PREDICTING WORKING ADULTS' INTENTION TO USE E-WALLET IN MALAYSIA: A PERSPECTIVE OF BEHAVIOURAL BELIEF

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DECLARATION

We hereby declare that:

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

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

(3) Equal contribution has been made by each group member in completing the FYP.

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LIST OF ABBREVIATIONS

E-Payment	Electronic Payment
E-Wallet	Electronic Wallet
T	Trust
A	Attitude
PEOU	Perceived Ease of Use
PU	Perceived Usefulness
PS	Perceived Securities
ITU	Intention to Use
MCO	Movement Control Order
TRA	Theory of Reasoned Action
HTMT	Heterotrait-Monotrait Ratio of Correlation
PLS-SEM	Partial Least Square Structural Equation Modeling
AVE	Average Variance Extracted

Abstract

In this era of technological revolution, e-wallet had become one of the main payment methods that were used around the world. However, the usage of this service is still considered moderately low in the context of Malaysia. Up until now, there were limited studies that can be found to examine the intention to use e-wallet for working adults in Malaysia. Hence, this paper aims to determine the effect of behavioural beliefs on their influence towards the intention to use e-wallet of working adults in Malaysia. In this study, the behavioural belief factors such as perceived usefulness, perceived ease of use, perceived security, and trust is examined to identify their relationship with working adult's intention to use e-wallet, with attitude as a mediating variable. The Theory of Reasoned Action (TRA) is used to construct the conceptual framework. This paper was done in hoping that it will provide as a benchmark to the e-wallet literature by identifying the effect of behavioural belief towards working adults' intention to use e-wallet, with attitude as the mediator.

CHAPTER 1: RESEARCH OVERVIEW

1.1 Background of Study

Cash was first adopted by China as a payment method from 960 anno domini (Bellis, 2015). Even though cash is still the most acceptable from of transaction until today, it still has its limitations that makes user to have a feeling of inconvenience. For example, when someone is making payment using cash, they need to have the sufficient amount of cash on hand. Otherwise, they would have to withdraw cash from the automated teller machine or financial institution. Furthermore, fake money is hardly possible to detect quick enough during the transaction process, which the cash users are more likely to face a difficulty when they are doing transaction. Lastly, cash is untraceable if it is stolen or when we lose it. In the perspective of accounting cash in hand transactions which are deliberately concealed are not shown in books and hence remain untraceable. For example, an act made by someone who wanted to avoid taxes.

The e-payment began in the 1870s when Western Union debuted the electronic fund transfer in 1871. As compared to cash, e-payment provides convenience to users as their payment history could be traced. In the 20th century, the third industrial revolution began, with the information technology and computer technology sector flourished, and more people are gradually accepting the use of internet including making transaction using e-payments.

E-wallet is a form of e-payments. It is a prepaid account that provide users a storage for their money, and also to secure keep their different bank accounts along with other personal information. It is a platform of collecting data of individuals' historical transactions on the e-wallet. Service providers could obtain information about their consumers' behaviour and habit in order to decide a better strategy to attract those potential customers to use e-wallet. The use of e-wallet could reduce the risk of losing money, make the process of exchanging the foreign currency when traveling overseas easier and preventing fake money in transactions.

The cashless society is becoming a trend in this era, but Malaysian still needed some time for them to accept this trend. But from the policy that the Malaysian government implemented,

which they intend to encourage the popularization of e-wallets. The biggest advantage of the popularization of e-wallets to society is that it can improve the efficiency of the entire society. All the transaction can done by through a phone scanner, instead of spending time in waiting for change. The government are also able to track the money in order to avoid corruption, smuggling, crime and tax evasion.

The use of e-wallet could allow people to make payments when they are travelling overseas even when the foreign currency is different with their home currency. For example, when they travel from China to those countries that accept WeChat Pay or Alipay. They would not have to face the problem of exchanging currency since they can change the currency mode in the mobile application. For example, tourist from China to Malaysia are able to exchange renminbi to Malaysian ringgit with just a few clicks. For those merchants that accepts e-wallet in foreign countries, they could also benefit as they can increase their transaction through foreign tourists.

Furthermore, the use of e-wallet could reduce the amount of cash on hand. Apart from that, users can also reduce their risk of losing as due to the entire process of transaction being completed through online. This could cause thieves to be unable to steal money as e-wallet requires a certain verification before making transactions. Even if the thief had gotten his hands on a user's mobile phone, they do not have any way of getting the money out in the absence of the user verification.

Next, the advantage of using e-wallet is that it could reduce the amount of fake monies in the market. As the e-wallet system is processed by the internet, if the hackers are able hack into the system, the money is still detectable by the system. Moreover, the Central Bank of Malaysia had issued the license of e-wallet to those e-wallet providers, so that they are able to provide their users the feeling of safe and secure.

There were many countries that are adopting e-wallet in order to achieve a cashless society. For example, 87% of the population in Sweden had adopted e-wallet as their main form of payment, leaving only 13% of the total population that are still relying on cash. The country is also expected to be the first country to achieve a cashless society by 2023 (Fourtané, 2019). More than 80% of retail transactions in Sweden along with the other Nordic countries including Finland, Norway, Denmark, and Iceland were conducted electronically. In addition, China is

the largest e-commerce market in the world with 11 times more mobile payments as compared to the United States with 49.6% of the total population uses a form of e wallet (EMarketer, 2019). Global countries are more likely to achieving cashless society due to the benefits of cashless society that brings efficiency and effectiveness.

To promote the use of e-wallet among Malaysians, the government had launched the policy "RM30 e-Tunai initiative" and "Economic Recovery Plan" by crediting RM50 into account for e-wallet users who are above 18 years old with annual income lower than RM100, 000. In 2020, the government had further encouraged the use of contactless payment and helped health authorities in the effort of reducing physical contact on encountering the issue of the covid-19 pandemic (Wong, 2020). For example, the launch of "e-Tunai " and "Economic Recovery Plan" could be able to implemented through e-wallet applications.

Due to Malaysia's implementation of movement control order (MCO), which had forced the public to practice the cashless transaction method, and over time they are becoming more familiar with it. Affected by the COVID-19 pandemic, government's action, movement control orders, and global economic panic, Malaysia's economy is basically stalled, while e-commerce are become more favoured by Malaysians trapped at home. Under this situation, more and more consumers are beginning to meet their daily consumption needs through online shopping. E-wallet payment methods are not only convenient, but can also prevent the spread of virus, Malaysian are becoming more dependent on cashless services and the acceptance are also increasing. Although some people still prefer cash, but more people are getting accustomed to paying utility fee, food, insurance, tax and groceries with a cashless alternative during the MCO. Government support and the pandemic have assisted in the rapid development of Malaysia's e-payment industry.

1.2 Problem Statement

Although there are 40% of e-wallet usage in Malaysia and is leading in terms of number of usage when comparing to other Southeast Asia countries (Naharul, 2020). However, that is considered as moderately low when compared to the high usage country such as Sweden where they have up to 87% of the population using e-wallet. Moreover, even when Malaysia is leading

other Southeast Asia countries in terms of e-wallet usage, which shows a good signal that Malaysia are getting closer to achieving cashless society, but this is still insufficient enough to achieve cashless society completely.

One of the main factors that contributes to this phenomenon in the nation is behavioural belief especially among working adults. Precisely, their behavioural belief in terms of their perceived ease of use, perceived usefulness, perceived security and trust is likely to cause them to have a lack of intention in performing their daily transaction through e-wallet. Most Malaysians who use smart phones are working adults, especially those 20-49 years old who are likely to execute their transaction by using e-payment through their respective mobile phones. In 2017, those are below 20 years old, 20-34 years old, 35-49 years old, 50-64 years old and above 65 years old are found to be associated with a large proportion of owning a smartphone with 86.9%, 84.8%, 68%, 53.5% and 28.6%, respectively (Müller, 2019). Since most 20-49 years old are in the labor force, they need to rely on mobile phones to extend their networks in their careers. After some time, their dependency on mobile phones tend to make them to feel convenient, thus indirectly making them adopt this usage in their daily transactions.

For Malaysians, working adults have a low intention to adopt e-wallet because they are more accustomed to using cash in making daily transactions. Many consumers still prefer to have cash payment rather than e-wallet payment because holding cash feels more secure (Subaramaniam, Kolandaisamy & Jalil, 2020). As a result, they feel more secure with the concept of cash transactions. This causes whole transaction process to take three to four trips back and forth during the whole process which drags down the efficiency. For example, food hawkers have to return to their stalls and look for change after delivering their food to the customers who paid in cash. This is due to they are lacking the technological knowledge and understandings about e-wallet; consumers might worry that their account would be hacked and steal their money since e-wallet able to connect with bank account for instant transfer.

There were lesser merchants that accept e-wallet payments from their customers. Among 41 providers of e-wallet platforms, only several of the platforms were accepted by the few of the merchants. Moreover, different merchants tend to prefer different platforms, which lead to users have to prepare more than one e-wallet application in their mobile phones and store their money into each e-wallet application just so that they are able to pay using e-wallet in different

places. Due to this, users could not complete their transactions using e-wallet if they do not have the specific e-wallet application in that particular shop. As a result of a low acceptance among merchants, 27% of respondents would not adopt e-wallet in their transactions (Nielsen, 2019). Moreover, E-wallets are not popular in some rural area, and there are less or not authoritative e-wallet platform accepted by merchants. Consumers must use cash and e-wallets alternately when spending, which causes inconvenience to consumers. For example, night market and food hawker do not accept e-wallet as the method of transaction, making users are more likely to feel more convenient by using cash for their payments, and ultimately increases the difficulty in building consumers' habit of using e-wallet as a transaction method.

Besides that, some areas in Malaysia are found to have a lack of facility and coverage in supporting the connectivity of internet. As a consequence, some transaction could not be executed smoothly and efficiently as the use of e-payment relies heavily on the speed and stability of internet. Unstable internet connection could not allow transactions to be executed smoothly, thereby leading to incorrect billing data recorded in the system (Subramaniam & Nirman, 2016). The network coverage of Malaysia is not extensive, when the network speed is not smooth or unstable, which makes it difficult for e-wallets to be universal. Hence some of the rural areas with low internet coverage will also affect the e-wallet user's experience and the intention to use e-wallet.

Above mentioned problems motivate us to choose whether working adults' behavioural belief could influence their intention to use e-wallet payment through their attitude. To investigate which variables are significant influence working adults' behavioural belief could influence their intention to use e-wallet payment through their attitude. Because If don't improve the nature of the problem of e-wallet, even work hard to promote it, e-wallet will not be popularizing and people hard enjoy the advantage of e-wallet.

1.3 Research Objectives

To examine whether working adults' behavioural belief could influence their intention to use e-wallet payment.

1.3.1 Recommendation for Future Studies

- To investigate the relationship between perceived usefulness and intention on using E-wallet among working adults in Malaysia

- To investigate the relationship between perceived ease of use and intention on using E-wallet among working adults in Malaysia

- To investigate the relationship between perceived security and intention on using E-wallet among working adults in Malaysia

- To investigate the relationship between trust and intention on using E-wallet among working adults in Malaysia

- To investigate the relationship between attitude and intention on using of E-wallet among working adults in Malaysia

1.4 Research Question

How does working adults' behavioural belief could influence their intention to use e-wallet payment through their attitude?

1.4.1 Specific Research Questions

- How does perceived usefulness significantly affect the intention of using E-wallet among working adults in Malaysia?

- How does perceived ease of use significantly affect the intention of using E-wallet among working adults in Malaysia?

- How does perceived security significantly affect and intention affect using E-

wallet among working adults in Malaysia?

- How does trust significantly affect intention on using E-wallet among working adults in Malaysia?

- How does attitude significantly affect intention on using of E-wallet among working adults in Malaysia?

1.5 Significance of Study

Our findings are expected to be used as a reference for the Malaysian government in stimulating working adults' intention to use e-wallet. For example, the government could redesign appropriate policies in encouraging people to use e-wallet, increasing efficiency of transactions between customers and small business owners in Malaysia. Apart from that, the transparency of transaction in business such as fraudulent transaction could be easily identified by e-wallet provider. This also could benefit to e-wallet providers by increasing their customer base. This study is therefore significant for entrepreneurs that have an interest in developing e-wallet service in Malaysia. This research provides them with comprehensive e-wallet details and can help them assess consumer adoption and growth opportunities in Malaysia.

Entrepreneurs should use this study as a guide when determining whether to run their businesses and provide e-wallet service. The results of this study will also enable entrepreneurs who are planning to provide e-wallet services to understand the key factors influencing the growth of e-wallet, including perceived usefulness, perceived ease of use, perceived security and trust. Therefore, entrepreneurs may rely on these reasons to make progress on e-wallet and increase the willingness of their consumers to use e-wallet for payment purposes.

CHAPTER 2: LITERATURE REVIEW

2.0 Overview

In this chapter, existing studies that support relevant theoretical framework are discussed to outline conceptual framework and hypothesis development.

2.1 Underlying Theories

Fishbein and Ajzen (1975) propose Theory of Reasoned Action (TRA), positing that behavioral intentions are a function of salient information or beliefs about the likelihood that performing a particular behavior leads to specific outcome. They further state that the attitude is populated to be the first antecedent of behavioral intention. They define that an attitude is “an individual's positive or negative feelings, also called as an evaluative effect about performing the target behavior”. An individual would intend to perform a certain behavior when their attitude toward the behavior is positive. They find that an individual's beliefs about the consequences of performing the behavior or behavioral beliefs could determine an individual's attitudes. In TRA, intention, attitude and behavioral beliefs are the main factors to be considered. To measure behavioral beliefs, they consider perceived usefulness, perceived ease of use, perceived security and trust as indicators. Moreover, we found the TRA as a much suitable model to discuss our topic as there are more aspects to be considered from several perspective. Also, we believe that the behavior is what affects the final intention to use a certain product which ultimately leads to our decision in using the Theory of Reasoned Action.

2.2 Review of variables

2.2.1 Perceived Usefulness

The meaning for the word usefulness is the quality or fact of something being useful. Perceived usefulness in this case is stated by Davis (1989) as the degree to which persons believe that using a particular system would enhance their job performance. Users believe that a system with high perceived usefulness improves their work performance. The author states that perceived usefulness is the fundamental and distinct construct that could influence decisions of using information technology. Based on the empirical study, the author finds that perceived usefulness positively influences attitude to adopt e-wallet when customers see the usage of e-wallet to be advantageous compared to cash.

Venkatesh, Morris and Davis (2003) finds perceived usefulness to be significant to behavioral intention and is one of the factors to determine intention to use a particular system. Mun and Hwang (2003) find that there exists a positive relationship between perceived usefulness and behavioral intention. Davis, Bagozzi and Warshaw (1989) and Venkatesh, Thong and Xu (2012) find that consumers' perceived usefulness provides a strong influence on their attitude in using e-payment. Park, Rhoads, Hou and Lee (2014) hypothesize that perceived usefulness could be used to directly predict behavioral intention of using technologies. Yap and Ng (2019) stated that "by knowing how Malaysians perceived usefulness on mobile payment, it will ultimately lead to an understanding of e-wallet adoption", which indicated the importance of perceived usefulness in the context of e-wallet. Adapting from these existing findings, the following Hypothesis 1 is formed.

Hypothesis 1: Users' perceived usefulness positively influences their attitude in using e-payment.

2.2.2 Perceived Ease of Use

As for the perceived ease of use, Davis (1989) defines it as "the degree to which a person believes that using a particular system would be free from effort". Rahmi & Adhy (2019) found that perceived ease of use is negative relationship with behavioural intention to use e-wallet.

Abrazhevich (2001) mentions that if the layout is presentable, customers would get more drawn to the e-payment program. If consumers could easily use and understand the program, they are likely to use e-wallet. Saadé and Bahli (2005) state that the role of perceived ease of use is important when using a complex system.

In Malaysia, Guriting and Ndubisi (2006) perform their study and reveal that consumers' perceived ease of use in Malaysia provide a positive connection with consumers' behaviour. Users' adoption of a program could be assessed by their ease of use in a given device. In viewing the use of online service technologies as being simple and user friendly, Al-Maroof and Al-Emran (2018) find that customers' perceived ease of use significantly affects consumers' attitude. The reason to support their finding is consumers notice that the use of e-wallet provide convenience to them. As a result, they tend to have a positive attitude towards adopting the e-wallet. From an article by Leong, Tan, Puah and Chong (2020) "the perceived ease of use reflects consumer's belief on how the new technology or system emerged to change the way the consumers act and experience". Due to this, the following Hypothesis 2 is proposed:

Hypothesis 2: Users' perceived ease of use positively influences their attitude in using e-payment.

2.2.3 Perceived Security

The security is the state of being free from danger or threat. For perceived security, Flavián and Guinalíu (2006) define it as the subjective probability for consumers to believe their personal information in terms of private and monetary could be stored during their transaction and storage. Shin (2010) states that consumers' perceived security would reflect their perception about whether a certain system is safely used or not in conducting their transactions. The author also reveals the importance of perceived security in influencing consumers' behavioral intention to adopt a mobile payment. He also states that it is important to establish measures of perceived security. For example, consumers who have high perceived security are more likely to adopt e-wallet.

Morosan (2014) defines that perceived security is based on individuals' perceptions of security rather than objective metrics of security. Oliveira, Thomas, Baptista & Campos (2016) and Wu and Lee (2017) find that individuals' perceived security would positively affect their intention to use mobile payment systems.

Oney, Guven and Rizvi (2017) find that perceived security has negative and insignificant relationship with electronic payment system. Taufan. A., & Yuwono. R.T. (2018) result showed that the hypothesis of perceived security affect intention to use e-wallet is rejected.

Furthermore, Chawla and Joshi (2019) define perceived security as the extent to which users believe that making payment could secure their transactions online. They also state that perceived security is consumers' feeling about their personal credentials could be stored confidently when they undertake online transactions. Tan, Aziz, Ong, Goh, Lim, Saadon and Chooi (2020) stated that "if consumers perceive e-payments benefit them and combined with perception on heightened security features, it is natural to expect that the attitude towards using e-wallet will be positive". Overall, these studies demonstrate that perceived security should positively influence attitude toward the use of e-wallet. As a result, the following Hypothesis 3 is formed.

Hypothesis 3: Users' perceived security positively influences their attitude in using e-payment.

2.2.4 Trust

Based on the Cambridge English Dictionary, trust is "the firm belief in the reliability, truth, or ability of someone or something". Suh and Han (2002) define ability, integrity and benevolence as the three dimensions for trust. Ability means that mobile service providers have knowledge and skills to fulfil their tasks. Integrity means that mobile service providers keep their promises, while benevolence means that mobile service providers are concerned with the interests of users, not just their own interests. Trust emerged as an important factor in determining user attitude and intention for adopting similar technologies.

According to Pavlou (2003), trust is ''a defining feature of the major social and economic interactions in which uncertainty is present''. Furthermore, the trust is also built from the reputation. Meanwhile, reputation is the faith in the transaction environment. Lu, Yang, Chau and Cao (2011) find that trust is a subjective belief for parties to fulfil their obligations according to the expectation.

According to Belanche, Casaló and Guinalíu (2012), someone who has trust could increase their outcome expectations and attitudinal beliefs based on their benefits of a trustworthy relation. In other words, trust perception could allow individuals to have a positive sentiment and predisposition toward the use of e-payment. Yang, Pang, Liu, Yen and Tarn (2015) make a comparison between traditional payment and e–payment systems, they find that the trust level in the e–payments is high, leading to many consumers would rather use the e–payment channel. Nguyen and Huynh (2017) stated that proved that the hypothesis of trust have positive effect on e-wallet adoption is supported. Wijayanthi (2019) found that user's perceived trust higher, then higher the behavioural intention to use e-wallet. Then, a positive relationship between trust and attitude can be supported based on the following hypothesis.

Hypothesis 4: Users' trust positively influences their attitude in using e-payment.

2.2.5 Attitude

Attitude is a subtle way of thinking or feeling about study. Davis (1989) states attitude is an individual's positive or negative feelings about performing the target behavior. However, Vankatesh et al. (2003) states attitudes toward using technology do not contribute to a significant influence on behavioral intention. Chawla and Joshi (2019) find that attitudes could positively influence the intention in using e-wallet. Sharma, Malik and Suresh (2019) state that incentives are an important factor in influencing consumers' attitude towards their adoption of wallet applications. Sathish, Sermakani and Sudha (2020) state that users' trust is the main determinant that directly affects their satisfaction and intention of adopting a mobile wallet. To support attitude could positively influence intention to use, the following hypothesis is formed.

Hypothesis 5: Users' attitude positively influences their intention in using e-payment

2.3 Proposed Theoretical Framework

Based on these existing hypotheses, the theoretical framework regarding the influence of users' behavioural beliefs towards the intention to use e-payment is shown in the figure below

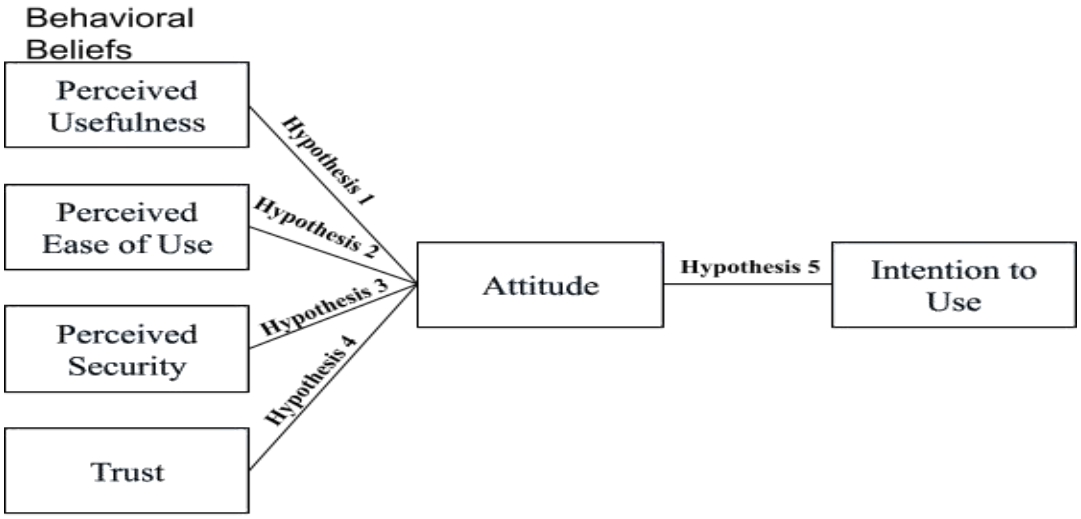

Figure 2.1: Theoretical framework of users' behavioural belief in influencing their intention to use e-payment. Adopted from the study by Ting, Yacob, Liew and Lau (2016).

Figure 2.1 was adopted from the theory of reasoned action which we used as the baseline of our study. However, the past studies that used this framework place their focus in the e-payment only, their targeted respondents were also not specified. Which we then are able to configured this framework by specifying the form of e-payment to e-wallet and adding working adults as out target respondents, this allowed us to create our conceptual framework.

2.4 Proposed Conceptual Framework

Based on the TRA model by Fishbein and Ajzen (1975), our study adopts the existing theoretical framework that consists of behavioural belief, attitude and intention to use. For this framework, our attention focuses on the intention to use e-wallet payment among working adults in the Malaysian content. To predict working adults' intention to use e-wallet in Malaysia from the perspective of behavioural belief, our framework is shown in Figure 2.2

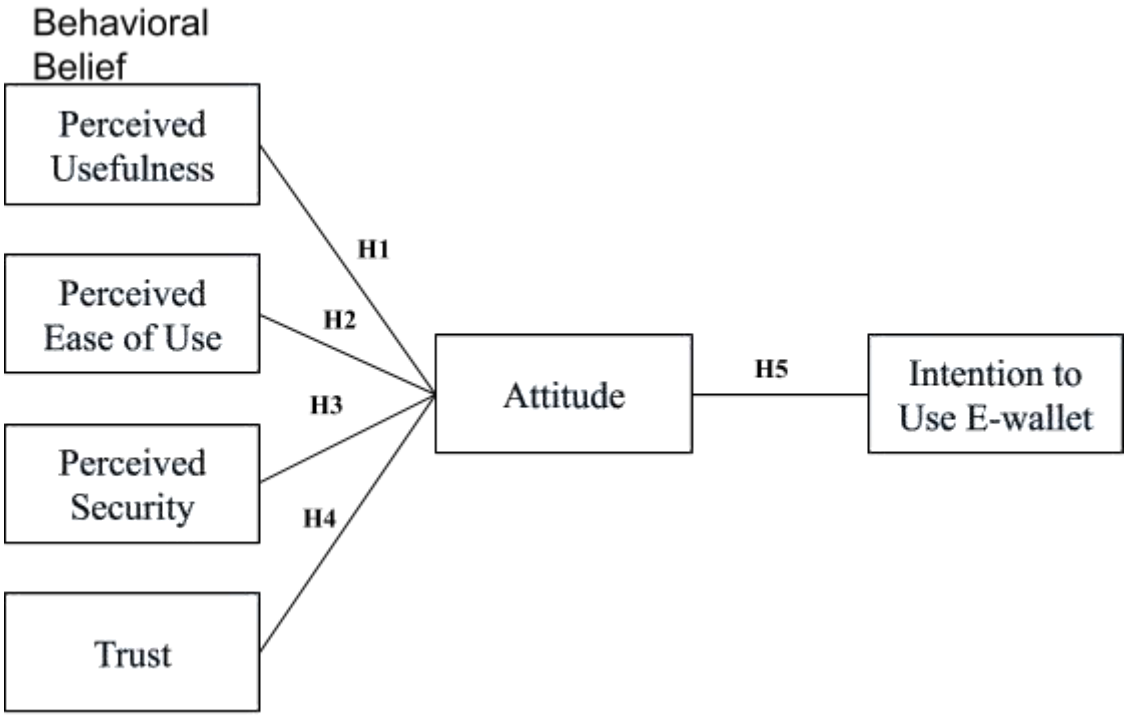

Figure 2.2: Conceptual framework of working adults' behavioural belief in influencing their intention to use e-wallet payment.

Figure 2.2 is the end result of our configuration after including e-wallet as our specific method of e-payment within the framework. We have not made any changes any of the variables other than intention to use as we would like to see the result of these variables and their effect on intention to use after specifying our targeted respondents as working adults.

2.5 Hypothesis Development

Based on the five existing hypotheses from the theoretical framework, we test the following first four hypotheses to examine the influence of behavioural beliefs of working adults' on their attitude in using e-wallet. These hypotheses are stated as follows:

H1: Working adults' perceived usefulness towards e-wallet positively influences their attitude in using e-wallet.

H2: Working adults' perceived ease of use towards e-wallet positively influences their attitude in using e-wallet.

H3: Working adults' perceived security towards e-wallet positively influences their attitude in using e-wallet.

H4: Working adults' trust towards e-wallet positively influences their attitude in using e-wallet.

Lastly, we test the following hypothesis in demonstrating whether there exists the mediating influence of working adults' attitude on their behavioural belief toward their intention to use e-wallet

H5: Working adults' attitude towards e-wallet positively influence their intention to use e-wallet

CHAPTER 3: DATA AND METHODOLOGY

3.1. Data

3.1.1 Targeted Respondents

The first of the element for survey to make inference is the target respondent. In this study, our targeted respondents are Malaysian working adults because they have a job, income, cost of living and more cash flow is circulating to society from them. Moreover, we also need to ensure that those respondents reach the condition, which is using mobile frequently, and are between 25-54 years old, since this age group is in their prime working age. In line with the movement control order implemented by the government to keep social distancing due to the spread of covid-19 pandemic among residents, we would conduct our survey through online platform.

3.1.2 Sampling Technique

A sampling technique is the name or other description of the particular process by which the entities of the sample have been chosen by dividing the element of population into different subgroups according to the similarity. Probability sampling and non-probability sampling which is the two main categories in the sampling technique. Convenience sampling is one of the types of non-probability sampling which someone is frequently available to participate into our survey. In probability sampling, each type of people in the population has a same chance to be selected through the use of a random selection procedure.

3.1.3. Designed Questionnaire

The questionnaire for this study consists of two section, Section A and Section B. Section A require respondents to provide their personal information about their gender, age group and annual income.

In Section B, respondents are required to provide their responses regarding the statements for each construct. The items of the construct as shown in Table 3.1. Respondents are required to choose from the range of 1-6 to represent their answer with 1 being strongly disagreed and 6 strongly agreeing. The list of items for each construct in our questionnaire is presented in Table 3.1.

To ensure that our questionnaire could allow respondents to understand easily in terms of the use of our language, grammar, sentence structure and vocabulary, we need to conduct a pilot test. The test is performed by distributing to our group's family members, relatives and friends. We would conduct the pilot test by interviewing our friends and family members through face to face.

Table 3.1:

The list of items for each construct

	Construct	Item	Source
1.	Perceived Usefulness (PU)	• The use of e-wallet will improve the quality of my online transaction. • The use of e-wallet has a critical role in supporting my daily expenses. • E-wallet is suitable for customer payment quickly and feasibly. • E-wallet contribute to a better life. • Online transactions will be easier without using e-wallet.	Venkatesh et al. (2012) Davis (1989) Davis et al. (1989)
2.	Perceived Ease of Use (PEU)	• Learning how to use this e-wallet is easy for me. • The use of e-wallet can make me have a better understanding about its function. • The use of e-wallet makes me have flexibility to make transactions. • The use of e-wallet is easy to be skilled. • Transferring money through e-wallet as many steps are required.	Davis (1989) Davis et al. (1989) Venkatesh et al. (2003)

Table 3.1: (Continued)

3.	Perceived Security	• The use of e-wallet is safer than the use of credit cards and cash in transactions. • The use of e-wallet can allow us to safely store money. • The use of an e-wallet can secure my personal information. • Using an e-wallet is safer because the service providers are governed by the Central Bank of Malaysia. • Using e-wallet have the potential to be fraud.	Swilley (2010) Flavian and Guinaliu (2006)
4.	Trust	• The use of an e-wallet would not leak my sensitive information to others. • E-wallet services providers keep their promises and commitment to users. • E-wallet services providers will provide assistance to consumers if needed. • The e-wallet services providers follow Consumer Protection Act 1999 • E-wallet services providers emphasize on their own interest instead of consumers.	Suh and Han (2002) Belanche et al. (2012)
5.	Attitude	• Using an e-wallet is more comfortable than a cash payment method. • E-wallet is an interesting form of payment. • E-wallet is good idea. • E-wallet should be used to support daily transactions. • The experience of using an e-wallet is pleasant.	Logahan,J,M., Villiano,M. 2017 Suh,B., Han,I.2002.
6.	Intention to use	• I intend to recommend the use of e-wallet in making transactions to others. • I intend to use an e-wallet due to government support. • I intend to use e-wallet for my transaction if there is a high acceptance rate among merchants. • I intend to use an e-wallet if the risk of using money is low. • I do not intend to use an e-wallet for my transactions if the internet coverage is low.	Vankatesh et al. (2003)

3.1.4. Data Collection

We collect respondents' information and responses by using online distribution. Before we conduct the actual online survey, we need to obtain the approval letter to conduct from the Institute of Postgraduate Studies and Research, Universiti Tunku Abdul Rahman. After we obtain the approval from the university and finalize the items in our questionnaire, we distribute the questionnaire through online platform such as Facebook and email. We use Google form as our method to develop a survey form and

share to our friends through social media. We identify those questionnaires which are completely answered by working adults and gather their responses for the purpose of analysis.

3.2 Methodology

3.2.1. Descriptive Analysis

Descriptive analysis helps to describe and understand the information about the feature of data that is collected through the questionnaire. This is a way of summarizing and providing the data obtained from the survey. Mean and standard deviation are examples of the correct central tendency and dispersion variables used for the study. Frequency and percentage analysis will be applied to analyse demographic profile of respondents. In addition, the range is also set to capture the highest and lowest response to selected questions as deemed appropriate. For example, age and gender. The frequency spectrum was brought into action to show variables that could be categorised, as well as all the goal respondent's personal data or demographic profiles (Sekaran & Bougie, 2013). Frequency distribution is a mathematical expression that may reflect the number of events within a given interval, either in a tabular or graphical format.

3.2.2. Model Measurement

Several ways of criteria can be used to evaluate the reliability of responses from the survey. First, outer loading examination is performed to examine the unidirectional predictive relationship between each latent measured indicator variables and its particular model. The variables should be highly correlated. According to the thumb law, that the latent variable will be denoted for more than 50 per cent of the variance of each variable. Therefore, it can be found extremely acceptable if the outer loading value is greater than 0.70. On the other hand, variables is to be omitted from the model for the outer loading value which is less than 0.40.

Second, reliability test is used to ensure the consistency of result produced by each variable (Weir, 2005). Reliability is an important element in the measurement instruments performance evaluation. Reliability suggests the study's findings are associated with fair worth. It is referred to as a measurement of continuity, accuracy, repeatability and authenticity in a research. Composite validity test can be used to measure the reliability of the variables and value recorded is above 0.6 which it's proven that there is high level of consistency reliability among the variable.

Third, Fornell-Larcker Test and Heterotrait-Monotrait Ratio of Correlation (HTMT) are used to discriminant items within the certain construct (Henseler, Ringle and Sarstedt. 2014). Fornell and Lacker criteria shows that average variance extracted (AVE) of each construct should be larger than its squared correlation with construct in order to obtain discriminant validity (Fornell & Lacker 1981). According to Hair, Black, Babin and Anderson (2010), discriminating validity guarantees that a measure of the system is distinctive and unique, as well as capable of reflecting phenomena of interest that are not represented by other constructive measurements of a particular structural equation model. HTMT is an approximation of the similarity between the constructs, HTMT being lower than one implies that the actual connection between the two constructs being distinct and that the significance is selective.

Fourth, convergent validity is used to reveal to what extent two measures that capture a common structure (Carlson & Herdman, 2010). Convergent validity is evaluated through average variance extracted (AVE) for each latent variable. Its acceptable threshold value would be at minimum 0.50 (Kline, 2015). Convergent validity is used to refer the degree to which structures that should theoretically be related are indeed related (Mokkink, Terwee, Patrick, Alonso, Stratford, Knol & Vet, 2010).

3.2.3. Structural Model

Partial least squares-structural equation modelling (PLS-SEM) is a variance technique (Henselar et al., 2009). This technique is used to decide the connection among constructs. PLS is capable to be used in deciding the differences for each construct

where we can find the similarity and differences among the independent variables. Additionally, PLS-SEM is used to perform model estimations at the exploratory stage to decide models with small samples with greater predictive accuracy (do Valle & Assaker, 2016). PLS is portrayed as a strategy most appropriate where the exploration reason for existing is expectation or exploratory stage. P-value is being used to determine the significant of variables. If the p value is below than 0.01 the variable is significant to the model. The null hypothesis will be rejected if the p value is less than significant level. In PLS-SEM, bootstrapping is applied since it does not have the presumption that data is naturally distributed, so it uses non-parametric bootstrapping requiring repeated random sampling with initial sample replacement to produce a bootstrap sample and which accumulate typical hypothesis test errors (Hair, Ringle & Sarstedt, 2011).), the bootstrap sample helps the scholars to verify as to whether they are relevant on the approximate coefficients predicted in PLS-SEM (Henseler, Ringle, & Sinkovics 2009). It is important that each bootstrap sample with the initial sample must have comparable number of examples. SEM results from each bootstrap sample are calculated using the PLS algorithm, as stated by Hair et al. (2011)

CHAPTER 4: DATA ANALYSIS

4.1. Demographic Profile of Respondents

As shown in Table 4.1, our survey involves 307 respondents. Our respondents consist of 52% of males and 48% of females. Other than that, 59% of our respondents is Chinese, follow by 22% of Malay, 19% of Indian and 1% of other races. Half of the respondent is single, follow by married, divorce and widowed which is 43%, 5% and 2% respectively. 34% of our respondent is 25-30 years old, 31-35 years old and 36-40 years old are both 17% in the total respondent. More than half of our respondent was bachelor degree holder while the Doctorate Degree only have 4% in the sample size. Finally, most of the respondent's income are between RM1001 and RM7000 per month which makes 70% of our total respondent. After filtering, we got 307 usable of 676 response through the online distribution Google form.

Table 4.1

Frequency of respondents' demography

Characteristics	Full Sample (n = 307)	
	Frequency	Percentage
Gender		
Male	161	52%
Female	146	48%
Ethnicity		
Chinese	180	59%
Malay	68	22%
Indian	57	19%
Other	2	1%
Marital Status		
Single	155	50%
Married	132	43%
Divorce	15	5%
Widowed	5	2%

Table 4.1: (Continued)

Characteristics	Full Sample (n = 307)	
	Frequency	Percentage
Age Group		
25-30 years old	105	34%
31-35 years old	52	17%
36-40 years old	53	17%
41-45 years old	37	12%
46-50 years old	28	9%
50 years old and above	32	10%
Education Level		
SPM/O-level	0	0%
STPM/A-level	43	14%
Diploma	52	17%
Bachelor Degree	166	54%
Master Degree	34	11%
Doctorate Degree	12	4%
Income Group		
RM1000 per month or below	25	8%
RM1001-RM3000 per month	60	20%
RM3001-RM5000 per month	93	30%
RM5001-RM7000 per month	62	20%
RM7001-RM9000 per month	29	9%
RM9001 per month or above	38	12%

4.2. Evaluating Constructs

Depending on the result in Table 4.2, the outer loading value for the dependent variables intention to use is considered extremely satisfactory as the value varied from 0.7 to 0.842 except for the items AT5, ITU5, PEOU5, PS5, PU5 and T5. The most reliable items from the PLS result are from ITU1 and PS1 where both recorded a value of 0.842. All items suggested scales that surpass the 0.7 benchmark. Those variables can also be considered extremely satisfactory. However, the indicators of AT5, ITU5, PEOU5, PS5, PU5 and T5 show a value of below 0 which had the lowest reliability among all indicators. Such items will be omitted from the models because they have less input to the model and the values for the variables are

below 0.7.) The value of item should be 0.7 or higher is preferred and value between 0.4 and 0.7 is acceptable. Any value below 0.4 should be omitted from the model. AT5, ITU5, PEOU5, PS5, PU5 and T5 is a negative statement items which prove that its lowest negative value recorded. This item was inserted so that the respondent read the question before answering the questionnaire.

Table 4.2

The Result Factor Analysis

Variables	Items	A	ITU	PEOU	PS	PU	T
A	AT1	0.776					
	AT2	0.757					
	AT3	0.771					
	AT4	0.829					
	AT5	-0.671					
ITU	ITU1		0.842				
	ITU2		0.755				
	ITU3		0.803				
	ITU4		0.746				
	ITU5		-0.608				
PEOU	PEOU1			0.769			
	PEOU2			0.716			
	PEOU3			0.773			
	PEOU4			0.777			
	PEOU5			-0.670			
PS	PS1				0.842		
	PS2				0.822		
	PS3				0.838		
	PS4				0.807		
	PS5				-0.712		
PU	PU1					0.817	
	PU2					0.789	
	PU3					0.654	
	PU4					0.770	
	PU5					-0.573	
T	T1						0.817
	T2						0.789
	T3						0.654
	T4						0.770
	T5						-0.573

A: Attitude; ITU: Intention to use; PEOU: Perceive ease of use; PS: Perceive security; PU: Perceive usefulness; T: Trust

Table 4.3 shows the composite result obtain from the PLS-SEM. The value for perceive security of the composite reliability is 0.794 which shows the highest value among all variables. This suggested that the efficiency of the security is high. Followed by the intention to use model showing the value of 0.750 and even attitude providing the value of 0.749 for the composite reliability. Furthermore, the trust variable has a value of 0.740 which is within the satisfactory standard ranging from 0.7 to 0.9. While perceive ease of use and perceived usefulness has the lowest value of all variables found to be 0.721 and 0.713, they still able to meet the acceptable norm for composite reliability also lies between the range. Composite reliability better way to find reliability between variable as Cronbach's alpha provide conservative measurement which tending to underestimate the true reliability in PLS-SEM. Based on the result all the value recorded is above 0.6 which it's proven that there is high level of consistency reliability among the variable.

Table 4.3

Composite Reliability

A	0.749
ITU	0.750
PEOU	0.713
PS	0.794
PU	0.721
T	0.740

A: Attitude; ITU: Intention to use; PEOU: Perceive ease of use; PS: Perceive security; PU: Perceive usefulness; T: Trust

Table 4.4 shows the Fornell-Lacker result which the value of the AVE's square root must be greater than other latent variables to suggest that there are discriminating validity. The figures of the square root of the AVE is greater than the other latent variables value, depending on the finding in table 4.4. This results outcome 0.766, 0.755, 0.742, 0.806, 0.728 and 0.749 respectively. Therefore, the results considered in this analysis have ample discriminating validity.

Table 4.4

Fornell-Larcker Criterion

Variables	A	ITU	PEOU	PS	PU	T
A	0.766					
ITU	0.513	0.755				
PEOU	0.339	0.310	0.742			
PS	0.383	0.398	0.368	0.806		
PU	0.413	0.333	0.534	0.416	0.728	
T	0.474	0.514	0.439	0.615	0.434	0.749

A: Attitude; ITU: Intention to use; PEOU: Perceive ease of use; PS: Perceive security; PU: Perceive usefulness; T: Trust

Table 4.5 shows the HTMT values. HTMT came up with greater precision and response rating compared to other methods to address the Fornell-Larcker criterion's shortcoming. If the value of HTMT is above 0.85 there will be discriminating validity problem and the variable should be omitted. However, when the value of HTMT is below the 0.90, the discriminating validity may be defined. Based on the result of the above equation, this model is well fitted as all the values are below 1.0. In fact, all the values displayed in table 4.5 had reached the HTMT value threshold and are all below 0.740. This suggests that this model acquires the criteria of the HTMT ratio.

Table 4.5

Heterotrait-Monotrait Ratio (HTMT) Criterion

Variables	A	ITU	PEOU	PS	PU	T
A						
ITU	0.610					
PEOU	0.402	0.380				
PS	0.446	0.463	0.443			
PU	0.486	0.391	0.674	0.484		
T	0.578	0.632	0.551	0.740	0.532	

A: Attitude; ITU: Intention to use; PEOU: Perceive ease of use; PS: Perceive security; PU: Perceive usefulness; T: Trust

Table 4.6 shows the average variance extracted values. The AVE value of perceived usefulness represents the lowest value of all variables which is 0.531, this means that it is the least related variable to intention to use e-wallet. Whereas the maximum value for the AVE is 'perceived security' which is 0.649, followed by the attitude indicating the value of AVE at 0.587 and the perceived ease of use value is 0.551. For the 'intention to use' construct which was found to be 0.570. From the result shown in the table, all of the AVE values are higher than the 0.5 varying from 0.531 to 0.649. This value show that the AVE values had reached the convergent validity criterion in this analysis. This meaning can also be inferred, since there is sufficiently convergent validity.

Table 4.6

The results of average variance extracted (AVE) for constructs

A	0.587
ITU	0.570
PEOU	0.551
PS	0.649
PU	0.531
T	0.562

A: Attitude; ITU: Intention to use; PEOU: Perceive ease of use; PS: Perceive security; PU: Perceive usefulness; T: Trust

4.3. Examining the Influence of Working Adults' Behavioural Belief on Their Intention to Use E-Wallet Payment

In Table 4.7 showing the result structure model. High coefficient which mean the variable is highly related with the dependent variable, the below table shows that attitude, perceived usefulness and trust have high coefficient. Besides that, the p-value for these H1, H4 and H5 showing significant to the dependent variable by showing the results is lesser than 0.05. Moreover, the higher perceived usefulness and trust of working adults will improve the attitude and the attitude will affect their intention to use of e-wallet. On the other hand, H2 perceived ease of use and H3 perceived security shows a low coefficient and high p-value. According to the result, perceived ease of use and perceived security has less effect to the attitude. Hence, we conclude that the result showing H1, H4 and H5 is supported and H2 and H3 is not supported.

Table 4.7

The results of structural model

H	Path	Coefficient	Standard Error	T-Statistics	P-Value	Results
H1	PU → A	0.214	0.074	2.564	0.011	Supported
H2	PEOU → A	0.06	0.066	0.914	0.361	Not Supported
H3	PS → A	0.086	0.063	1.37	0.171	Not Supported
H4	T → A	0.301	0.084	3.56	0.000	Supported
H5	A → ITU	0.513	0.085	6.959	0.000	Supported

A: Attitude; ITU: Intention to use; PEOU: Perceive ease of use; PS: Perceive security; PU: Perceive usefulness; T: Trust

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATIONS

5.1 Discussion of Major finding

Our empirical results demonstrate that H4 is supported, which means that trust is the main factor that influences working adult's intention to use an e-wallet. Our findings are consistent with the prior study by Nguyen and Huynh (2017) and Wijayanthi (2019). The reason behind that is working adults would not save their money in an e-wallet if they do not trust. For example, those working adults are willing to save their money in banks rather than e-wallet because they feel bank is more secure than e-wallet system. When they do not trust the platform of e-wallet, they would not save their money in e-wallet, which causes them to not have the opportunity to experience the advantages of e-wallet and unable to build the habit of using e-wallet.

Apart from that, H1 is also supported, this indicates that perceived usefulness also significantly influences the working adult's intention to use e-wallet through attitude. Our findings consistent with the prior researchers which Davis et al. (1989) and Vankatesh (2012). Working adults would not consume time to learn a new payment method if they do not feel the use of e-wallet will bring benefit to them, they will much prefer to pay by cash rather than using e-wallet. On the other hand, working adults are able to build the habit of using e-wallet, if they perceive e-wallet as useful, they are willing to spend time to improve their understanding about e-wallet.

H5 is also supported, our findings is consistent with prior studies done by Chawla and Joshi (2019), Malik and Suresh (2019) and Sathish, Sermakani and Sudha (2020). Trust and perceived usefulness significantly influence working adult's attitude on the intention to use e-wallet. For working adults tend have good attitude if they feel comfortable and useful about e-wallet. On the other hand, if they have bad attitude at the beginning, it means that they have a

bad impression about e-wallet if they think e-wallet is not useful than cash and might reduce the intention to use e-wallet.

On the other hand, our empirical results do not support H2, indicating that working adult's perceived ease of use does not significantly influence their intention to use e-wallet through their attitude. Our findings consistent with a study done by Rahmi and Adhy (2019). Working adults are able to use smartphones basic, since they rely on mobile to bring convenient to them, but even if the use of e-wallet will bring advantages to them, they are still preferring cash over e-wallet.

Our findings demonstrate that perceived ease of use is insignificant in terms of influencing working adult's intention to use e-wallet. In addition, our empirical results show that H3 is not supported, that leads to perceived security having an insignificant relationship with attitude. This finding is consistent with those findings by Oney, Guven and Rizvi (2017) and Taufan and Yuwono (2018). When comparing the security between cash and e-wallet, e-wallet is much more secure than cash obviously. E-wallet are able to solve the weakness of cash such as robbery and lost of cash. However, the working adult's intention to use e-wallet is still low.

5.2 Implications

5.2.1 Theoretical Implication

The results from this study allowed us to recognize several theoretical implications that are crucial. The first is the result shows that perceived usefulness and trust positively and significantly influences attitude. Not only that, trust has a stronger effect on attitude when compared with perceived usefulness. The most possible explanation for this finding is that users may not use e-wallet if they do not trust e-wallet, even when they find the product to be highly useful. Hence trust is more direct and significant than perceived usefulness in terms of their influence towards attitude. This study is able to fill the gap of understanding the variables from the perspective of working adults that were not presented in past studies.

Secondly, attitude is found to be positive relationship towards the intention to use e-wallet. Attitude is also acting as the mediating factor for all the other variables to influence intention to use e-wallet which proves the theory of reasoned action that was used to create our model of study. Based on our review on the literature, the result from this study further proves that attitude indeed does have a positive and significant relationship with intention to use e-wallet.

5.2.2 Practical Implication

Our findings provide essential practical implications for the efforts of the government and e-wallet issuers in promoting Malaysia working adult's adoption of e-wallet. Firstly, this study found that trust has a significant relationship with the working adult's intention to use an e-wallet. Malaysia government and e-wallet issuers are able to put more effort in this direction to stimulate working adults' trust towards the use e-wallet. Since money is attained through the result of hard work, consumer tends to feel more sensitive if they store their money in some place that does not guarantee safety. The reason behind this scenario is consumer have little understanding, knowledge and experience about the system of e-wallet. E-wallet issuer should present a talk or campaign for letting more people to have an understanding about the security of e-wallet, they may also provide some form promotions and advantages to those attendees, this action improves the distrust between consumers and e-wallet issuers which in the end will attract more people to improve the understandings about e-wallet.

Secondly, this study found that perceived usefulness also has a significant relationship with working adults' intention to use e-wallet. Consumers are willing to adopt e-wallet if they find that e-wallet will is useful to them. That is low merchant acceptance rate, resulting in the consumers not seeing e-wallet as an useful tool. Government and e-wallet issuers exploiting more merchants to accept e-wallet as a payment method rather than only introducing the promotion to consumers.

Finally, the attitude of working adults has a significant relationship with intention to use an e-wallet, and it can be impacted by trust and perceived usefulness. Government and e-wallet issuers should be able to put more effort in these two directions in order to stimulate more people's intention to use e-wallet. For instance, the government Malaysia can continue implement e-wallet incentives for eligible Malaysian as a way to encourage working adults to use e-wallet

5.3 Limitations of Study

Our study was limited to a sample size of 307 due to time and method of collection constraint. We use online survey as our primary and only data collection method which means that the limitations of online survey will also be associated with this study. The limitations of doing an online survey such as survey fraud where respondents may not be answering honestly or properly. Apart from that, doing online survey also hold limited sampling and respondent availability problem as the access to our online survey are not certain due to the fast refresh rate of internet or have no interest in conducting the survey. Furthermore, there might be a possible cooperation problem in which respondents may not answer honestly and may leave the survey halfway if they lose interest mid survey.

Another limitation of our study was that our survey was done during the COVID-19 lockdown period. Therefore, the perception of using e-wallet may be slightly different from the usage before the pandemic due to the effort by government in promoting the usage of e wallet by giving out one-off digital incentives but also due to the idea of contact- free transaction during COIVD-19 in hoping to reduce body contact and prevent the spread of virus.

As we use convenience sampling as our sampling technique which cuts out a large part of the population. As a result, several problems may occur such as the inability to generalize the results of the survey, under or over representing the population and a biased result due to some are able to take part in the survey and some do not.

5.4 Recommendation for Future Studies

We recommend for the future studies to be done not only doing online survey but also using physical interview method in order to gain a more accurate data to cover the possible misconception that only surveys has. For example, interview has a better response rate than online questions for those who cannot read and write down the answer for questionnaire, interviewer can judge the non-verbal behaviour of the respondent and interviewer can choose the area for interview in a private and quiet area, unlike the ones conducted through online survey which can have a totally different environment. Furthermore, further studies can be done after the COVID-19 period in order to conduct a comparative study among the response before, during and after this pandemic. Which can be used to provide more understandings regarding the intention to use, hence are able to provide more valuable findings for the government and e-wallet service providers to design and promote e-wallet. Apart from that, several different sampling techniques could also be used in order to receive different response from different targeted respondents. Finally, the framework in this study which emphasizes on the effect of behavioural belief, the mediating role of attitude can be applied in the context of other countries to aid in the research of understanding the intention to use e-wallet in different parts of the world.

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