach our intended respondents, this study used a computer-administered survey with given questions.

### **3.4 Study Sample**

#### **3.4.1 Location of Study**

This study was only conducted at a university, namely at Universiti Teknikal Malaysia Melaka (UTeM), Durian Tunggal, Melaka.

#### **3.4.2 Population and Study Sample.**

The student population at the Faculty of Technology Management and Technopreneurship is 1500 students. Therefore, because it is difficult for the

researcher to get that many students, the respondents chosen by the researcher in this study are 160 students of the 6th semester at Universiti Teknikal Malaysia Melaka (UTeM). The researcher chose only 160 respondents because the researcher did not have enough time to get respondents according to the population. A questionnaire was distributed among students who use the e-wallet system to accurately collect data about the factors that influence the use of the electronic wallet payment system among students by focusing only on semester 6 students. Therefore, based on Krejcie and Morgan (1970), the sample size of this study is 113 respondents. Therefore, the sample size is used as the questionnaire respondents.

### **3.4.3 Sampling Methods**

According to Webster (1985) in Mahadi Khalid, a sample is a subset of respondents chosen from a broad population for the aim of a study (2007). While according to Portney and Walkin (1993) in Mahadi Khalid (2007) the sample is a subset of the population selected to be studied, Among the reasons the sample is used is to facilitate the study to be done. The use of the study sample is sufficient without using the entire study population that is by using the correct sampling method. The normal distribution is typically met when the sample size is more than 30 units, hence using a sample size over 30 units is recommended. According to Noor Azizah Mohd Isa (2004) increasing the sample size will make the results more typical of the population and reduce sampling error.

### **3.5 Research Instruments**

A set of questionnaires were created to collect input from respondents in order to accomplish the objective study. A questionnaire was the study's primary data collection tool. Such tools are frequently employed in descriptive studies. According to Mahadi Khalid, questionnaires are the most efficient technique to gather information from respondents (2007). A questionnaire is a tool or instrument used to assess a respondent's conduct.

The use of questionnaires is more appropriate and practical. Furthermore, this questionnaire is effective and saves money. In fact, it can also avoid 'bias' to the

researcher and give the respondents a chance to think. The construction of this instrument construct is based on the objectives of the study and through the objectives of this study, the researcher will set the research questions to be studied.

Once the determination of the research question is planned next the items will be constructed covering what is to be studied based on the prescribed construct. Properly and carefully conducted questionnaires increased the amount of feedback, facilitating conclusions and analysis of the collected data. Questionnaires are also suitable for use because the questionnaires guarantee confidentiality and elicit a more honest response while requiring low cost to get great feedback.

### 3.5.1 Questionnaires

A set of questionnaires was constructed by the researcher to collect information and then answer the research questions- This questionnaire contains two parts namely

1. Part A deals with Student Personal Information.
2. Part B is the factors that influencing the use of electronic wallet payment system among university students consisting of:
  - i. Perceived ease of use
  - ii. Perceived usefulness
  - iii. Perceived security
  - iv. Social Influence
3. Part C is the acceptance of electronic wallet payment system.

Part A is a questionnaire related to students' personal information. The questionnaire was self -designed by the researcher and aimed to obtain background information of the study respondents. The information is age, gender and race.

Part B is a questionnaire called the factors that influencing the use of ewallets among students which is divided into four factors namely ease of use, usefulness, security and social influence. The questionnaire was constructed by the researcher by adapting various items from the questionnaire form. This questionnaire aims to identify the factors that influence the use of ewallets among students to facilitate respondents to make perceptions about the factors that influence the use of electronic

wallet payment system such as ease of use, usefulness, security and social influence among university students in part B. Researchers use likert scale as in the table to measure the response of the respondents in section B.

Part C is a questionnaire called the accepting of electronic wallet payment system to know how much student was accept the e-wallet.

**Table 3: Likert Rating Scale**

1	2	3	4	5
Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

### 3.6 Data Analysis

The next stage is to analyze the data when all the forms have been answer. The statistical software "Statistical Packages for the Social Sciences Version 26 (spss/PC)" was used to analyse the data. The analysis's results are presented in tabular format with the frequency, mean, and percentage shown. The study's findings are addressed in accordance with each item based on the research questions from the data collected. In actuality, it can also assess the reliability of each instrument employed in this study. The validity test for Cronbach's alpha, correlation, t-test, and anova were used to investigate the relationship between the independent and dependent variables as well as to test the validity of the hypothesis.

#### 3.6.1 Reability Test

A statement from Kerlinger (1986) in Siti Shuhaila binti Mohd Noor (2018) states that reliability means trust which is the accuracy and precision of the measuring instrument used. According to Azizi et. al, (2007), the instrument can be measured using the Cronbach's Alpha method. Index value tests on good instruments should exceed 0.60. Table 2 below shows Cronbach's Alpha ( $\alpha$ ) Interpretation :

Cronbach's Alpha ( $\alpha$ )	Stage
<0.5	Not accepted
0.5-0.6	Weak

0.6-0.7	Accepted
0.7-0.8	Simple
0.8-0.9	Good
0.9-1.0	Excellent

Table 4: Cronbach's Alpha ( $\alpha$ ) Interpretation

### 3.6.2 Correlation

To obtain a measurement of the relationship between the two variables, the researchers will use the interpretation put forward by Guilford (1956) as shown in table 3 below.

Correlation Coefficient Values	Interpretation
0.00 – 0.20	A rather weak relationship
0.20 – 0.40	Weak relationship
0.40 – 0.60	A simple relationship
0.60 – 0.80	Strong relationship
0.80 – 1.00	A very strong relationship

Table 5: Interpretation of correlation coefficient values

In addition, researchers also used t-test and anova in data analysis for this study to distinguish the two variables.

### 3.7 Analysis of Pilot Test

Before the actual study was conducted, the researcher conducted a pilot study. A pilot study is intended as an experimental study or pre-test to try or test the research instrument. The purpose of this pilot test is in line with the view of Polit *et al* (2001) in Rozanah Madsarapi (2011) who stated, a pilot test refers to a small or experimental version of the study conducted in preparation for a larger or major study.

Rozanah Madsarapi (2011) on the other hand thinks that a pilot study can be a pre-test to try a specific research instrument. Pilot studies can help researchers gain early indications of any parts of the study that may be inaccurate or fail. It also allows the researcher to identify any deficiencies in the research instrument and subsequently improve it.