UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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

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# 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 5 DISCUSSION AND CONCLUSION**

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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.
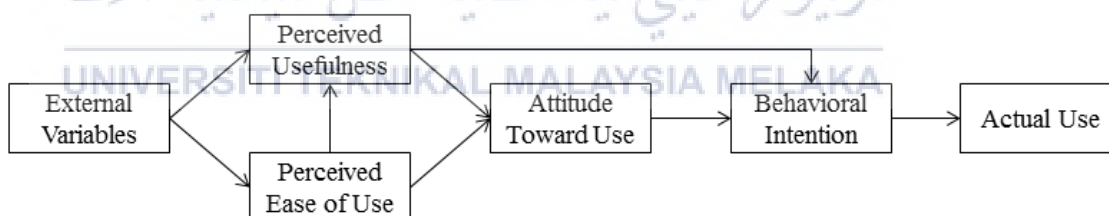


Figure 1 shows the Technology Acceptance Model

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-Maroof 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**

**Independent Variable**                                    **Dependent Variable**
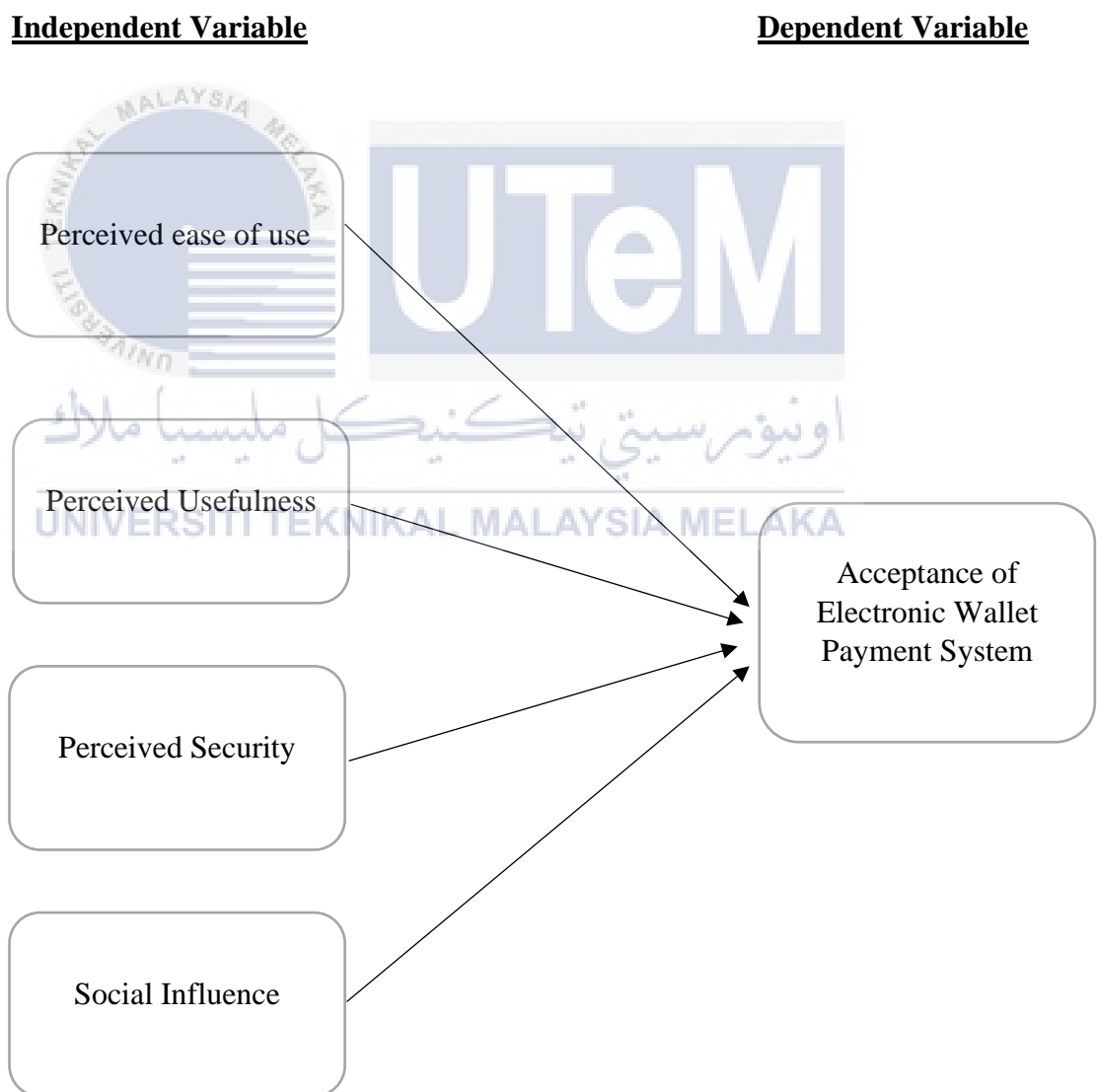


**Figure 2: Conceptual Framework**

**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.

# CHAPTER 3

# RESEARCH METHODOLOGY

## 3.1 Introduction

The research mehod 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 Badrulzaman 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 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 (α) 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.

The pilot study also gives the respondents the opportunity to comment on the research instrument in terms of shortcomings, confusion and ambiguity of the language of the instrument according to Rozanah Madsarapi (2007). In addition, for the above purpose, the researcher conducted a pilot study to determine the reliability of the instrument used.

A statement from Rozanah Madsarapi (2007) states that reliability is the degree of consistency for a measurement instrument. An instrument that has a high degree of reliability will give the same or almost the same results every time it is used in an equivalent situation or scenario. Through the pilot study as well, the researcher can see to what extent the questionnaire used can produce relevant results, achieve the objectives and answer all the research questions.

This pilot study was conducted at a university in the state of Malacca. A total of 30 students in the 6th semester at Universiti Teknikal Malaysia Melaka (UTeM) were selected as a study sample.

The data obtained from this pilot study was analyzed through a computer using the Statistical Package for Social Science Version 26 for windows (SPSS) software. Cronbach Alpha was used to determine the reliability and validity of the questionnaire. A statement from Noorhasnidah Mohd Kassim (2012) states that the reliability of the items formed in the questionnaire depends on the height of the alpha value. A high alpha value that is above 0.70 is considered a high and acceptable coefficient, while an alpha value lower than 0.70 is considered invalid and the level of reliability of the constructed items is low and rejected.

### 3.7.1 Reliability and Validity

According to Nurul Aainaa Abdul Rashid (2016), testing the level of validity is important to ensure that the items created are appropriate for the respondents to be tested. In order to determine the validity of this research instrument, the researcher asked for help from experts who have experience in the field of educational psychology to revise the instrument and provide comments for improvement.

The reliability of the items in this pilot study used the Cronbach's Alpha. This is because we want to test the level of reliability of the items in this study. The validity

and reliability of research items on the factors that influence the use of e-wallets among students in Malaysia is based on a study that has been conducted on 30 students at a university in the state of Melaka, namely the Universiti Teknikal Malaysia Melaka (UTeM).

### Reliability Statistics

| Cronbach's Alpha | N of Items |
|---|---|
| .978 | 30 |

Table 6: Reliability Statistic

Table 4 above shows the reliability of the items using the Cronbach Alpha coefficient is 0.978 in the entire study.

A separate analysis for each dimension is as in table 7 below:

| Variable | Number of Question | Cronbach's Alpha |
|---|---|---|
| Perceived Ease of Use | 5 item | 0.922 |
| Perceived Usefullness | 5 item | 0.914 |
| Perceived Security | 5 item | 0.940 |
| Social Influence | 5 item | 0.887 |

The perceived ease of use factor has an alpha value of 0.922, the perceived usefulness factor has an alpha value of 0.914 and the perceived security factor has an alpha value of 0.940. In addition, the Social Influence factor obtained an alpha value of 0.887.

Cronbach Alpha is a reliability coefficient that shows the relationship of each item in the set of questions. If the alpha value is close to one, then the reliability of the item is high. An alpha value of less than 0.6 is weak and an alpha value of 0.7 is accepted. If the alpha value is more than 0.8 it is good.

**3.8 Summary**

This chapter explains in detail about the methods and methods used based on the study design, study site, population and study sample. Sampling methods and research instruments include data collection and data analysis. To obtain data, the approach used was descriptive using frequency and statistical using correlation. Everything is done in order to obtain valid research results so that the findings of the study are valid and accountable.

# CHAPTER 4

## ANALYSIS AND RESULT

### 4.1 Introduction

This chapter explains the results of the research that has been carried out by the researcher. It is a description of the results of the respondents' response to the distributed questionnaire. The processed data is the data obtained from the questionnaire instrument that was answered in full by the respondents and analyzed using The Statistical Packages For The Social Sciences Version 26 (SPSS/PC). The analysis of this study is divided into two parts, namely descriptive statistics and inferential statistics.

### 4.2 Descriptive Analysis

Descriptive analysis is used to explain the findings of the study related to the background of the respondents from the aspect of gender, race and age distribution. This analysis involves frequency distribution and percentage. While the inferential statistics used are t-test, correlation, and anova to explain the factors that influence the use of electronic wallet payment systems among students in Malaysia. This data analysis was also carried out based on a questionnaire conducted on 113 respondents consisting of semester 6 students at Universiti Teknikal Malaysia Melaka (UTeM).

#### 4.2.1 Gender Demographic

| Gender | | | | | |
|--------|--------|-----------|---------|---------------|--------------------|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Female | 79 | 69.9 | 69.9 | 69.9 |
| | Male | 34 | 30.1 | 30.1 | 100.0 |
| | Total | 113 | 100.0 | 100.0 | |

Table 8 : Gender

The table above shows that the majority of respondents who participated in this study were female students, 69.9% which is 79 respondents, while male respondents were only 30.1% which is 34 respondents. Therefore, it is clear that there are two genders involved in this study.

**4.2.2 Age Demographic**

| Age | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 18 - 20 years old | 2 | 1.8 | 1.8 | 1.8 |
| | 21 - 23 years old | 81 | 71.7 | 71.7 | 73.5 |
| | 24 - 26 years old | 19 | 16.8 | 16.8 | 90.3 |
| | 27 and Above | 11 | 9.7 | 9.7 | 100.0 |
| | Total | 113 | 100.0 | 100.0 | |

Table 9: Age

Table 9 above represents the respondent's age category. The most popular age range in this survey is 21 to 23 years old which is 81 respondents with 71.7%. The second most popular age range is followed by respondents aged 24 to 26 years, which is a total of 19 respondents with 16.8% and further contributed by the age group of 27 and above, of which 11 respondents with 10.%. Next, there are 2 respondents with 1.8% being between 18 and 20 years old.

**4.2.3 Race Demographic**

| Race | | | | | |
|---|---|---|---|---|---|
| | | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | Chinese | 22 | 19.5 | 19.5 | 19.5 |
| | Indian | 12 | 10.6 | 10.6 | 30.1 |
| | Malay | 78 | 69.0 | 69.0 | 99.1 |
| | Others | 1 | .9 | .9 | 100.0 |
| | Total | 113 | 100.0 | 100.0 | |

Table 10: Race

The table above shows that the majority of respondents who participated in this study were Malay students, 78 respondents with 69%, while out of 19.5%, 22 respondents were Chinese. Next, there are 12 respondents from the Indian race with a percentage of 10.6% and the rest are other races as much as 0.9% which is a total of 1 respondents. Therefore, it is clear that the majority of students involved in this study are Malay respondents.

**4.2.4 Aware of The Effects of Using An E-Wallet?**

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No    | 1         | .9      | .9            | .9                 |
|       | Yes   | 112       | 99.1    | 99.1          | 100.0              |
|       | Total | 113       | 100.0   | 100.0         |                    |

Table 11: Aware of the effect of using An E-wallet

Table 11 shows user awareness of the impact of e-wallet use among target respondents. There are 99.1% of the 112 respondents who are aware of the effects of using e-wallets while only 0.9% of the 1 target respondents are not aware of the effects of using e-wallets.

**4.2.5 Do you often use e-wallet?**

|       |       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | No    | 9         | 8.0     | 8.0           | 8.0                |
|       | Yes   | 104       | 92.0    | 92.0          | 100.0              |
|       | Total | 113       | 100.0   | 100.0         |                    |

Jadual 12: Often use e-wallet

Table 12 shows whether users often use e-wallets or not among the target respondents. There are 92% of the 104 respondents who often use e-wallets while only 8% of the 9 respondents do not often use e-wallets.

**4.3 Descriptive Analysis Independent Variables**

**4.3.1 Independent Variable : Perceived Ease of Use (IV1)**

| Perceived Ease of Use | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic |
| Q1: I quickly mastered using the e-wallet service because it is easy to use and saves time. | 113 | 2 | 5 | 4.58 | .594 |
| Q2 : I think the procedures of e-wallet are simple. | 113 | 3 | 5 | 4.58 | .548 |
| Q3 : I think the e-wallet is user-friendly and easy to understand. | 113 | 3 | 5 | 4.55 | .597 |
| Q4 : I think e-wallet service help me to see past transactions easily. | 113 | 3 | 5 | 4.58 | .513 |
| Q5 : I think e-wallet provides various payment channels that ease my online shopping process. | 113 | 3 | 5 | 4.59 | .528 |

**Table 13 : Perceived Ease of Use**

Table 13 indicates the standard deviation and mean of all items under the independent variables perceived ease of use. The highest mean for perceived ease of use is Q5 which is 4.59 while the lowest is Q3 which is 4.55. As for the standard deviation, the highest is Q1 which is 0.597 and the lowest is Q5 which is 0.513.

### 4.3.2 Independent Variable : Perceived Usefulness (IV2)

| Perceived Usefulness | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic |
| Q1: I think e-wallet services are a useful mode of payment. | 113 | 2 | 5 | 4.58 | .578 |
| Q2: I think e-wallet is a practical choice because it makes it easier for me to manage and make payments. | 113 | 1 | 5 | 4.58 | .624 |
| Q3: I think using an e-wallet makes it easier for me to carry out my daily tasks because the flow of money in and out can be tracked easily. | 113 | 3 | 5 | 4.54 | .598 |
| Q4: I think using e-wallet will increase the effectiveness of my payment because not limited to one time or place. | 113 | 2 | 5 | 4.55 | .582 |

| | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|

| Q5: I found that e-wallet service useful in the purchasing process. | 113 | 2 | 5 | 4.62 | .540 |

**Table 14 : Perceived Ease of Use**

Table 14 indicate the mean and standard deviation of all items under the independent variables perceived usefulness. The highest mean for perceived ease of use is 4.62 which is Q5 while the lowest is Q3 which is 4.54. As for the standard deviation, the highest is Q2 which is 0.624 and the lowest is Q5 which is 0.540.

### 4.3.3 Independent Variable : Perceived Security (IV3)

| Perceived Security | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic |
| Q1: I think the risk of misuse of user information is low when using a e-wallet. | 113 | 1 | 5 | 4.31 | .846 |
| Q2: I think e-wallet services secure for conducting my payment transactions. | 113 | 1 | 5 | 4.42 | .729 |
| Q3: I believe e-wallet keep customers information private and confidential. | 113 | 1 | 5 | 4.35 | .821 |
| Q4: I believe the e-wallet will protect users from the risk | 113 | 1 | 5 | 4.39 | .761 |

| | | | | |
|---|---|---|---|---|
| of fraud and financial loss. | | | | |
| Q5: I am satisfied with the security system of e-wallet. | 113 | 1 | 5 | 4.37 | .826 |

Table 15: Perceived Security

Table 15 indicate the mean and standard deviation of all items under the independent variables perceived security. The highest mean for perceived ease of use is Q2 which is 4.42 while the lowest is Q1 which is 4.31. As for the standard deviation, the highest is Q1 which is 0.846 and the lowest is Q5 which is 0.729.

### 4.3.3 Independent Variable : Social Influence (IV4)

| Social Influence | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic |
| Q1: I think my family influenced me to use e-wallet because they consider digital wallet as a good payment method. | 113 | 2 | 5 | 4.50 | .670 |
| Q2: I use e-wallet because people around me always share the benefits of e-wallet. | 113 | 1 | 5 | 4.45 | .768 |
| Q3: I believe my friends always use e-wallets as their payment methods. | 113 | 1 | 5 | 4.57 | .625 |
| Q4: I believe my friend think I will use e-wallets when making a payment. | 113 | 2 | 5 | 4.43 | .766 |
| Q5: I think the media and advertisement affect my intention to use the e-wallet. | 113 | 1 | 5 | 4.45 | .779 |

Table 16: Social Influence

Table 16 indicate the mean and standard deviation of all items under the independent variables social influence. The highest mean for perceived ease of use is 4.57 which is

Q3 while the lowest is Q3 which is 4.43. As for the standard deviation, the highest is
Q5 which is 0.779 and the lowest is Q3 which is 0.625.

## 4.4 Descriptive Analysis Dependent Variables : Acceptance Of Electronic Wallet Payment System

| Acceptance of Electronic Wallet Payment System | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic |
| Q1: I think e-wallets can replace cash-based payment methods because they can support existing payment methods. | 113 | 3 | 5 | 4.57 | .532 |
| Q2: I will always use e-wallet payments during purchasing things. | 113 | 2 | 5 | 4.47 | .757 |
| Q3: I would recommend others to use e-wallet payment for purchases as it is beneficial to users. | 113 | 3 | 5 | 4.55 | .582 |
| Q4: I think i will use e-wallet for my payments in the future. | 113 | 3 | 5 | 4.63 | .503 |
| Q5: I think e-wallet payments would be one of my favourite | 113 | 2 | 5 | 4.55 | .612 |

| technologies       for payment. | | | | | |
|---|---|---|---|---|---|

Table 17: Acceptance of Electronic Wallet Payment System

Table 17 indicate the mean and standard deviation of all items under the dependent variables acceptance of electronic wallet payment system. The highest mean for acceptance of electronic wallet payment system is Q4 which is 4.63 while the lowest is Q2 which is 4.47. As for the standard deviation, the highest is Q2 which is 0.757 and the lowest is Q4 which is 0.503.

**4.5 Correlation Analysis**

| Correlations | | IV1 | IV2 | IV3 | IV4 | DV |
|---|---|---|---|---|---|---|
| IV1: Perceived Ease of Use | Pearson Correlation | 1 | .911** | .742** | .851** | .831** |
| | Sig. (2-tailed) | | .000 | .000 | .000 | .000 |
| | N | 113 | 113 | 113 | 113 | 113 |
| IV2: Perceived Usefulness | Pearson Correlation | .911** | 1 | .721** | .813** | .838** |
| | Sig. (2-tailed) | .000 | | .000 | .000 | .000 |
| | N | 113 | 113 | 113 | 113 | 113 |
| IV3: Perceived Security | Pearson Correlation | .742** | .721** | 1 | .826** | .763** |
| | Sig. (2-tailed) | .000 | .000 | | .000 | .000 |
| | N | 113 | 113 | 113 | 113 | 113 |
| IV4: Social Influence | Pearson Correlation | .851** | .813** | .826** | 1 | .860** |
| | Sig. (2-tailed) | .000 | .000 | .000 | | .000 |
| | N | 113 | 113 | 113 | 113 | 113 |
| DV: Accaptance of Electronic Wallet Payment System | Pearson Correlation | .831** | .838** | .763** | .860** | 1 |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | |
| | N | 113 | 113 | 113 | 113 | 113 |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | |

Table 18: Correlation Analysis

Table 18 shows the Pearson Correlation of the relationship between the independent variables of perceived ease of use, perceived usefulness, perceived security and social influence and the dependent variable of acceptance of electronic wallet payment systems. All correlations were shown to be significant ($p < 0.05$). The Pearson correlation for perceived ease of use is $r = 0.831$. This shows that the perception of ease of use is related to the acceptance of electronic wallet payment systems in a very strong relationship. Next, the relationship between perceived usefulness and acceptance of electronic wallet payment systems is $r = 0.838$ which is a very strong correlation. Moreover, the relationship between security perception and acceptance of

electronic wallet payment systems is shown as r = 0.763, which is a strong correlation. In addition, social influence is the most correlated with r = 0.860. All variables are significant with customer satisfaction because the results analyzed using linear regression are also significant at the <0.001 level.

## 4.6 Regression Analysis

Multiple regression analysis was used in this study in order to examine the impact of independent variables perceived ease of use, perceived usefulness, perceived security, and social influence on the dependent variable acceptance of the electronic wallet payment system.

| Model Summary | | | | |
|---|---|---|---|---|
| Model | R | R Square | Adjusted R square | Std. Error of the Estimate |
| 1 | .895 | .800 | .793 | .25485 |
| a. Predictors: (Constant), mean_IV4, mean_IV2, mean_IV3, mean_IV1 b. | | | | |

Table 19: Model Summary

The results of multiple regression analysis for acceptance of electronic wallet payment system are summarised in table 19, with a correlation coefficient (R) of 0.895 indicating a strong relationship between independent variables in this study. A good link between independent variables and dependent variables is a positive indicator of R. The R square value was 0.800, indicating that the four independent variables can explain 80 percent of the variance in acceptance of electronic wallet payment system.

| ANOVAª | | | | | | |
|---|---|---|---|---|---|---|
| | Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 28.128 | 4 | 7.032 | 108.272 | .000ᵇ |
| | Residual | 7.014 | 108 | .065 | | |
| | Total | 35.142 | 112 | | | |
| a. Dependent Variable: mean_DV | | | | | | |
| b. Predictors: (Constant), mean_IV4, mean_IV2, mean_IV3, mean_IV | | | | | | |

Table 20 : Anova

From Anova table, it showed a probability level of value 0.000. However, the probability 0.000 lower than 0.05. That mean the multiple regression models can be used to predict the perceived ease of use, perceived usefulness, perceived security and social influence on acceptance of electronic wallet payment system. To summarize, all independent variables significantly affect the acceptance of electronic wallet payment system.

**Coefficientsᵃ**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | .452 | .225 | | 2.010 | .047 |
| | Perceived Ease of Use | .068 | .131 | .061 | .517 | .606 |
| | Perceived Usefulness | .378 | .113 | .357 | 3.353 | .001 |
| | Perceived Security | .077 | .057 | .103 | 1.335 | .185 |
| | Social Indluence | .385 | .088 | .433 | 4.384 | .000 |
| a. Dependent Variable: mean_DV | | | | | | |

Table 21 : Coefficient

**Hypothesis 1**

According to the findings, there is a positive relationship between perceived ease of use factors and acceptance of electronic wallet payment system. Perceived ease of use was rejected because has a significant value of 0.606, which is more than 0.05.

**Hypothesis 2**

Based on the results, the perceived usefulness variable has a significant impact on e-wallet acceptance. The significant value of perceived usefulness is 0.001 which is less than 0.05. This indicates that the hypothesis is accepted. This show that there are positive relationship between the perceived usefulness factor and the acceptance of the electronic wallet payment system. This also shows that e-wallet is very useful for users among students.

**Hypothesis 3**

The table above shows that perceived security have a significant value of 0.185. This show a significant value of perceived security is more than 0.05. Hence, there is no significant relationship between perceived security and acceptance of e-wallet.

**Hypothesis 4**

The results above show that there is a significant relationship between social influence and acceptance of e-wallet. The significant value of social influence is 0.000 which is less than 0.05. This shows that social influence has a significant relationship with acceptance of e-wallet. This indicates that the hypothesis is accepted.

**4.7 Summary**

This chapter has presented the findings related to the demographics of the respondents and the entire related analyzes to prove the hypothesis that was built at the initial stage. All research questions in chapter one have been discussed based on empirical data and information collected quantitatively. The results obtained through descriptive, correlation and anova are shown in this chapter to make it easier for the reader to understand the overall results of this study.

CHAPTER 5

DISCUSSION AND CONCLUSION

**5.1 Introduction**

This chapter 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 focus of the discussion is related to the factors that
influence the use of e-wallets among students in Malaysia. As a result of this
discussion and conclusion, the researcher made some suggestions that are considered
appropriate and reasonable and can be implemented by other researchers who are
interested in doing research on the factors that affect the use of e-wallets among
students in Malaysia.

**5.2 Discussion on Finding**

This study will provide an overview of the factors that influence the use of e-wallets
among students. The findings of this study explain factors such as perceived ease of
use, perceived usefulness, perceived security and social influence that have a
relationship with the acceptance of e-wallet.

**5.2.1 To identify the factor of using electronic wallet payment systems among
students.**

To identify the factors that influence the use of e-wallets among students, the
researcher conducted a questionnaires with a sample of 103 respondents or e-wallet
users among students at the Universiti Teknikal Malaysia Melaka (UTeM). SPSS
analysis version 27 was used to calculate statistical results.

The factors used in this study are perception of ease of use, perception of
usefulness, perception of security, and social influence. According to previous studies,
all of these independent variables are factors to study user acceptance of e-wallets. For
this research, all those factors influence the acceptance of electronic wallet payment
systems. But things like the perception of ease of use and the perception of security

have less power for the adoption of e-wallet use. Respondents feel that e-wallets are not easy to use because e-wallets require internet access to access them. Furthermore, respondents felt that e-wallets do not have good security features because they feel that personal data is not stored securely. This is because respondents are still skeptical and suspicious of the digital payment system, due to worry and fear of online intrusions resulting in losses.

Objective 1 is to determine the factors that influence the use of e-wallet among students. There is a significant relationship between perceived usefulness and acceptance of e-wallet because the significant value of perceived usefulness is 0.01 which is less than 0.05. This shows that the hypothesis is accepted because an ewallet is an electronic device or software that allows users to make transactions electronically or digitally. It's a faster way to send or receive money or make payments in online and offline stores.

## 5.2.2 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.

As for objective 2, which is to analyze the relationship between the factors of ease of use, usefulness, security and social influence that influence the use of electronic wallet payment systems among students by looking at the data that has been created in SPSS. The data seen is from the coefficient that shows the independent variable whose perceived usefulness reaches 0.001 and the social influence achieved <0.000 has a good relationship with the acceptance of e-wallet which is the dependent variable. Two of these four independents got significance less than 0.05.

For the other independent variables that are considered easy to use get a value of 0.606 and the perception of security gets a value of 0.185, getting a high significance and exceeding 0.05 causing the relationship between these two independent variables with the acceptance of the dependent variable of e-wallet has no relationship. So there is no significant relationship between the perception of ease of use and the perception of security with the acceptance of e-wallets. Respondents feel that the perceived ease of use factor is not true because its use is limited and there are some premises that do not have an e-Wallet payment system. This causes respondents to feel that e-wallets

are difficult to use. In addition, the security factor is also perceived as bad because the respondents feel that their data is not safe from the malicious intentions of hackers.

### 5.2.3 To evaluate the most significant factors that influencing the use of electronic wallet payment systems among students.

All correlations were shown to be significant ($p < 0.05$). The Pearson correlation for perceived ease of use and acceptance of e-wallet is $r = 0.831$. This shows that perceived ease of use and acceptance of e-wallet have a very strong relationship. Next, the relationship between perceived usefulness and acceptance of e-wallet is $r = 0.838$ which is a very strong correlation. In addition, the relationship between perceived security and acceptance of e-wallet shows $r = 0.763$ which is a strong correlation. In addition, social influence is the most correlated with $r = 0.860$. All variables are significant with acceptance of electronic wallet payment system as the results analyzed using linear regression are also significant at the <0.001 level. Perceived usefulness has significant .001 and social influence has significant .000. The most significant factor is social influence.

From the data found after being done in SPSS, the independent variable that is considered trust has a high correlation between the other independent variables with 0.860 and is followed by perceived usefulness of 0.838, then perceived ease of use of 0.831 and finally perceived security with a correlation of 0.763.

Based on table 18, the most significant factor is social influence with 0.860 which shows a strong relationship in the correlation table. In addition, in the reliability test conducted at the beginning of the research with a total of 30 respondents found that perceived security is the highest factor with Cronbach's alpha reaching 0.940 followed by perceived ease of use with 0.922 and both are in a good reliability position.

## 5.2   Contribution of Studies

### 5.3.1 Theorethical Contributions

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. In order to anticipate consumer intention to use e-wallets, no empirical study of the combined factors (perception of ease of use, perception of non-contact, and perceived social impact) has been done to far, particularly in Malaysia during the Covid-19 pandemic.

### 5.2.2   Practical Contribution

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 results of this study also imply that managers should be aware of the effects of student e-wallet use factors, as a number of elements are discovered to be pertinent in determining e-wallet use.

Additionally, as the COVID-19 pandemic spreads, cashless digital payments are becoming increasingly popular. It is hoped that it will continue to grow and eventually spread to the entire community. This study looks at what motivates students to use e-wallets. New factors are proposed, such as contactless perceptions, intentions to use e-wallets during the Covid-19 outbreak, and greater emphasis on public perception of e-wallets. The empirical data in this study can help e-wallet creators in determining the cause of the unexpected increase in e-wallet usage. To ensure that users continue to use e-wallets, e-wallet founders need to be more attentive and improve it. Finding the cause of e-wallet use is very important. Therefore, identifying the factors of e-wallet use is very important to understand the customer's perspective so that any important decision can be made.

**5.4 Limitation**

The fact that the questionnaire was distributed online and the researcher never contact to any of the respondents limits this study. The dissemination of surveys face-to-face should be an option for future investigations. The technology acceptance model theory is another theory applied in this investigation. It is advised that future researchers use different theories like the theory of planned behaviour and the theory of reasoned action to see if they can quantify the factors of e-wallet use more accurately than the TAM theory.

**5.5 Recommendation**

The findings of this study confirm previous studies and some initial assumptions about the factors that influence the use of e-wallets among students in Malaysia. However, there are findings that require further research to further increase its validity and find other factors that influence it. Among the further studies that are felt to be necessary are as follows:

The study conducted by this researcher examines the factors that influence the use of e-wallets among students in Malaysia using quantitative methods. The respondents used by the researchers in this study were 160 students only and involved a university from a district in Malacca. It would be very meaningful if further research could be done using a larger sample size and involving all universities in Melaka. In fact, the research conducted is based on the students' self-reports only. Therefore, it is suggested that future research may involve obtaining information based on student reports.

This study was conducted at a university, the Universiti Teknikal Malaysia Melaka (UTeM). Therefore, it is suggested that further research should be carried out in public higher education institutions in the state of Malacca to confirm the findings of the study. A study will be more perfect if it uses various levels and research methods. Therefore, it is more meaningful if further studies can combine qualitative methods to obtain more in-depth information about the factors that influence the use of e-wallets among students in Malaysia which could not be covered in previous studies.

The study that has been conducted by this researcher only examines the factors that affect the use of e-wallets among students in Malaysia only. So the results are

limited because they can only be seen through the factors that influence the use of e-wallets among students in Malaysia and cannot be seen from other angles. Therefore, it is suggested that further research can study other things about the use of e-wallets among students in Malaysia such as studying the types of e-wallets used by students and the effects of using e-wallets among students in Malaysia.

## 5.6 Conclusion

This study, conducted at Universiti Teknikal Malaysia Melaka, intends to investigate the factor tha influencing the use of e-wallet among students in Malaysia at a university in Melaka, namely Universiti Teknikal Malaysia Melaka (UTeM). In conclusion, this study's findings revealed the existence of factors that influence the use of e-wallets among students. Additionally, the study's findings indicate that consumer behavioural intentions are significantly influenced by perceived ease of use, perceived usefulness, perceived security and social influence. This demonstrates that the majority of respondents use e-wallets frequently. The study's findings, nevertheless, are modest. Nevertheless, this study got a lot of positive feedback from other sources.

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**APPENDIX**

**Section A**

**Instructions:** Please answer the questions below by ticking (/) the relevant box or fill in the blanks.

1. Gender:

   Male [   ]                          Female [   ]

2. Age

18- 20 years old [   ]     21- 23 years old [   ]     24- 26 y[   ]old     27 [   ]
Above

3. Race

Chinese [   ]          Indian [   ]          Malay [   ]          Others [   ]

4. Are you aware of the effects of using an e-wallet?

   Yes [   ]                    No [   ]

5. Do you often use e-wallet?

   Yes [   ]                    No [   ]

**APPENDIX**

**SECTION B**

**I. PERCEIVED EASE OF USE**

**Instructions** : Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

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

| Bil | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | I quickly mastered using the e-wallet service because it is easy to use and saves time. | | | | | |
| 2 | I think the procedures of e-wallet are simple. | | | | | |
| 3 | I think the e-wallet is user-friendly and easy to understand. | | | | | |
| 4 | I think e-wallet service help me to see past transactions easily. | | | | | |
| 5 | I think e-wallet provides various payment channels that ease my online shopping process. | | | | | |

## II. PERCEIVED USEFULNESS

**Instructions** : Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

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

| Bil | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | I think e-wallet services are a useful mode of payment. | | | | | |
| 2 | I think e-wallet is a practical choice because it makes it easier for me to manage and make payments. | | | | | |
| 3 | I think using an e-wallet makes it easier for me to carry out my daily tasks because the flow of money in and out can be tracked easily. | | | | | |
| 4 | I think using e-wallet will increase the effectiveness of my payment because not limited to one time or place. | | | | | |
| 5 | I found that e-wallet service useful in the purchasing process. | | | | | |

## III. PERCEIVED SECURITY

**Instructions** : Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

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

| Bil | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | I think the risk of misuse of user information is low when using a e-wallet. | | | | | |
| 2 | I think e-wallet services secure for conducting my payment transactions. | | | | | |
| 3 | I believe e-wallet keep customers information private and confidential. | | | | | |
| 4 | I believe the e-wallet will protect users from the risk of fraud and financial loss. | | | | | |
| 5 | I am satisfied with the security system of e-wallet. | | | | | |

## IV. SOCIAL INFLUENCE

**Instructions**: Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

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

| Bil | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | I think my family influenced me to use e-wallet because they consider digital wallet as a good payment method. | | | | | |
| 2 | I use e-wallet because people around me always share the benefits of e-wallet. | | | | | |
| 3 | I believe my friends always use e-wallets as their payment methods. | | | | | |
| 4 | I believe my friend think I will use e-wallets when making a payment. | | | | | |
| 5 | I think the media and advertisement affect my intention to use the e-wallet. | | | | | |

**SECTION C : ACCEPTANCE OF ELECTRONIC WALLET PAYMENT SYSTEM**

**Instructions**: Please tick (/) in the space you think is most appropriate based on the following guidelines. Mark only one answer for each question.

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

| Bil | | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 1 | I think e-wallets can replace cash-based payment methods because they can support existing payment methods. | | | | | |
| 2 | I will always use e-wallet payments during purchasing things. | | | | | |
| 3 | I would recommend others to use e-wallet payment for purchases as it is beneficial to users. | | | | | |
| 4 | I think i will use e-wallet for my payments in the future. | | | | | |
| 5 | I think e-wallet payments would be one of my favourite technologies for payment. | | | | | |

# APPENDIX

| Task/ Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Briefing on FYP | | X | | | | | | | | | | | | | |
| Fomulating Title | | X | X | X | X | | | | | | | | | | |
| Topic Confirmation | | | | | X | X | X | | | | | | | | |
| Formulating research objective and research question | | | | | | | X | X | X | X | | | | | |
| Find sources related chosen topic and reading article journal | | | | | | | X | X | X | X | X | | | | |
| Identify the proble statement | | | | | | | X | X | X | X | X | | | | |
| Writting Chapter 1 | | | | | | | X | X | X | X | X | X | | | |
| Writting Chapter 2 | | | | | | | X | X | X | X | X | | | | |
| Writting Chapter 3 | | | | | | | | | | | | X | X | | |
| Writting overall report and presentation slide | | | | | | | | | | | | | X | X | |
| Report presentation | | | | | | | | | | | | | | X | X |
| Submission | | | | | | | | | | | | | | | X |

**APPENDIX**

| Task/ Week | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Continuation on FYP 2 | | ■ | | | | | | | | | | | | | |
| Forming & developing constructions of measurement for Questionnaire Survey | | ■ | ■ | ■ | | | | | | | | | | | |
| Submit Questionnaire for checking | | | | | ■ | ■ | ■ | ■ | | | | | | | |
| Correction questionnaire | | | | | ■ | ■ | ■ | ■ | | | | | | | |
| Forming &developing Questionnaire survey using Google Form | | | | | ■ | ■ | ■ | ■ | | | | | | | |
| Amendment on FYP report | | | | | | | | | | | | | | | |
| Proceed to data collection | | | | | | | | | | | | | | | |
| Finishing data collection (385 respondents) | | | | | | | | | | | | | | | |
| Extract data and key-in at SPSS | | | | | | | | | ■ | ■ | ■ | | | | |
| Writing overall report and presentation slide | | | | | | | | | | | ■ | ■ | ■ | ■ | |
| Report presentation | | | | | | | | | | | | | | ■ | ■ |
| Submission | | | | | | | | | | | | | | | ■ |