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THE DETERMINANTS OF BEHAVIOURAL INTENTION TO ADOPT E-WALLET AMONG THE YOUTH IN UNIVERSITI TUNKU ABDUL RAHMAN

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The Determinants of Behavioural Intention to Adopt E-wallet Among the Youth
in Universiti Tunku Abdul Rahman

DECLARATION

We hereby declare that as below:

1) This research study is under our undergraduate FYP which is all done by our own effort and own work, the acknowledgement has been listed with the references for ALL sources of information that will be printed, electronic, or personal.

2) There is no part of this FYP has been submitted with the support of any application for any others degree or qualification of this or any other universities, or other institutes of learning.

3) ALL group members contributed equally to this undergraduate FYP research study.

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DEDICATION

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Glad to have a good groupmate for this Final Year Project course to run this research paper. Our groupmates are from the specialization of Financial Economics, who try to do their best in this research paper.

We are being grateful to help each other during the whole research process all the time till the end of the two trimesters.

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LIST OF ABBREVIATIONS

BNM   Bank Negara Malaysia

CC   Consumer Confident

CFS   Centre of Foundation Studies

C-TAM-TPB   Combined of TAM and TPB

FAM   Faculty of Accountancy and Management

FAS   Faculty of Arts and Social Science

FBF   Faculty of Business and Finance

FC   Facilitating Condition

FCI   Faculty of Creative Industries

FEGT   Faculty of Engineering and Green Technology

FES   Lee Kong Chian Faculty of Engineering and Science

FICT   Faculty of Information and Communication Technology

FinTech   Financial Technology

FMHS   Faculty of Medicine and Health Sciences

FSBP   Financial Sector Blueprint

FSC   Faculty of Science

ICS   Institute of Chinese Studies

IDT   Innovation Diffusion Theory

JENDELA	National Digital Network
KKMM	Communications and Multimedia Malaysia
MLR	Multiple Linear Regression
MM	Motivational Model
MPCU	Model of Personal Computer Utilization
MPCU	Model of PC Utilization
NFC	Near Field Communication
PDRM	Royal Malaysia Police
PIDM	Perbadanan Insurans Deposits Malaysia
PLS-SEM	Partial Least Squares Structural Equation Modelling
PU	Perceived Usefulness
PV	Price Value
R^2	R-Square
SCT	Social Cognitive Theory
SEM	Structural Equation Modelling
SI	Social Influence
SPSS	Statistical Package for the Social Sciences
TAM	Technology Acceptance Model
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UTAR	Universiti Tunku Abdul Rahman

UTAUT	Unified Theory of Acceptance and Use of Technology
UTAUT2	Extended Unified Theory of Acceptance and Use of Technology
VIF	Variance Inflation Factor

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PREFACE

This research study played an important role for economics students to complete the four years undergraduate course, the Bachelor of Economics (HONS) Financial Economics in Universiti Tunku Abdul Rahman (UTAR). The topic in this research study is "The determinants of behavioural intention to adopt the E-wallet among the youth in UTAR". In short, this research study aims to seek out what are the determinants that significantly affected the behavioural intention to adopt the E-wallet among the youth in UTAR in Malaysia.

In this Covid-19 pandemic, E-wallet played an important role in the world. The adoption of E-wallet is important toward the economy of growth and the reduction of Covid-19 spreading due to the contactless of the transaction as well. Undeniably, E-wallet boosts up economic growth and transform the cash environment into a cashless environment. All the parties played an important role to increase the adoption of E-wallet nowadays, parties such as the government, organizations, all educational institutions etc. Thus, it helped the cash environment move into a cashless environment easily.

Indeed, this research study investigates the behavioural intention to adopt the E-wallet because the adoption of E-wallet is important and has become a trend nowadays in the developed countries. This research study studies the five determinants that affecting the behavioural intention to adopt an E-wallet which are the perceived usefulness, consumer confidence, price value, facilitating condition and social influence. Overall, of this research study aims to provide a different insight toward the different parties such as the government, organization and all educational institutions on how to boost up the adoption of E-wallet in Malaysia.

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ABSTRACT

Malaysia is moving into a cashless society to replace cash with E-wallet applications. But many people continue to use money instead of using E-wallet applications. As a result, many researchers concern about the behavioural intention to adopt E-wallet among university students in developed countries. However, the students who studied in a private university in Malaysia, on the other hand, are often neglected, despite the fact that they are the primary potential users for the E-wallet applications in these countries. Hence, the study is carried out to examine the determinants of behavioural intention to adopt E-wallet among the youth in UTAR by including independent variables of perceived usefulness, consumer confidence, price value, facilitating condition and social influence by the aid of Unified Theory of Acceptance and Use of Technology (UTAUT) theory. There are 484 respondents are collected from UTAR Kampar and UTAR Sungai Long and the quota sampling technique is employed. Besides, the Statistical Package for the Social Sciences (SPSS) version 26.0 is used to conduct Multiple Linear Regression Analysis. The results concluded that perceived usefulness, consumer confidence and social influence have a significant relationship towards the behavioural intention to adopt E-wallet. Conversely, price value and facilitating condition have an insignificant relationship towards the behavioural intention to adopt E-wallet. Hence, universities and government agencies should concentrate to improve the behavioural intention to adopt E-wallet in Malaysia.

Keywords: Behavioural Intention to Adopt E-wallet, Perceived Usefulness, Consumer Confidence, Price Value, Facilitating Condition, Social Influence

CHAPTER 1: INTRODUCTION

1.0 Introduction

"In this portion, we will discuss the research background". Next, it is the problem statement that used to identify and explain the problems of behavioural intention to adopt E-wallet in this research study. Hence, research objectives, research questions and hypotheses will be stated clearly. Then, the importance of running this research study is explained. The following is a brief structure of study for each of the chapters in this research study. Indeed, the conclusion will conclude the main overall points for chapter one.

1.1 Research Background

According to Ishak (2020), electronic payment (e-payment) provides a more convenient and cost-effective way to transfer funds and credits through a digital form. The usage of smartphones has increased in Southeast Asia. The "Mastercard Impact Study 2020" mentioned that the utilization of E-wallet in Malaysia is the highest among Southeast Asia countries, adopting mobile and digital wallets. The outcome manifested that the adoption rate of E-wallet in Malaysia is 40%, followed by Philippines, Thailand and Singapore (Beetroot, 2020). The input of the research was collected from ten different markets in Asia Pacific region based on 10,000 consumers and business professionals. In April 2020, Malaysians increased 18% of cashless payments such as mobile and QR payments, which are more than the Philippines, Singapore and Thailand (Tan, 2020).

Nowadays, almost everyone owns a smartphone in Malaysia, and it became an essential role in our daily life. According to the Mastercard Impact Study 2020, a report shows almost half of Malaysians have raised their online shopping activities, especially during the Covid-19 pandemic. The report done by "Tan (2020)" showed that there is significant increase in different segmentation through internet during pandemic such as online news, online video streaming, social networking, online purchase of food and groceries.

One of the payment system components is the E-wallet. A payment system is defined as a system that allows the fund to be transferred from a payer to a receiver, such as payment or transaction services (Jinimol, 2018). In today-world, smartphones serve as communication devices and as socialised tools, entertainment tools, and payment tools. The advancement of technology allows users to perform money transactions by using their smartphones. They need to install the mobile wallet application on their smartphones to complete the money transaction. Smartphones can be named as "Digital Wallet" or "Mobile Wallet" when the smartphones function as leather wallets (Doan, 2014). According to Müller (2021) in Figure 1.1, Malaysia's smartphone users has increased to 30.41 million in 2020. Besides, if the population keeps growing in Malaysia, it is expected to increase and reach 33.46 million by 2025 (Doan, 2014).

Figure 1.1: Malaysia's smartphone users from 2015 to 2025 (in millions)

Source: Statista (Müller, 2021)
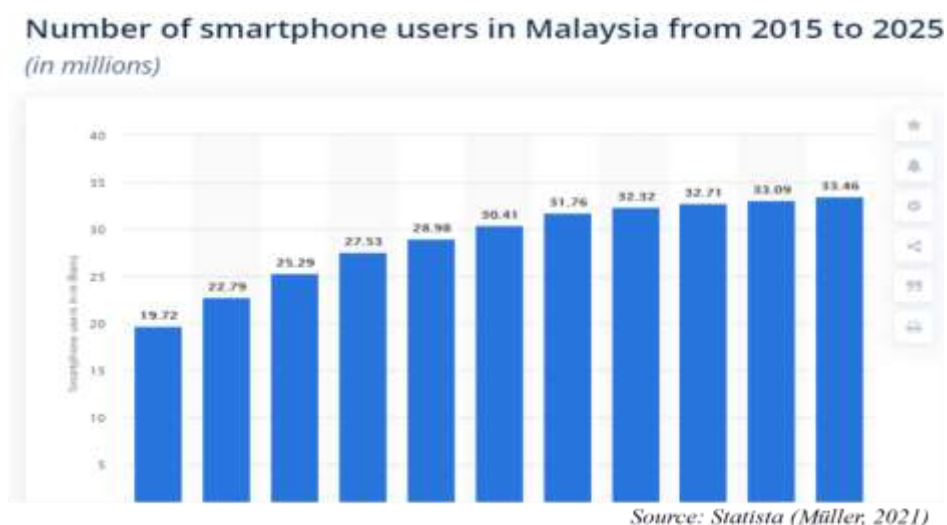
An electronic wallet is one kind of Financial Technology (FinTech) product that is getting popular and improving the cashless payment environment in Malaysia. There is a high potential that Malaysians will use mobile payment systems to make transactions and replace the cash in future (Tenk, Yew and Heang, 2020). An electronic wallet such as a mobile wallet can perform financial transactions through a mobile device. There are some advantages to use mobile wallet, such as supporting different types of financial transactions, getting discount coupons or cashbacks and reducing the risk associated with cash in hand. Moreover, they are some examples of mobile wallets in Malaysia such as "WeChat Pay, Boost, GrabPay, Touch n Go E-wallet" as well as Fave Pay (Jin, Seong and Khin, 2020).

In Malaysia, there is a long-term plan set by the Malaysian government to achieve a cashless society. The research team by Oppotus.com (2020) in Figure 1.2 shows the top five E-wallet usages in Malaysia. It shows that the highest E-wallet used by Malaysians is Touch n Go eWallet, followed by Grab Pay, Maybank Pay, Boost and BigPay. From the third quarter in 2019 to the second quarter in 2020, there is a massive increase in Touch n Go eWallet due to the consumer wanting to claim e-Penjana by using Touch n Go eWallet, especially during the Covid-19 pandemic.

Figure 1.2: Top 5 E-wallets used in Malaysia

Source: Oppotus.com (Oppotus.com, 2020)
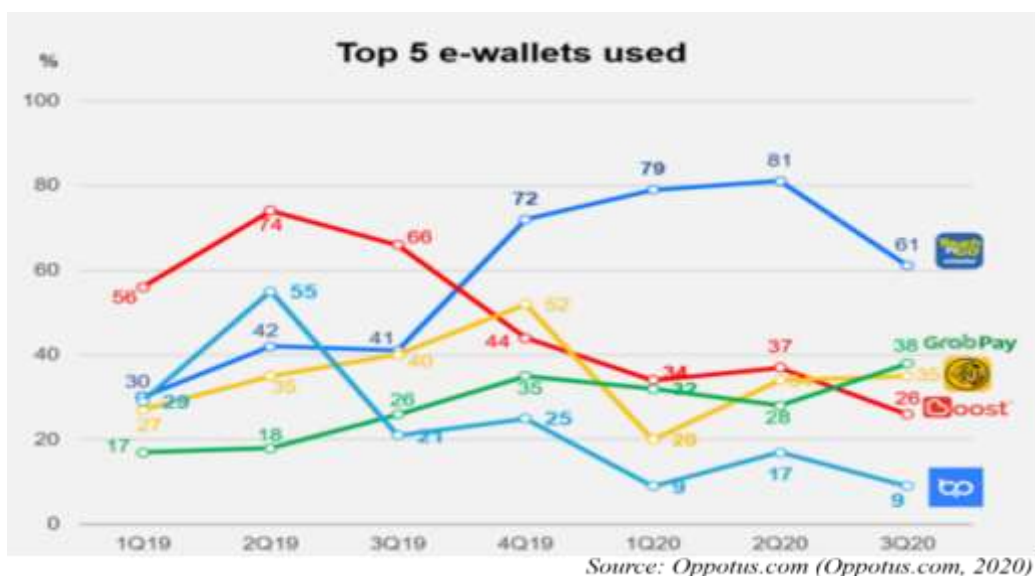
Furthermore, Muslimin (2021) further explained that among the 40 initiatives, the ePENJANA[1] programme is considered one of the initiatives. There is a total of RM35 billion given out by the government under the PENJANA economic stimulus plan in July 2020. The ePENJANA initiative has provided some benefits such as the E-wallet credits worth RM50 and vouchers, cashbacks and discounts worth RM50 in value by E-wallet. It is only applicable to the users of Touch n Go eWallet who are aged 18 years old and above with an earning less than RM100,000 per year to claim the benefits. The users are required to download the MySejahtera app.

Moreover, Bank Negara Malaysia (BNM) issued the "Financial Sector Blueprint" from 2011 to 2020, stimulating and managing Malaysia's local payment system and financial markets. In the Malaysia Budget 2020, the government also offered RM30 as an incentive to E-wallet users. It will stimulate more consumers to download the E-wallet application and increase the usage rate of the E-wallet among Malaysia's consumers (Tenk et al., 2020). Besides that, Malaysia's government also allocated RM75 million in Malaysia Budget 2021 under eBelia Programme to promote a cashless society and encourage more young consumers to adopt E-wallet. The programme will give a one-off incentive of RM50 E-wallet credit to eligible Malaysia's youngsters aged between 18 to 20 years old. According to Malaysia's Finance Minister, the programme will benefit 1.5 million Malaysia's youngsters (Estimated Federal Expenditure, 2021).

Apart from that, the Prime Minister of Malaysia announced the launching of Malaysia Digital Economic Blueprint, also known as My Digital, in February 2021. The purposes of the programme are to improve technology literacy, provide more high-income job opportunities, improve the efficiency of banking and finance business, provide virtual education access and more medical facilities. The blueprint plans to provide cashless payment facilities in all public

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1 Short-Term Economic Recovery Plan (PENJANA) presented ePENJANA that pointed toward empowering purchaser spending, just as to impart security rehearses through contactless instalment and help the public health authorities to work with contact tracing for Coronavirus through the MySejahtera application.

agencies and sectors and encourage cashless payment to be the main payment option starting in 2022 (Malaysia Digital Economy Blueprint, 2021).

Besides that, the government will also improve the effectiveness of the digital ecosystem by enhancing the digital infrastructure in Malaysia. By implementing the National Digital Network (JENDELA) under My Digital, the government will invest RM21 billion to improve the existing internet connectivity and widen the network coverage in Malaysia. Also, a total of RM1.65 billion will be funded by Malaysia's telecommunication companies to improve the connection with the international submarine cable network. The investment plan will provide more stable international data transfer. Other than that, My Digital also provides them equal access to different licensed telecommunication companies in Malaysia to provide better 5G network service to consumers in the future. It will encourage people to adopt the E-wallet because the digital and telecommunication infrastructure are the backbone to build a complete and sustainable cashless and digital ecosystem (Malaysia Digital Economy Blueprint, 2021).

Figure 1.3: Usage of E-wallet by Age
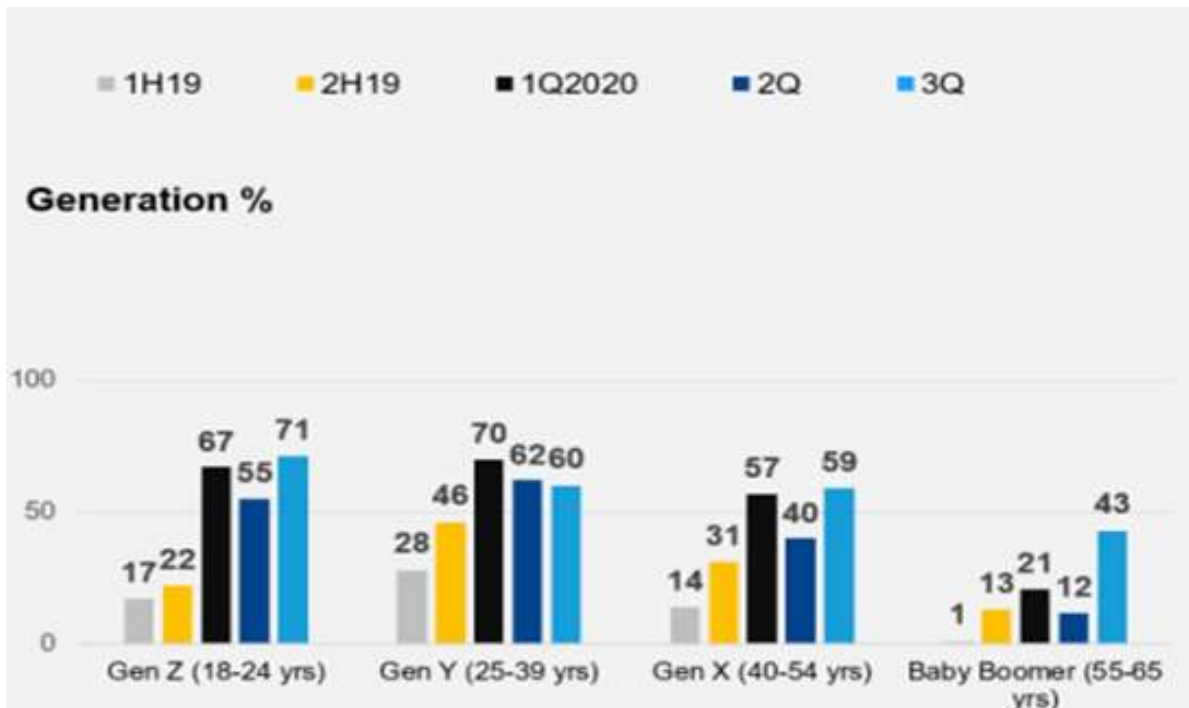
Source: Oppotus.com (Oppotus.com, 2020)

The bar graph above (Figure 1.3) illustrates E-wallet usage among different generations, studied by the Oppotus research group (2020). We can observe a significant increase in the adoption of E-wallet among all generations since the beginning of the year 2020. While there was recorded the highest percentage in Generation Z aged between 18 to 24 years old, which is 71% in the third quarter of 2020. Other than that, Generation Z and baby boomer groups achieved the strongest increment in the usage of E-wallets between the second quarter of 2019 and the third quarter of 2020.

Tee and Ong (2016) mentioned that consumers would enjoy the convenience and freedom of not carrying cash in their physical wallets since they can make payments and transactions through a mobile wallet application known as an E-wallet. Cashless payment can change the behaviour of consumers by reducing the usage of paper money and coins as a medium of exchange for products and services and encouraging more people to adopt E-wallet as their primary option to make transaction. The growth of the cashless system depends on consumer's behaviour and behavioural intention to adopt the new technology in society (Ragaventhar, 2016). From a business perspective, Asian Development Bank Institute (2019) mentioned that small and medium-sized enterprises could achieve more objectives and goals by utilising the E-wallet platform. It can penetrate the local products to overseas markets or other local areas through E-wallets such as Shopee Pay, and Touch n Go to improve the productivity of the companies. Hence, this paper will highlight the determinants affecting the "behavioural intention to adopt E-wallets".

1.2   Problem Statement

This paper aims to review the determinants of "behavioural intention to adopt the E-wallet" among the youth in UTAR, such as Perceived Usefulness, Consumer Confidence, Price Value, Facilitating Condition, and Social Influence. All these determinants played an essential part in altering the behavioural intention to adopt the new financial technologies and exemplifies E-wallet.

Nandhini & Girija (2019) indicated that a cashless society could be developed to supplant the money notes by applying and using the E-wallet. It played such an essential role for successful businesses and financial services in light of E-wallet carrying benefits to society contrasted with a conventional strategy, cash "(Kim et al. 2010, Cotteleer et al. 2007, Linck et al. 2006)". A couple of scientists also upheld that they gave a few instances of the benefits with few characteristics like security, protection, comforts, and adequacy viability. These turned into the primary purposes behind the significance of e-instalment (Tsiakis and Sthephanides 2005, Cotteleer et al. 2007). Notwithstanding, these sorts of benefits could be boundaries that the general public is not willing to tolerate and embrace the new standard, which is utilising the E-wallet.

E-wallet adoption is presently quickly developing worldwide, especially in our country due to the Covid-19 pandemic. In general, individuals will utilise it due to an E-wallet to empower them to be contactless with one another and, in this manner, ready to keep themselves from the infection. According to Luarn & Lin (2005) and Paynter & Lim (2001), Malaysians are still confronting a few difficulties in the reception of E-wallet. For instance, no trust in tolerating the innovation and the absence of information and knowledge to use the E-wallet and web. Consequently, a large portion of individuals still depends on money (Hataiseree, 2008). In light of Adnan Mohammad (2008), the test for many individuals is not willing to acknowledge the new utilisation standard by utilising E-wallet because of the absence of mindfulness and lack of certainty on the E-wallet development. Abrazhevich (2001) likewise demonstrated that the

explanation of these issues happens as a direct result of the E-wallet framework does not meet the buyer's assumption. Henceforth, the specialist co-ops do not acquire any dedication and trust from them. To be sure, it will prompt an adverse consequence of the E-wallet towards people in general, and it may cause social impact. As a result of the frustrated and terrible encounter in utilising the E-wallet, they will not rate and give a decent standing on the advancement.

Furthermore, the AIA Finance and Insurance (2019) expressed that the E-wallet has no comprehensive openness worldwide. It was further supported by Subaramaniam & Kolandaisamy (2020). Based on the examination, they found out that the E-wallet is not accessible worldwide. A portion of the retailers will accept a different kind of cashless payment by using various E-wallets. For instance, Boost is not available in every shop, and people need to utilize other E-wallet application to make the transaction payment on condition that the shop is not providing Boost payment. Additionally, some of the stores even only accept real cash as their primary payment method. Subaramaniam & Kolandaisamy (2020) also mentioned that the technical problem is one component impacting the behavioural intention of E-wallet adoption in public. Technical issues like system breakdown, system outages and system shutdown became the main concern for people nowadays. They expect the E-wallet will convenience them to make the payment or do other transactions rather than trouble them. People are more impatient with E-wallet that have multiple stages of creating and accepting the payment. Some E-wallets are giving a hard time to the users by forcing first-time users to upgrade the E-wallet application system to the latest version while making their payment (*E-Wallet In Malaysia – Why Still A Low Usage?*, n.d.). Thus, it will bother users and impatient them. Paying by cash might be better and save time than using an E-wallet application.

To increase E-wallet use among the youth, UTAR has been putting a lot of effort to promote cashless payment within the campus. The university collaborated with different E-wallet providers to launch E-wallet applications for the students. For example, Social Wallet[2] was

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2 Social Wallet is one of the applications that permit users to make payment digitally. It was first priority and customized for closed communities like universities.

introduced by UTAR in the year 2018 to the students. It can be used for paying for the bus ticket, clubs and society recruitment drive and membership registration. However, the Social Wallet service was terminated in November 2019 and students were needed to cash out their money from the application before the year 2020. Some factors have caused the barriers for UTAR to implement the E-wallet service within the campus. Hence, this research may study and discover the determinants affecting the students to adopt E-wallets in UTAR.

Therefore, the study examines whether there is a crucial correlation between the predictor variables and response variable. We applied different methods to identify the vital connection between determinants of behavioural intention toward the adoption of E-wallet among the youth in UTAR.

1.3 Research Objectives

1.3.1 General Objectives

This general objective in this paper is examining the determinants of behavioural "intention to adopt E-wallet among" the youth in UTAR.

1.3.2 Specific objectives

"Specific objectives" are constructed to fulfil general objectives:

1) "To identify whether there is significant correlation between the perceived usefulness and behavioural intention to adopt E-wallet among the youth in UTAR."

2) "To identify whether there is significant correlation between the consumer confidence and behavioural intention to adopt E-wallet among the youth in UTAR."

3) "To identify whether there is significant correlation between the price value and behavioural intention to adopt E-wallet among the youth in UTAR."

4) "To identify whether there is significant correlation between the facilitating condition and behavioural intention to adopt E-wallet among the youth in UTAR."

5) "To identify whether there is significant correlation between the social influence and behavioural intention to adopt E-wallet among the youth in UTAR."

1.4   Research Questions

Having mentioned our aims, we defined the following research questions:

1) "What is the relationship between the perceived usefulness and behavioural intention to adopt E-wallet among the youth in UTAR?"

2) "What is the relationship between the consumer confidence and behavioural intention to adopt E-wallet among the youth in UTAR?"

3) "What is the relationship between the price value and behavioural intention to adopt E-wallet among the youth in UTAR?"

4) "What is the relationship between the facilitating condition and behavioural intention to adopt E-wallet among the youth in UTAR?"

5) "What is the relationship between the social influence and behavioural intention to adopt E-wallet among the youth in UTAR?"

1.5   Hypotheses of the study

"H1: Perceived usefulness and behavioural intention to adopt E-wallet among the youth in UTAR has significant correlation."

"H2: Consumer confidence and behavioural intention to adopt E-wallet among the youth in UTAR has significant correlation."

"H3: Price value and behavioural intention to adopt E-wallet among the youth in UTAR has significant correlation."

"H4: Facilitating condition and behavioural intention to adopt E-wallet among the youth in UTAR has significant correlation."

"H5: Social influence and behavioural intention to adopt E-wallet among the youth in UTAR has significant correlation."

1.6   Significance of Study

The finding of this examination will redound and benefit all the participants or society who are taking part and playing an essential role in the view of Malaysia economy market since Norulhuda Abdullah et al. (2020) stated that the evolution of technologies is the global trend. The cashless era is improved due to financial technologies that reduced the cash transaction by implementing in a whole country. It helps them to understand more about the determinant's impacts such as the perceived usefulness, consumer confidence, price value, social influence

and facilitating conditions. These all determinants will bring remarkable effect to the behavioural intention toward the adoption of E-wallet. By clearly stated the effects of the determinants mentioned above, the public readers of this study can gain some ideas on how the determinants bring the impact directly toward the adoption of new financial technologies such as E-wallet, especially in the case of Malaysia the implementation of BluePrint 2011-2020 (*Financial Sector Blueprint - Bank Negara Malaysia*, 2020). Absolutely, for the publication of government and private information in the researching field of adopting new technologies, the scholars and students can apply and derive from the results of this study. It will assist them in their future work.

According to the Bank Negara Malaysia Economic Department, the evolution of digital phases is crucial in policy implementation toward boosting the digital economy in Malaysia (*Working and Research Papers - Bank Negara Malaysia*, 2020). The academicians in the educational sectors will be guided and emphasised in the teaching curriculum to help improve the students' academic performance in the research papers. Indeed, whether it is a group base study, this research paper will support and lead them to explore certain uncovered essential areas in the research process that the researchers might not have explored before. This research paper not only beneficial for academicians and researchers but also the economist. The Bank Negara Malaysia's economic research department also stated that every sector in the market, including government, household and businesses, will have a deep understanding on the determinants of behavioural intention affecting E-wallet adoption. When every citizen is familiar to the cashless environment, it will lead Malaysia to a higher competitive position globally (Kylasapathy et al., 2018). Undeniably, this research study will contribute to behavioural intention to adopt new technologies as it keeps evolving as time passes in the aspect of unlocking the new ideas and innovation with the digital economy in Malaysia (Kylasapathy et al., 2018).

1.7   Structure of the Study

There are five chapters in this research. We deliberate the overview and background environment of this study in **Chapter 1**. Besides that, the "research objectives, research questions, and hypotheses of this study" are listed in this segment as well. In addition, we clarify the beneficial of this study.

Chapter 2 comprises the review of relevant past studies, fundamental and pertinent realistic theories and models in the theoretical framework. Furthermore, this chapter contains the definition of each variable, the previous existing concepts or theories and apply to this research study. We also develop a clear, specific, testable and predictable of the hypothesis.

"In **Chapter 3**, we" specify the research "methodology of" this research. We explain the selected "method of data collection", and sampling design. This division also illustrates the constructs of measurement, the process of processing the primary data and approach of data analysis.

In **Chapter 4**, the research results are presented. Moreover, we also show the demographic analysis of the questionnaire respondents, and measures of central tendencies and dispersion. The result of reliability test, diagnostic test and multiple regression analysis are the important elements in this chapter.

Chapter 5 discusses the study result in detail based on previous chapter. Also, we also explain the managerial and theoretical implications of this study. Last but not least, the limitation of this study and recommendation to solve the constraints.

1.8　Conclusion

Undeniably, the past decade has seen the rapid development of adopting E-wallet in many countries nowadays. In the cashless era, many factors impacted "the adoption of E-wallet" in the cashless environment. Thus, an individual's behavioural intention to adopt E-wallet is crucial toward the new technologies nowadays. Indeed, this research study confirms that the determinants affecting the behavioural "intention to adopt E-wallet among" the youth in UTAR. This investigation study collectively outlines a critical role for the determinants such as perceived usefulness, consumer confidence, price value, social influence, and facilitating conditions.

CHAPTER 2: LITERATURE REVIEW

2.0   Introduction

In this section, we comprehensive the "literature review" and constructed it in the following ways. As mentioned in the **Chapter 1** introduction section, it was clearly stated that the "research background, problem statement, research questions, research objectives, hypotheses of the study, the significance of the research and the structure of study". Undeniably in **Chapter 2**, we reviewed the "relationship between dependent variables and the other five independent variables". The "dependent variable is the behavioural intention to adopt the E-wallet". In contrast, the other "five independent variables are Perceived Usefulness (PU), Consumer Confidence (CC), Price Value (PV), Facilitating Condition (FC) and Social Influence (SI)", "also being reviewed in this literature section." Indeed, the theoretical framework and conceptual framework are being discussed. The hypothesis is constructed in the last area of the literature review.

2.1 Literature Review

2.1.1 Dependent Variable

2.1.1.1 Behavioural Intention to Adopt E-wallet

Behavioural intention to adopt an E-wallet for cashless transactions in the current era is essential. As Lim et al. (2017) stated, Malaysia is developing in different industry sectors to boost up the growth of the economy and aims to become one of the higher income industrial countries in the year 2020. Indeed, Malaysia already proceeded into the fourth industrial revolution, which we have known as 4.0 as we know that the evolution of industries in the aspect of artificial intelligence, financial technologies, blockchain technologies, mobile technology, robotics, and digitalisation of financial services (David, 2017; Engert et al., 2018; Schmarzo, Jain, Gofe and Tulu, 2019).

Undeniably, the world's technological evolution transformed financial technologies from cash payment into digital and E-wallet, which stepped into the cashless era (Abdullah, Redzuan and Aziah Daud, 2020). Apart from Malaysia, the cashless transaction is one of the goals to be achieved in every country, hence research and development in the cashless society have been implemented and carried out "(Olisola et al., 2013; Tee and Ong, 2016; Ha et al., 2019)". Cashless society can be defined as the evolution of traditional cash payment method with paper currency into the electronic payment, which is one of the agenda in the world for the consumers in the economic market which provided and protected them more safely, convenient way and the better services to the consumers (Akinola, 2012; Tee and Ong, 2016).

To accomplish the global trend toward the e-payment cashless era, "Bank Negara Malaysia (BNM)" introduced "the Financial Sector Blueprint (FSBP)" from 2011 to 2020 and built up a

cashless environment. Widayat et al. (2020) argued that consumers still lack the behavioural intention to adopt E-wallet as an intermediate payment method for making transactions, thus emphasising that this is a common problem that needs further study. The acronym and abbreviation of E-wallet are termed an electronic wallet or a digital wallet. Various of them exemplify Boost, Touch 'n Go E-wallet, GrabPay, BigPay, FavePay, MaybankPay, WeChat Pay and Razer Pay. Tella and Adeyinka (2012) claimed that the e-payment process is made without using any paper currencies.

The behavioural intention of consumers in the market to adopt e-payments increased, and on 21 July 2016, Maybank Group President launched the very first e-payment application which the E-wallet called MaybankPay. The payment was made via mobile phone in the E-wallet. It became the beginning point of evolution for consumers to do cashless transactions throughout the E-wallet with their phone (Maybank, 2016). Bank Negara Malaysia stated that the infrastructure for the payment from E-wallet could be differentiated as bank e-wallet and non-bank e-wallet (Wei and Tsu, 2018). Melissa et al. (2020) found that the "Central Bank of Malaysia (BNM)" launched "the Financial Sector Blueprint 2011-2020" to eradicate and lessen checks and advance e-payments. The central bank (BNM) pumped out a RM 30 incentive from Malaysia Budget 2020 to each of the consumers in the market who are above "18 years old and above" Malaysia citizens with an annual income lower than RM 100,000 to stimulate the utilize of E-wallet in the Malaysia market. Undeniably, the spur of this incentive is to speed up the transformation to a cashless environment in Malaysia and move to the cashless payment era. In the final analysis, Widjaja (2016) claimed that it helped develop and manage Malaysia's future financial markets and payment system. As "Malaysia" is still in the infant stage of a cashless society, Malaysia intends to increase the "behavioural intention to adopt E-wallet" in Malaysia's public and private sector.

The Covid-19 pandemic and crisis in Malaysia in the year 2020 is the same as in India. Revathy and Balaji (2020) empirical results have proven that during the Covid-19 pandemic, E-wallet usage had increased rapidly due to social distancing and avoiding physical touching with each other were the basic protection steps to avoid Covid-19 infection. Furthermore, it makes the consumers increase their behavioural intention to adopt the E-wallet faster and speed up

progress into a completely cashless society. Indeed, E-wallet played an essential role in reducing the risk of getting Covid-19 infection by RBI Governor (2020) and are valuable, primarily due to the Covid-19 global pandemic, lockdown, and movement control period in Malaysia.

The first independent variable of perceived usefulness proposed by Davis in 1989 was agreed that the performance and expectation of accepting an innovation would be improved based on the consumer's behavioural intention (Davis, 1989). The high perceived usefulness has a critical nexus with the wiliness of technology adoption in E-wallet (Murthy and Mani, 2013). Also, Davis, Bagozzi and Warshaw (1989) also mentioned that "perceived usefulness is one of the" most crucial considerations that able to impact a user's decision-making on adopting an E-wallet. It was further supported by Marvello Yang et al. (2021). Consumers accept that utilising such a framework can satisfy their money and way of life wants, other than expanding effectiveness in directing different exchanges. As a result, people tend to use E-wallets to do their transactions due to the conveniences and thus will lead to an increase in their interest "and behavioural intention to adopt E-wallet". Consequently, the apparent value was theorised to be a considerable connection between the eagerness of reception and E-wallet.

Then, consumer confidence can be defined as people will feel safe while using an E-wallet to make payment. Also, when people make a transaction, it is uncontroversial that the money can transfer successfully from one account to another. Trust and security risks are included in consumer confidence, and they may arise when they have losses due to system failure and the unusual activity of online hackers. Chiew and Perera (2019) stated that trust had a positive relationship with E-wallet adoption when the Malaysian government supported E-wallet development. Therefore, they have strong and confidence in using E-wallet applications. However, "Al-Amri, Maarop, Jamaludin, Samy, Magalingam, Hassan, Ten and Daud (2018)" mentioned an insignificant connection between perceived risk and the acceptance of E-wallet when there are vulnerabilities and security concerns.

Besides that, price value can be explained as a trade-off where a person can benefit and pay for costs while using the technology. Price value can be defined as two, which are positive price value and insignificant price value. The positive price value is when the benefits are more than the cost paid, while the insignificant price value is when the benefits are less than the cost paid. Examples of benefits are coupons, free sample gifts, cashback, rewards points and so on. Some studies prove a considerable link between the price value and the behavioural intention to adopt an "E-wallet". Nguyen, Nguyen and Tran (2020) stated that using an E-wallet to make payment is free of cost, and customers are always sensitive to the price and always seeking value. However, there is also an inconsequential connection between the price value and the behavioural intention to adopt the E-wallet. Abidin, Rivera, Maarop and Hasson (2017) mentioned that when the E-wallet application charges a higher cost on users' transactions, it will affect their use.

In the research of Widayat et al. (2020), consumers are the factors that determine the success of innovation in financial technologies with the adoption of E-wallet because they are users. In other words, "their behavioural intention to" utilize "the E-wallet" innovation is the key to determining its success and failure. In the final analysis, Mahore (2017) elucidates the facilitating conditions significantly affect the satisfaction level with the "behavioural intention to adopt the E-wallet". Thus, the better-facilitating conditions will increase the satisfaction level toward the behavioural intention, as utilities increased the "behavioural intention to adopt the E-wallet". Apama et al. (2018) also argued that a better system with the E-wallet would increase the popularity of E-wallet in the consumer's market. The consumers will have better satisfaction using an E-wallet to make purchases due to the facilitation condition and efficiency of the E-wallet. In general, Venkatest et al. (2003) claimed that facilitating conditions elucidated individuals' perceptions toward their behavioural intention to adopt the E-wallet. Latha and Vatchala (2019) clarified that facilitating conditions are significant toward adopting E-wallet's behavioural intention. Undeniably, some researchers argued that the facilitating condition does not affect the behavioural intention to adopt E-wallet if the E-wallet is tied with the message application and not separately as a single E-wallet for e-payment by Intarot and Beokhaimook (2018).

Lastly, social influence is how individuals perceive that others' suggestions are important to them whether to adopt an electronic wallet. People essential to the individual refer to family members, friends, and partners (Chresentia & Suharto, 2020). It is assumed that the behaviour of consumers to implement "E-wallet is" influenced by surrounding people. The value of using an E-wallet will be promoted to the individual and persuade them to use an E-wallet. Wijenayake et al. (2020) mentioned that social influence refers to social norms forcing individuals to adopt new technology. People like to follow the latest trend wave by adopting new technology and being influenced by other social pressures (Chresentia & Suharto, 2020).

2.1.2 Independent Variables

2.1.2.1 Perceived Usefulness (PU)

As per Davis, in 1989, "perceived usefulness" was one of the components collected in the "Technology Acceptance Model (TAM)". It can be specified as the level of consumer's convictions that accepting a new and specific innovation will improve their user experiences (Yap & Ng, 2019; Shankar & Datta, 2018). At the same time, the TAM depends on the "Theory of Reasoned Action (TRA)" that looks to clarify the individual behaviour and the expectation of utilising an innovation (Ajzen & Fishbein, 1980). Gefen and Straub further explained it in the year 2003, they indicated that the perceived usefulness was a brand-new information technology measurement "identified with the setting offered by a person's abstract examination of the worth". Hence, "perceived usefulness" is one of the essential variables that most researchers frequently use to testify the effectiveness of the technical performance of an individual (K. Kavitha & Dr D. Kannan, 2020). It can also further play an essential role in analysing the determinants of the E-payment adoption intention. In short, high perceived usefulness shows a positive relationship where the consumers accept and would like to use the brand-new innovation such as utilising E-wallet to make payment over other payment methods such as cash payment (Davis, 1989; Umek, 2016).

Similarly, in the light of Khayati and Zouaoui in 2013, perceived usefulness can be described as the consumer's perception based on the experiences where Murthy and Mani can further support it in the same year. They mentioned that if the technology is valuable in perceived usefulness, society will likely accept it because of its careful implementation efforts. Thus, the awareness of the E-wallet adoption will be reflecting the level of acceptance of the adoption of E-wallet. Ground on the TAM framework, "Park et al. (2014)" stated that the perceived usefulness enables people to forecast the relationship with the social expectation to utilise the technology. Therefore, people that believe in the technology will have resulted in the productivity and effectiveness of using an E-wallet after accepting and using it as one of their payment methods compared to the traditional way. Also, a positive relationship and result showing from the research of E-wallets in the hospitality industry with the variables of perceived usefulness (Lew et al., 2020). In the year 2014, according to Shanmugam, Wen, and Savarimuth, they also resulted in a express impact and considerable correlation between the "perceived usefulness" compared with the users' attitude. Lee and Kim, in 2009, presented a similar output of an effect on proper utilisation of intranet innovation.

However, even the previous studies have resulted significantly in the factors affecting the acceptance of E-wallet with "perceived" usefulness "(Ooi and Tan, 2016; Nyaboga et al.,2015; Liebana-Cabanillas et al.,2018; Koenig-Lewis et al., 2015; Lew et al., 2020; Shanmuga.m et al., 2014; Lee and Kim, 2009)", the output of the study by Immanuel et al. in the year 2020 showing an insignificant relationship of the perceived usefulness and the E-wallet adoption intention during the Covid-19 pandemic. The result was out of their expectations with the framework of TAM that Davis proposed in the year 1989. They also believed and accepted insignificant outcomes because the survey was conducted during the Covid-19 pandemic. The unstable pandemic is throughout yet during the time in their country. Due to this explanation, individuals in their country will first be concerned about their health and wellbeing or even family.

Consequently, the increasing anxieties triggering them to adopt and use the E-wallet immediately without thinking of the advantages and conveniences provided by the specialist organisations. By utilising the E-wallet during the serious pandemic condition, it will be helping them to prevent themselves from the spread of infection with the actual contact with the natural things (money). At the same time, the government also urges people to use the E-wallet in their purchases and do all the transactions online. Subsequently, they are ready to avoid the get-together and close contact with each other in their country. Therefore, people will continuously and constantly use the E-wallet for their daily transactions and purchases without first pondering the benefits of health and safety (Immanuel et al., 2020).

In addition, there are various kinds of samples gathered from different previous studies. In light of the exploration by Goh Sau Wei in the year 2017, he has testified to the elements influencing E-wallet among privates' universities students only in Klang Valley territory. By accomplishing his investigation's point, he focused on 500 respondents in five different universities by using cross-sectional analysis. Also, Md Wasiul Karim et al. (2020), using the same territory with Goh, conducted their study from existing E-wallet users. They have developed the results by using "Partial Least Squares Structural Equation Modelling (PLS-SEM)". With their results, the significant outcome of perceived usefulness "and behavioural intention to adopt E-wallets in" their investigation was assisting the services providers to a computerised commercial centre further to comprehend better the value and usefulness of E-wallet for transaction purposes (Md Waisul Karim et al., 2020). According to Lew et al. (2020), they conducted their investigation by distributing their self-administered questionnaires in restaurants and cafes to collect information from the individuals who had experiences in utilising the E-wallet by depending on their outcome. The extended model presenting above 60% of the difference in ability and conduct aims to accept and adopt the E-wallet.

In conclusion, the "perceived usefulness in the adoption of E-wallet" shows a positive and significant relationship among them even if a study proved that the results were out of the TAM expectation proposed by Davis in the year 1989. But the overall previous studies explained and testified that perceived usefulness is one of the essential variables in a similar investigation.

2.1.2.2 Consumer Confidence (CC)

Consumer confidence is defined as a subjective belief that individuals feel safe, feasible and valuable when using an E-wallet (Chiew & Perera, 2019). Especially when the transaction process is going on, the payment system can ensure that funds can be transferred safely from one account to another. Consumer confidence includes the trust and security risk that may arise when there is a potential loss due to the system failure and unusual activity of online hackers. The possible loss also can be lowered when the transaction is safe (Chresentia & Suharto, 2020). Besides, E-wallet service providers need to ensure that consumers feel confident in the system by protecting the privacy information safely in the system (Hidayanto, Hidayat, Sandhyaduhita & Handayani, 2015).

According to Chiew & Perera (2019), researchers in Malaysia carried out the study that trust influences positively and significantly toward adopting an E-wallet. As Malaysia's government had supported E-wallets in recent years, the respondents had strong trust and confidence to use E-wallet in Malaysia. Chresentia & Suharto (2020) also agree that trust has a meaningful influence on the individuals' behavioural intention. Trust ensures that consumers use E-wallet continuously by maintaining the relationship between E-wallet service providers and consumers. Kurniasih (2020) also mentioned the compelling positive interrelation between trust and the consumer's intention to use an E-wallet continuously. Ajmera and Bhatt (2020) mentioned that E-wallet providers should ensure the safeness, security level, authentication level of E-wallet applications to protect the best interest of consumers.

However, Xian, Yien, Ai, Yi and Ping (2018) mentioned an insignificant correlation of security towards the adoption of E-wallet because most of the respondents pay attention to the action of financial institutions in solving the security issue. Taufan and Yuwono (2019) also stated an insignificant connection between perceived security and the E-wallet's adoption rate. When the E-wallet application becomes more powerful and alternatives in terms of safety, it will only

affect the people who use it. Moreover, financial institutions also give warnings to the consumers and inform them if any fraud happens. Therefore, the E-wallet security is not safe enough for the consumer to trust and use it. Wei (2017) also stated that there is an insignificant correlation between trust and the dependent variable while "Kim et al. (2019) and Pavlou (2001)" mentioned that trust is not useful when making an online transaction through an E-wallet application and trust has not enough evidence to encourage the users to use the E-wallet application. Tenk, Yew and Heang (2020) insignificant interrelation between perceived risk and E-wallet's adoption among consumers. The result in the research is same as "the study by de Sena Abrahao, Mariguchi and Andrade (2016)", where the perceived risk is insignificantly influencing the behaviour of individuals to use E-wallet.

Besides, Ming, Jais, Wen and Zaidi (2020) mentioned an insignificant correlation "between perceived" risk "and the adoption of an E-wallet" whereby users will reject the use of the E-wallet to make payment when the perceived risk is high. Wu, Liu and Huang (2017) stated that perceived risk has a destructive link with the adoption of WeChat Pay in China based on the estimated result shown by the confirmatory factor analysis. Abdullah, Redzuan and Aziah Daud (2020) mentioned an insignificant connection between the security and the acceptancy of E-wallet among public universities in Malaysia. "Al-Amri, Maarop, Jamaludin, Samy, Magalingam, Hassan, Ten and Daud (2018)" mentioned that there is a undesirable connexion "between perceived risk and the" adoption of NFC (Near Field Communication) mobile wallet due to there is the slow adoption rate of this technology and some vulnerabilities and security concern. They also mentioned that human and security perspectives might also affect the adoption of the NFC mobile wallet payment system.

Different sample groups had been used in the previous research to study the relationship between consumer confidence and "consumer's behavioural intention to adopt E-wallet". For instance, Chiew and Perera (2019) surveyed 107 students and working individuals in Malaysia. Most of the respondents are Chinese Malaysian and low to middle-income individuals. Kurniasih (2020) surveyed 331 E-wallet users in Jakarta, and Razif et al. (2021) surveyed 231 individuals randomly aged between 18 to 30 years old online in Malaysia.

Different statistical methods have been used in various studies; therefore, it will be inconsistent with different research to investigate the connection between consumer confidence and consumers' behavioural intention to adopt E-wallet. For example, Phuah and Bernard (2020) used Multiple Regression Analysis and found an insignificant effect of consumer confidence towards consumer's behavioural intention to adopt E-wallet. Yang et al. (2021) applied PLS-SEM to analyse the collected data and obtained a significant positive correlation between consumer confidence and intention to use an E-wallet. However, Xian et al. (2018) used PLS-SEM to analyse the data and found an insignificant relationship between consumer confidence and the adoption of E-wallet. Al-Amin et al. (2018) used Multiple Linear Regression and found an insignificant relationship between consumer confidence and the adoption of E-wallet. Taufan et al. (2017) used Exploratory Factor Analysis and found an insignificant relationship between consumer confidence and the adoption of E-wallet, while Wei (2017) also used Exploratory Factor Analysis and found an insignificant relationship between consumer confidence and the adoption of E-wallet. Tenk et al. (2020) and Ming et al. (2020) used PLS-SEM and found an insignificant relationship between consumer confidence and the adoption of E-wallet. Wu et al. (2017) used Confirmatory Factor Analysis, and Al-Amin et al. (2018) used SPSS26.0 to obtain the data and found an insignificant relationship between consumer confidence and the adoption of E-wallet.

2.1.2.3 Price Value (PV)

The price value is considered one factor that will pressure the "behavioural intention to adopt E-wallet" among the youth. Price value can be explained as a give and take between the benefits gained by a person and the cost to use it when using the technology. There is a positive price value when the benefits are more than the cost paid, while there is an insignificant price value when the benefits are less than the cost paid. Aydin and Burnaz (2016) mentioned that benefits such as rewards like monetary inducement, vouchers, free sample give away, and sweepstakes. Ming, Jais, Wen and Zaidi (2020) mentioned that when the E-wallet provides benefits such as

cashback and reward points to the users, only the users will adopt the E-wallet services. For instance, a study shows that when there are some incentives such as waiver in services taxes and cash backs to the users, the mobile transactions have grown by 38%, from 235.5 million in 2017 to 325.2 million in 2018.

Chresentia and Yulianto (2020) stated a constructive link between the price value and the adoption of E-wallet because the consumer thinks that the OVO is one of the types of E-wallets in Indonesia good value for money, and the price is also reasonable. It indicates that the consumers are willing to give up some costs to use the OVO. Besides, Ming et al. (2020) mentioned a positive connection between the rewards and the acceptancy "of E-wallet". "Based on the" result, it will attract more users to use the E-wallet applications when higher rewards are provided. Moreover, Ajmera and Bhatt (2020) also mentioned a "positive relationship" between the benefits and the adoption of an E-wallet. When the customers are loyal, they like to be valued and look for benefits such as gifts and vouchers, rewards points and upgrade the membership type. The percentage of discounts can also attract customers to use the E-wallet applications.

Furthermore, Nguyen et al. (2020) mentioned a "positive relationship" between "perceived cost and adoption of E-wallet". When the costs are agreeable and acceptable to the consumers, the chances to adopt the E-wallet is higher. Besides, Soodan and Rana (2020) mentioned a positive relationship between price value and the adoption of E-wallets. Using an E-wallet to make payments compared to other traditional payments plays a vital part since Indian consumers are price sensitive and always obtain value. Also, it is free of cost while using the E-wallet services. It also mentions that the markets can encourage consumers in using E-wallet, they can provide more offers such as cash backs or loyalty-based offers to the consumers. "Liébana-Cabanillas, García-Maroto, Muñoz-Leiva and Ramos-de-Luna (2020)" mentioned a "positive relationship" between perceived value and acceptance of E-wallet. It suggested service-dominant logic should be used by the company doing their marketing service to develop marketing strategies that focused on user's holistic and come out value proposals of mobile payment response and the brand that promotes them.

On top of that, Lilliecrona and Sundelin (2017) explained that the perceived fee positively affects the adoption of E-wallet as 85% of respondents think that mobile payment services are not expensive. They will always compare the perceived fee with the cost they paid previously on the same system. From the result, it can say that the respondents did not make the comparison and measure the costs while they are using mobile payment services such as making payments for mobile Internet. Sentanu, Sagala, Marjuki and Gunadi (2020) mentioned a "positive relationship" between perceived benefits and the acceptance of E-wallet. In this research, around 74.9% of respondents are aged between twenty to thirty years old, using digital technology and gaining some benefits. Many young adults in the 21st century will use the E-wallet services more than the older generations when they know that there are benefits, promotions and offers by the service while making a transaction. Dawi (2019) mentioned a positive relationship between price value and the adoption of E-wallet. The positive price value has a considerable connection to affect the customer's intention to shop online, and it has also been tested in a mobile payment service setting.

However, Abidin, Rivera, Maarop and Hasson (2017) have mentioned an insignificant connection between the price value and the adoption of E-wallet. Most of their respondents are not using the E-wallet application, and they do not know what resources they need to use mobile payments. Kar (2020) mentioned that there is an irrelevant link between cost and the adoption of E-wallet. It mentions that when there is a higher cost, communication cost and subscription cost for a transaction, it will affect the consumers to adopt E-wallet applications. "Tenk, Yew and Heang (2020)" mentioned an insignificant correlation "between perceived" cost "and the adoption of E-wallet".

Different sample groups had been used in the previous research to study the relationship between price value and the adoption of E-wallet. Roselyn et al. (2020) has collected 100 respondents aged between 15 to 29 years old and currently staying in Bandung and had used E-wallet applications to make payment. Soodan et al. (2020) has collected 613 respondents. The survey is in Jalandhar, Ludhiana and Chandigarh of Punjab state because more students,

corporate employees, and shoppers always go online shopping and make payments online. Taufan et al. (2018) has collected 214 questionnaires through online media. There are a total of 110 male and 104 female respondents to complete the survey.

There are different statistical methods to investigate the connection between the price value and the adoption of E-wallet. First, the most common method used by the researchers is PLS-SEM which is applied by Aydin and Burnaz (2016), Chresentia and Suharto (2020), Dawi (2019), "Roselyn et al. (2020), Sentanu et al. (2020), Abidin et al. (2017), Ming et al. (2020), and Tenk et al. (2020)". Secondly, Exploratory Factor Analysis is used by "Liébana-Cabanillas et al. (2020), Nguyen et al. (2020), Soodan et al. (2020) and Taufan et al. (2019)". Thirdly, Multiple Regression Analysis is used by Ajmera (2017) and Kar (2020). Fourthly, the Value-Based Adoption Model is used by Lilliecrona et al. (2017). We can observe that different statistical methods have brought different results between the price value and the adoption of E-wallet. For instance, Aydin (2016), who uses PLS-SEM, came out with an optimistic correlation between the price value and the adoption of E-wallet, while Kar (2020), using Multiple Regression Analysis, came out with an insignificant relationship.

As a result, there are inconsistent results for the price value and the adoption of E-wallet. It is because different studies are using various statistical methods such as PLS-SEM and Multiple Regression Analysis. Also, the characteristics of respondents might bring inconsistent results as some studies are conducted in Malaysia, but the results are because they selected different respondents to run their research.

2.1.2.4 Facilitating Conditions (FC)

"Venkatesh et al. (2003)" stated that the facilitating condition is being characterized as the degree to the consumers or end users who believe that the latest technical infrastructure is supported by using an e-payment system with E-wallet to do cashless transactions. The previous research studies showed that the facilitating condition is positively significantly directly affected "on the behavioural intention to adopt E-wallet". A study in the Kowang Owee Tan et al. (2020) proved that the big advancement of "facilitating conditions" influenced the adoption and usage of the e-payment with the e-wallet technology and services.

Chen and Chang (2013) stated that the empirical results indicated that the facilitating condition is a significant independent variable among the determinants of behavioural intention to adopt E-wallet and affected the individual's attitude toward using E-wallet technology. Undeniably, the facilitating conditions refer to the degree of consumers or users whether they have the basic supportive infrastructure to use the E-wallet for cashless transactions. Thus, it would be better if there is an online supporting line to solve their difficulties in adopting e-payment (Dong, 2019). In the final analysis, Zhou et al. (2010) proved that a strong and good facilitating condition behind an e-payment system is more convenient for cash transactions and works more efficiently and effectively than cash payments (Miklesh Yadav & Madhu Arora, 2019).

The economic research analysis paper of Miklesh Yadav and Madhu Arora (2019) summarized empirical results that the facilitating condition in the aspect of having problems with the infrastructure would affect the consumers and user's satisfaction level toward the behavioural intention to adopt E-wallet. An insignificant relationship was found between problems appearing in facilitating conditions and the satisfaction level toward the behavioural intention to adopt E-wallet. Satisfaction economic behaviour term is applied in Mahore (2017) research and showed that the facilitating condition contributed to the satisfaction level toward behavioural intention to adopt E-wallet as the consumers' utility increased while using it.

According to Miladinovic and Xiang (2016), quantitative method research is applied in the study toward the consumers or users in the mobile shopping services; thus, results confirm that the weight of regression for "facilitating conditions" significantly "influences the behavioural intention to" adopt E-wallet. Conversely, Akar and Mardikyan (2014) argued that facilitating the condition has no considerable effect on the behavioural intention of adopting "E-wallet" in their development of empirical results.

Indeed, facilitating conditions can also be defined as educational training in the cashless transaction era with the latest technology provided by the financial technology company with collaboration and consent from the government for the consumers and users to use it (Wong et al., 2015). Realistically, the facilitating condition has played an essential role in affecting the behaviour on usage toward E-wallet, and it has been argued by differing e-payment with e-wallet studies (Alalwan, Dwivedi and Williams, 2016). Huang (2015) emphasised that some previous studies revealed that facilitating conditions were positively affected by the behavioural intention to adopt E-wallet.

In contrast, Intarot (2018) proved that facilitating conditions does not affect the behavioural "intention to adopt E-wallet if the E-wallet is" tied with the message application, such as the WeChat message application. Seemingly, the best example is Wechat in China, and the message application itself created social influence toward the consumers and encouraged consumers to do more cashless transactions via the Wechat message application instead of a separate E-wallet application. In a nutshell, by using facilitating conditions to predict the "behavioural intention to adopt E-wallet", it should be based on the perceptions from each of the individuals about the facilitating conditions. Hence it only illustrates the actual behaviour that affected the behavioural intention to adopt E-wallet (Ajzen and Madden, 1986; Sheeran et al., 2003).

Taherdoost (2018) claimed that the behavioural intention to adopt an e-payment system of individuals or users is significant to the development stage for E-wallet technologies. Undeniably, the responses from individuals or users with the facilitating condition in the e-

payment system affected the stage of e-payment development (Mathieson, 1991). Dillon and Morris (1996) stated that evaluating and examining the individual's responses to the E-wallet technologies argued that the best method of "Technology Acceptance Model is the Unified Theory of Acceptance and Use of Technology (UTAUT)". "Venkatesh (2003)" emphasised that the construction of the "UTAUT model" explained the best for facilitating conditions among the earlier models such as "Davis (1986) and Davis, Bagozzi & Warshaw (1989)" "Technology Acceptance Model (TAM)", Ajzen (1985) "Theory of Planned Behavior (TPB)", "Bandura" (1977; 1978; 1986) "Social Cognitive Theory (SCT)", Davis and Bagozzi & Warshaw (1992) Motivational Model (MM), "Fishbein and Ajzen (1975)" "Theory of Reasoned Action (TRA)", Rogers (2003) Diffusion of Innovation (DIT), Thompson and Higgins & Howell (1991) Model of PC Utilisation (MPCU). Indeed, the research of Venkatesh et al. (2003) and Sharma & Mishra (2014) revealed that the unified theory was able to explain about 70 per cent of the variances, which the earlier theories only explained 30 percentage to 40 percentage of the variances "toward the behavioural intention to" adopt the "E-wallet".

Seemingly, a different sample size of groups and demographics were adapted in the past research studies to examine the affiliation of facilitating conditions toward "the behavioural intention to adopt" E-wallet (Muhammad Auwal Kabir et al., 2015) and identified the pattern toward the research methodology in the past research to examine the relationship. The most common data collection instrument was questionnaires to collect from respondents to hypothesis testing through online and offline methods (Zhou, Lu & Wang, 2010; Foon & Fah, 2011). Indeed, some previous researchers combined questionnaire with the source of secondary data by Muhammad Auwal Kabir et al. (2015) and further research by using other methods are recommended.

The studies from Gallardo et al. (2015), Senyo (2013) and Ebiringa (2010) argued that the qualitative studies in nature could improve and found the new hidden problems and issues that related to the behaviour of individual and user perception to adopt the E-wallet. It was confirmed by the finding from Chin (1998) and Hair (2011) the minimum size of the sample can be calculated by multiplying the number of explanatory variables involved in the studies. We have five explanatory variables; thus, at least 50 sample sizes are the minimum in our

research. Apart from this, different statistical methods are applied in the past studies Do et al. (2020), Siti Aishah & Kassim (2019) and Kowang Owee Tan et al. (2020), which included the "Descriptive Statistics, Reliability Test, Pearson Correlation and Multiple Regression Analysis", "Exploratory Factor Analysis and Partial Least Square-Structural Equation Modelling". Undeniably, it shows different relationships and results, which created an existing gap in the study of facilitating conditions toward the behavioural intention to adopt E-wallet.

2.1.2.5 Social Influence (SI)

"Social influence" is specified as the scale to which individuals perceive that others' suggestions are influential to them whether to adopt an electronic wallet. People essential to the individual refer to family members, friends, and partners (Chresentia & Suharto, 2020). According to Kurniasih (2020), the positive suggestion of the individuals around consumers, such as friends and family members that are given from them, will affect the consumers to adopt and use E-wallet continuously. This research proposed that Social Influence influences the consumer's intention to adopt an E-wallet significantly.

"According to Shen et al. (2013)", their study pointed out that the influence from the surrounding community will affect the adoption behaviour towards technology. While Lee et al. (2013) also opined that there is a significant impact on adopting new technology if most people in a community are successful group acceptance. According to the studies done by Widayat et al. (2020), social influence is significantly influencing an individual's behaviour to adopt an E-wallet. Consumers are willing to adopt E-wallet, make E-wallets their first preference of transaction method and install E-wallet applications in their smartphones due to the influence of their surrounding people. The persuasion of their friends, family members and the couple will increase the behavioural intention of an individual to use an E-wallet. Besides that, the study which was done by Wang and Dai (2020) also supports that social influence is one of the essential components affecting the behavioural intention of consumers. The study

believes that users of E-wallet are heavily affected by the endorsement of family and friends. The factor also determines whether a group of individuals will join the new wave of technology. Also, Yang et al. (2021) mentioned that social influence from friends and family members would affect consumers to use new technology products and services. The study showed there is a positive effect of "social influence" on intention to use an E-wallet.

However, some studies show an insignificant connection "between social influence and the consumer's" behavioural "intention to utilize an E-wallet". According to research done by Chresentia & Suharto (2020), social influence has an insignificant relationship to affect the intention of an individual to adopt an E-wallet. Besides, Ridaryanto et al. (2019) and Widodo, Irawan and Sukmono (2019) also support "that social influence" has an insignificant "effect on behavioural intention". There are a few possible explanations to illustrate the insignificant relationship. Firstly, the respondents may not be influenced by their family members and friends to use an E-wallet, although their family and friends adopted it. Besides, the studies also believe that most respondents feel that using an E-wallet is customary to make payment, and it is not modern technology. Also, the respondents do not gain any professional status when they use an E-wallet. Therefore, these factors may cause an insignificant result in previous studies (Dong, 2018).

Different statistical methods have been used in the previous research findings to explore the relationships "between social influence and behavioural intention to adopt E-wallet". Firstly, "Structural Equation Modelling (SEM)" was utilized to evaluate in the previous studies (Junadi & Sfenrianto, 2015; Sfenrianto, Junadi & Saragih, 2017; Widodo, Irawan & Sukmono, 2019; Chresentia & Suharto, 2020; Yang, Mamun, Mohiuddin, Nawi & Zainol, 2021). Secondly, "Multiple Linear Regression Analysis" has been aplied to investigate the correlation between explanatory and predicted variables (Ridaryanto, Firmansyah, Kartano, Sundjaja, 2019; Nguyen, Tran, Nguyen, 2020). Besides that, Phan, Ho and Le-Hoang (2020) and Dong (2018) used a quantitative research method to study the determinants affecting consumers' decision to adopt E-wallet.

There are different groups of samples in different study to investigate the determinants affecting consumers' behavioural intention to adopt E-wallet. For example, Ridaryanto et al. (2019) used 143 E-wallet users by non-probability sampling method, and Kurniasih (2020) also surveyed 200 e-payment users in Jakarta. Besides, Phan et al. (2020) surveyed 200 internet users aged between 18 and 25. At the same time, Patel (2016) studied 274 undergraduate students in India.

As the research setting is different from the previous studies, it led to a different result in explaining the interrelation between "social influence" and "the behavioural intention of" individuals to adopt E-wallet. For instance, Chresentia & Suharto (2020) and Sfenrianto et al. (2017) studied the determinants affecting "consumer's intention to use E-wallet in" Indonesia. "The" research's target population done by Sfenrianto et al. (2017), who used E-wallets, is qualified to complete the questionnaire. However, Chresentia & Suharto (2020) only surveyed people using E-wallets and within productive age, which is 15 to 64 years old. This difference between the two studies caused Sfenrianto et al. (2017) to obtain significant results, but Chresentia & Suharto (2020) got insignificant results.

In conclusion, there are different results from previous studies to evaluate the correlation between the predictor and predicted variables. Most of the studies show a significant relationship, but a few research studies show insignificant results between social influence towards the behavioural intention of adopting E-wallet. The difference in the previous studies may be caused by different ranges of age, education level, income level and gender of respondents. Besides, different qualifications and criteria for selecting a target group for samples and different research environments may also generate a different result (Dong, 2018).

2.2 Theoretical Framework

In this section, the past theories in the studies have been used and tested to examine the relationship of the determinants "(Perceived Usefulness, Consumer Confidence, Price, Facilitating Condition, and Social Influence)" toward "the behavioural intention to adopt E-wallet". Hence, "Unified Theory of Acceptance and Use of Technology (UTAUT)", "Extended Unified Theory of Acceptance and Use of Technology (UTAUT2)" and "Technology Acceptance Model (TAM)" are applied in this research thesis.

2.2.1 Technology Acceptance Model (TAM)

Figure 2.1

"Technology Acceptance Model (TAM)"
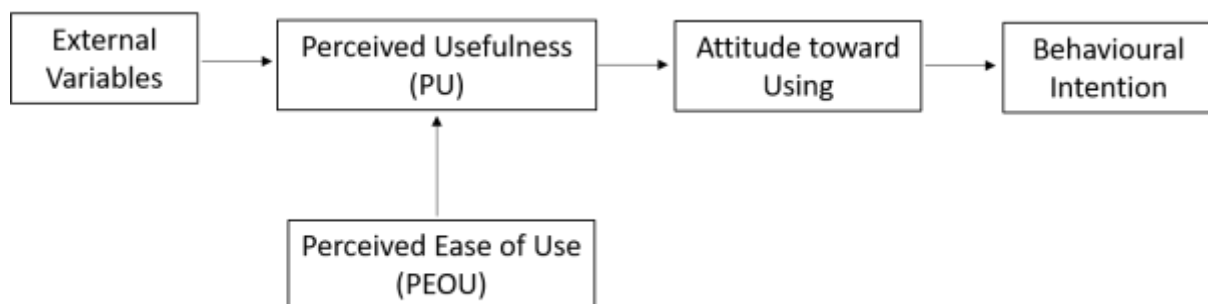
"In 1989, Davis presented the Technology Acceptance Model (TAM)" to clarify the adoption of innovation of an individual. As per Abrazhevich (2001) and Khalifa & Ning Shen (2008), they demonstrate that TAM was utilised to make the decisions of the adoption of e-commerce activities such as E-wallet as well as comprehend the user's technology acknowledgement

conduct. From the past examinations by Aslam, Ham, and Arif (2017), Zarmpou, Saprikis, Markos, and Vlachopoulou (2012), Shankar and Datta (2018), Kim, Mirusmonov, & Lee (2010) and Chen (2008), they found that perceived usefulness was the fundamental determinants in influencing the E-wallet adoption as well as an innovation. Due to this reason, TAM is the most appropriate model to emphasise in the study because it can all around fit the variable in the model. It was further supported by Shankar & Datta (2018), who were using TAM to hypothetically clarify the relationship of E-wallet adoption with their variables in India. And according to their study with the extended constructs of TAM, they can describe well the significant relationship between a user's behavioural intention to adopt an E-wallet with parts of their "independent variables such as trust, social influence, and perceived usefulness". In the light of Hampshire (2017) and Mathieson (1991), by contrast with other theoretical models, TAM turned into a valuable and helpful model to help in investigating the user's interests in utilising the E-wallet. Another assertion upheld by Dewi Mustikasari Immanuel and Yuli Kartika Dewi (2020) is that TAM can conjecture and comprehend the user's knowledge of the advantages of using an E-wallet. Thus, Lee (2009) concurred that the TAM is generally reasonable in comparable examinations to explain adopting an online system such as an E-wallet.

2.2.2 Unified Theory of Acceptance and Use of Technology (UTAUT)

Figure 2.2

"Unified Theory of Acceptance and Use of Technology"
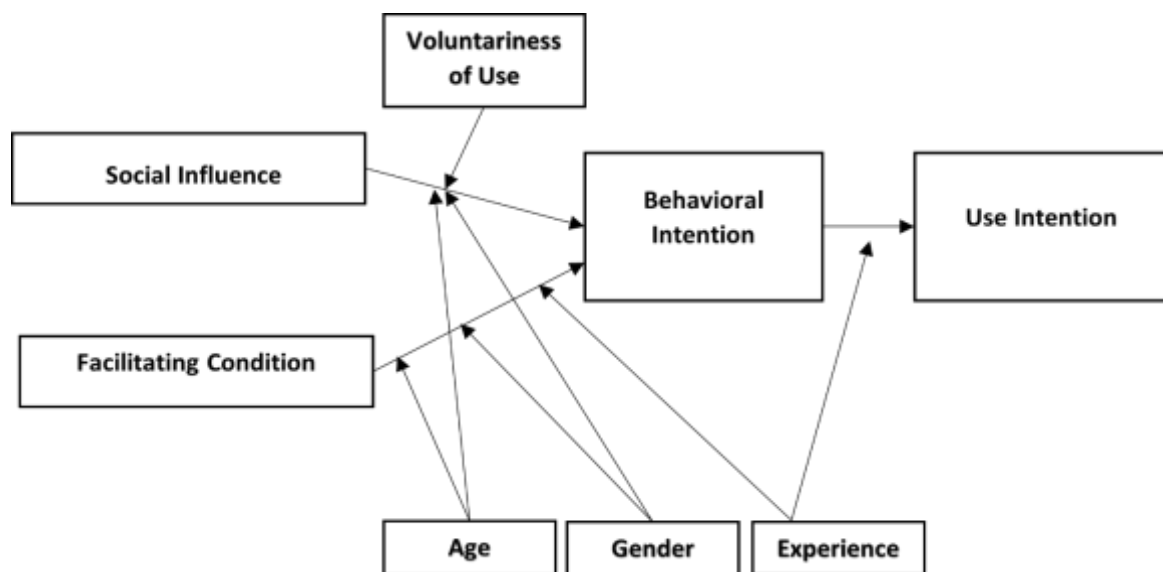
⟶ "The relationship is hypothesised as significant in the UTAUT (Venkatesh et al. 2003)"

The underpinning theory in this research is the "Unified Theory of Acceptance and Use of Technology (UTAUT)", which was developed by "Venkatesh et al. (2003)", and it is the extension of the previous well known "Technology Acceptance Model (TAM)". The evolution of technology nowadays brings a substantial positive impact on the individuals, users, and organisations in their daily routine (Siti Aishah & Kassim, 2019) and stated that the e-payment technology could be fully utilised in the view of users, individuals and organisations. It increased the organisation's performance in terms of cost reduction and efficiency as long as the users, individuals and organisations received benefits and acknowledged the innovation of

E-wallet. Undeniably, UTAUT has been using in different technologies, research studies and different settings.

Venkatesh, Morris, Davis & Davis Venkatesh (2003) elucidated that the UTAUT is better than the other previous eight individual "technology acceptance models such as the Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), the Combined of TAM and TPB (C-TAM-TPB), Motivational Model (MM), the Model of Personal Computer Utilization (MPCU), the Social Cognitive Theory (SCT) and the Innovation Diffusion Theory (IDT)". In the dissertate of "Venkatesh et al. (2003)" studies, it found that the R-Square (R2) in the "UTAUT model" up to 70 percent of variance can explain the changes of the user's intentions to adopt the E-wallet. In the past studies of adopting new technologies and information technologies, Lim et al. (2019) argued that many scholars and researchers adopted UTAUT constructs to study the determinants of acceptance toward adopting new technologies. It is noted that there is a association between the factors ("Social Influence", Facilitating Condition) with the role of key moderators (Age, Gender, Experiences, Voluntariness Use) and adopting the E-wallet technologies among the users. In the final analysis, in the analysis of adapted theories paper "Muhammad Auwal Kabir et al. (2015)", the results concluded that the UTAUT "model" is the most frequently used to study E-wallet adoption.

Figure 2.3

"Extended Unified Theory of Acceptance and Use of Technology (UTAUT2)"
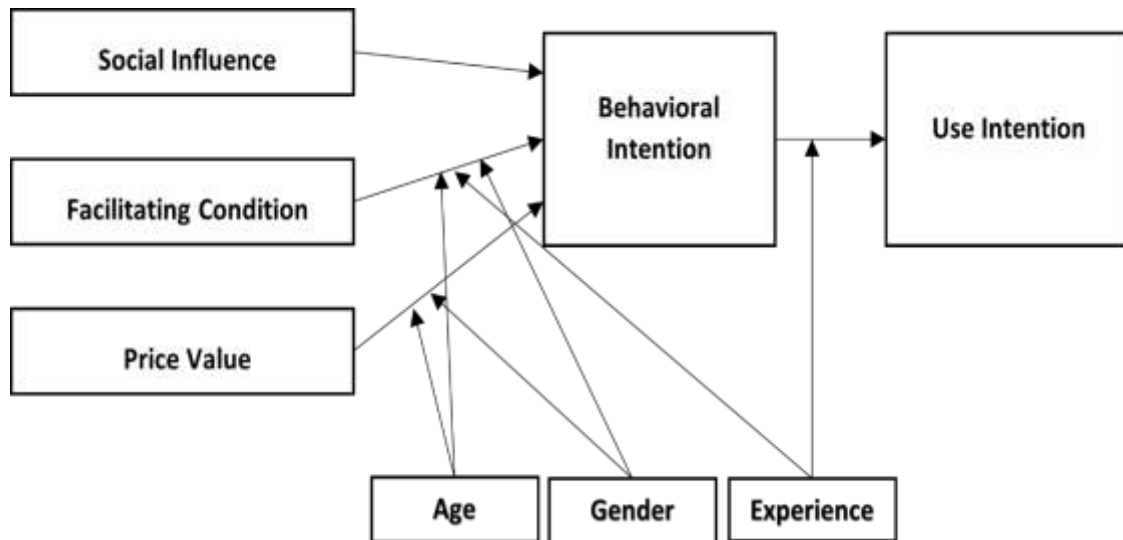
⟶ "The relationship is hypothesised as significant in the UTAUT2 (Venkatesh et al. 2012)"

Extended UTAUT2 is the extension of "Origin Unified Technology and Use of Technology by Venkatesh et al. (2012)" to investigate the use and the acceptance of technologies based on consumer view. It is slightly different from the original UTAUT as extended UTAUT did not include one of the general moderators (Voluntariness) but the other three moderated components (Age, Gender, Experience) to pertain to the three new constructs. UTAUT2 is developed to expand the horizons of theoretical and capture the new price value variable with the three origin moderators for consumer technologies text used. Indeed, Venkatesh et al. (2012) argued UTAUT2 captured the variance and explained the behavioural intention with some improvement. As mentioned earlier, 4 percent increases in behavioural intention total 74 per cent and 12 per cent increases in the use of technology which is 52 per cent in total.

2.3   Conceptual Framework

Figure 2.4

"Conceptual Framework"
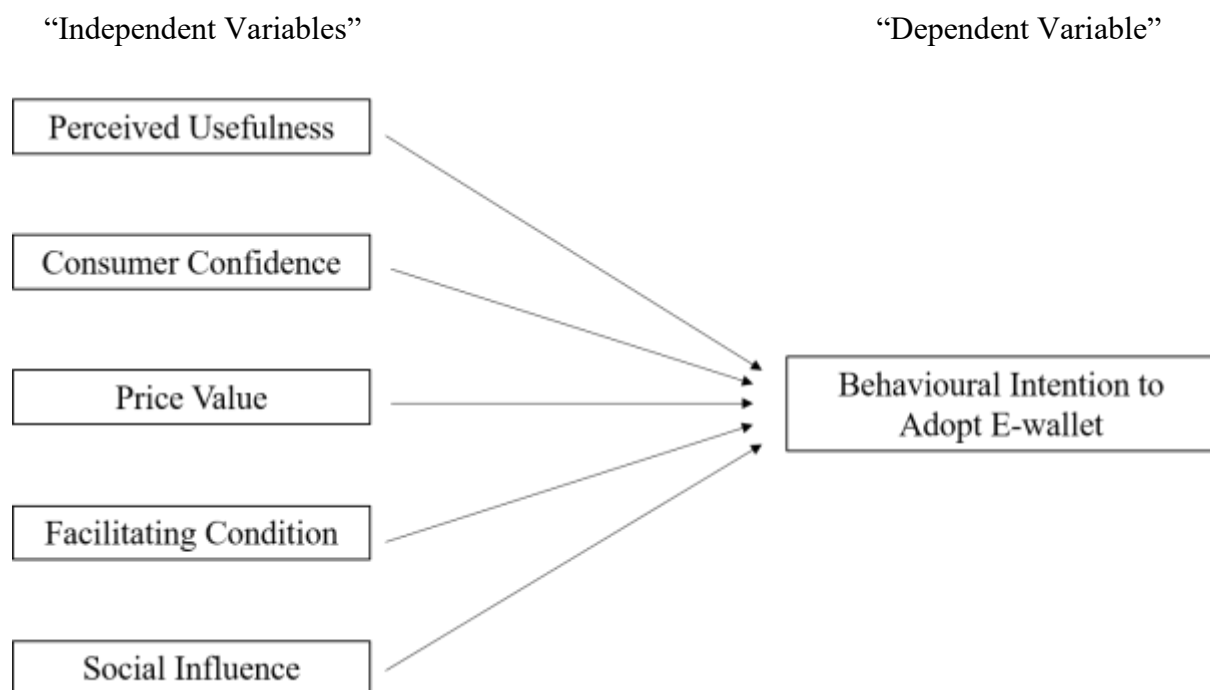
Furthermore, as per the structure of TAM and UTAUT, these factors will affect and "influence the behavioural intention to adopt" E-wallet. "From the theory of TAM by Davis (1989)", perceived usefulness is one of the variables coming out from his idea. He has clarified that the perceived usefulness is the level of a person to accept and receive the innovation to improve their work execution. Hence, perceived usefulness can be used to testify the behavioural intention to adopt E-wallet. The excellent and quality result in perceived usefulness explains the more behavioural intention of an individual to adopt and use an E-wallet.

Furthermore, from the extended theory of TAM (Shankar & Datta (2018), trust and social influence have resulted in the behavioural intention to adopt E-wallets among the youth because they are essential in influencing and encourage consumers to adopt and use the E-wallet (Junadi & Sfenrianto, 2015). Other than that, Junadi and Sfenrianto (2015) also clarified that consumer perception would be influencing the utilization of innovation as well as the behavioural intention to adopt E-wallet, and it refers to the facilitating condition by using UTAUT theory. However, for price value, people nowadays will be more willing to adopt an innovation if the technology benefits them.

Hence, the figure above investigates the behavioural intention to adopt E-wallet among the youth with the conceptual framework. There are five independent variables to testify the relationship between each of them with the dependent variables. The independent variables included Perceived Usefulness, Consumer Confidence, Price Value, Facilitating Condition, and Social Influence. So, the hypothesis for these relationships will be built using this framework. We assume all of these are significant links with the dependent variable, the behavioural intention to adopt E-wallet.

2.4   Hypothesis Development

2.4.1 Perceived Usefulness and Behavioural Intention to adopt E-wallet

"Perceived Usefulness" has been found to affect the behavioural intention significantly to adopt E-wallet by previous studies. According to Omwansa (2009), an E-wallet allows people to withdraw their money digitally and do all the transactions online. It is so convenient because payment can be done in a cashless environment anywhere and anytime. Kar (2020) indicates

that if consumers perceive E-payment as more useful and beneficial to them than the traditional payment method, they will be more satisfied in using the innovation. Hence, people's behavioural intention on this new trend technology will be showing significantly. For instance, people tend to adopt and use E-wallet because of convenience and usefulness. Hence, there should be a positive and important relationship and effect on perceived usefulness and behavioural intention to adopt E-wallet. Therefore, we hypothesised that the perceived usefulness would have a crucial association between the behavioural intention to adopt E-wallet in this study:

"H1: There is a significant relationship between Perceived Usefulness and Behavioural Intention to adopt an E-wallet among the youth."

2.4.2 Consumer Confidence and Behavioural Intention to adopt E-wallet

On top of that, consumer confidence has a considerable impact on the adoption of E-wallet. According to Chiew and Perera (2019), when the Malaysian government supports the E-wallet development, the respondents will have strong and confidence in adopting the E-wallet in Malaysia. They will use an E-wallet application since the Malaysian government has given support to it. Some studies show the influence of consumer confidence towards the adoption of E-wallet in some countries such as Malaysia (Chiew & Perere, 2019; Razif et al., 2020), Indonesia "(Chresentia & Suharto, 2020; Yang et al., 2021; Hidayanto et al., 2015; Widodo et al., 2019)" and India (Ajmera & Bhatt, 2020) and the results came out that consumer confidence is significant to affect the adoption of E-wallet. Thus, the second hypothesis in this study is:

"H2: There is a significant relationship between Consumer Confidence and the Behavioural Intention to adopt an E-wallet among the youth."

2.4.3 Price Value and Behavioural Intention to adopt E-wallet

Apart from that, price value has a considerable impact on the adoption of E-wallet. According to Soodan and Rana (2020), consumers are sensitive to the price, and they always seek value when using an E-wallet to make payments. Also, when the cost of using an E-wallet is free, they will adopt the E-wallet application more than the traditional payments. Some studies have shown the influence of price value towards the adoption of E-wallet in some countries such as Indonesia (Chresentia & Yulianto, 2020; Sentanu et al., 2020), Sarawak (Ming et al., 2020), India (Ajmera & Bhatt, 2020; Soodan & Rana, 2020; Taufan & Yuwono, 2019), Vietnam (Nguyen et al., 2020) and Malaysia (Dawi, 2019) and the results came out that price value significantly affects the adoption of E-wallet. Thus, the third hypothesis in this study is:

"H3: There is a significant relationship between Price Value and Behavioural Intention to adopt E-wallet among the youth."

2.4.4 Facilitating Conditions and Behavioural Intention to adopt E-wallet

In the final analysis, facilitating conditions might be significantly toward "behavioural intention to adopt the E-wallet". "Venkatesh et al. (2003)" mentioned the importance of individual perceptions toward the technologies available and resources in the organisation, which elucidates the knowledge, resources, and opportunities to solve the problem when the users adopt and use the E-wallet. Previous studies analysis results argued that the influence of "facilitating conditions on the" adopting E-wallet intention and concluded that there is a significant influence of facilitating conditions on the intention to adopt E-wallet in different

developing countries such as Malaysia (Siti Aishah & Kassim, 2019) and Foo-Wah Lim et al. (2019), Taiwan (Huang, 2015), India (Latha & Vatchala, 2019) and Jordan (Alalwan, Dwivedi & Williams, 2016). Thus, Kowang Owee Tan et al. (2020) found a significant connection that influences the "facilitating conditions" on the adopting E-wallet intention among university students. In the final analysis, the fourth hypothesis is developed in this study:

"H4: There is a significant relationship between Facilitating Conditions and Behavioural Intention to adopt E-wallet among the youth."

2.4.5 Social Influence and Behavioural Intention to adopt E-wallet

"Social Influence" has been found to significantly affect the "behavioural intention to adopt E-wallet". It has been described "as the degree to which" individuals perceive that others' suggestions are essential to influence the "behavioural intention to adopt E-wallet" (Chresentia & Suharto, 2020). The suggestion from the family members, friends and partners will influence the decision making of the individual (Lopez-Nicolas, Molina-Castillo & Bouwman, 2008). Therefore, social influence is one of the important reasons manipulating individuals' behavioural intention to adopt E-wallet. Many previous studies analysed the effect of social influence on the behavioural intention to adopt E-payment in different countries. Moreover, the results of the studies show that "social influence is" significantly affecting the behavioural intention to adopt E-payment such as in China (Wang & Dai, 2020), Vietnam (Do & Thi-DO, 2020), Indonesia (Angelina & Rahadi, 2020), Portugal (Oliveira et al., 2016) and Thailand (Dong, 2018). Furthermore, Patel (2016) also found a considerable connection "between social influence and behavioural intention to adopt an E-wallet among university students". Therefore, we can develop the hypothesis for this study is:

"H5: There is a significant relationship between Social Influence and Behavioural Intention to adopt an E-wallet among the youth."

2.5   Conclusion

As was pointed out in the introduction to this research thesis; this research thesis is to develop an understanding of the determinants of behavioural intention to adopt an E-wallet. A deeply detailed and reviewed literature about the relationship and significance "of the dependent variable, which is the behavioural intention to adopt" an "E-wallet" and five independent variables (Perceived Usefulness, Consumer Confident, Price Value, Facilitating Condition, and Social Influence) are mentioned and stated in Chapter 2. We did seek out the previously theoretical framework that in the past studies from the other academic researchers to support and proved with the evidence. Thus, the new "conceptual framework and hypotheses are" being updated in this research thesis.

CHAPTER 3: RESEARCH METHODOLOGY

3.0   Introduction

The purpose in this research paper is to assess the "behavioural intention to adopt E-wallet" among the youth with the determinants that affected the behavioural intention. The objective and research methodology, which are very important, are discussed in this chapter. First and foremost, the research design is addressed, followed by explaining the data collection method. After that, sampling design, research tools, definitions, and scales are discussed. Moreover, the "data processing" types and "data analysis" are included in this methodology chapter. The quantitative study design is employed in the study. The quota sampling method is used to gather the primary data and samples for online questionnaires.

3.1   Research Design

"Research design" is referred to the tool that builds up the research study with all the strategies. It is to ensure that the research problem is addressed effectively (Xian et al., 2018). There are quantitative research and qualitative research designs in this research study. Quantitative research only focused on determining the relationship between all variables with the objective of the studies. All the variables can be measured using tools such as using statistical procedures to analyse the numbered data. It also applies to larger sample sizes and focuses on measurements and classification variables (Sidek, 2015).

Quantitative research is applied in this study. According to Dawi (2019), Lilliecrona and Sundelin (2017), "Nguyen et al. (2020)", "Abidin et al. (2017)", "Abdullah et al. (2020)", "Al-Amri et al. (2018)", "Tenk et al. (2020)", "Xian et al. (2018)" and Oliveira, Thomas, Baptista and Campos (2016) are applying quantitative research in their studies. The questions set in the questionnaire are 5 points Likert Scale close-ended response format where the respondents can choose from the limited options (Sidek, 2015).

3.2   Data Collection

The crucial step in this research is collecting the sample of data. In a quantitative study, the researchers may not be able to study the interest of the whole population. Therefore, researchers will use samples that belong to the subgroup of the entire population. (Khalid, Hilman & Kumar, 2012). The result of a study depends significantly on the collected data. "Primary data and secondary data" are being adapted in all past research studies (Sekaran & Bougie, 2010). This study collected primary data to study the determinants affecting the individual's behavioural intention to adopt an E-wallet.

3.2.1   Primary Data

"Primary data" is being used to study the variables by using a questionnaire to collect sample data in this research. The research of Sekaran and Bougie (2010), primary data refers to the anonymous data collected for the first time to study a problem. In order to collect primary data, the questionnaires are distributed to targeted groups of individuals. We spread the questionnaires through the Google Form website because it is relatively low cost and less time

consuming than collecting data physically (Razif, Misiran, Sapiri & Yusof, 2020). Since the questionnaires are distributed through an online platform, our data were generated when participants fill up the self-administered survey. According to Truman et al. (2003), online questionnaires can provide respondents with a better experience than paper-based questionnaires. In addition, online questionnaires can obtain greater data accuracy and a better response rate. Besides that, the system will help keep the respondents' answers and information privately and confidentially. Questionnaires have been used in previous studies, which were conducted by Kurniasih (2020), Chresentia and Suharto (2020), "Yang et al. (2021), Chandra et al. (2018) and Sentanu et al. (2020)".

3.3   Sampling Design

3.3.1   Targeted Population

Targeted "population" expressed as using the survey data to make inferences (Lavrakas, 2008). The researchers will target this group of people to generalise the results. The researchers ensured all the respondents are eligible for the survey and ensure that they will analyse the correct data.

The study's "objective" is to seek out the determinants that effect behavioural "intention to adopt E-wallet among the" youth. Thus, the targeted population in the research study is UTAR students.

3.3.2   Sampling Locations

A "location" for "sampling is" a place where the data is collected. The sampling location in this study is in UTAR Kampar and Sungai Long where the target population are all the students in UTAR. Moreover, many students come from various faculties, which allow the study to collect more data from different faculties.

3.3.3   Sampling Elements

"Sampling elements" can be expressed as the single unit or a case from the population that is being measured. This research study, quota sampling is applied in UTAR and selected students from eleven different faculties and other personal information like age, gender, ethnicity, and current year of study.

3.3.4 Sampling Technique

The Taherdoost (2016) stated that "sampling techniques" are known as "probability sampling and non-probability sampling". Zikmund et al. (2013) mentioned that all the single item in a "population" has a nonzero and known as the probability being included in the sample that selected in probability sampling. While non-probability sampling is selecting a model based on personal judgement or convenience, the likelihood of any specific groups in a population is unknown.

In this study, we gathered our data through the questionnaire to students studying foundation, degree and master courses in university. We chose quota sampling, which is included in the non-probability sampling technique. The sampling technique in which respondents are selected based on predetermined characteristics, so the proportion of different groups in the total sample is similar to the population (Taherdoost, 2016). The questionnaires are distributed to all the students in UTAR Kampar and Sungai Long campus. Quota sampling can improve the representation of specific groups in a population and ensure that the collected data is not over-representing. Besides that, quota sampling is faster and easier than probability sampling techniques to apply since it does not require a sampling frame (Sharma, 2017).

This sampling technique has been used in some previous studies. Kraiwanit et al. (2019) used quota sampling to collect data from 200 respondents in the different geographical areas in Thailand. Other than that, Klinthongkum (2018) also applied the quota sampling method to choose 400 consumers from their target sample group in Thailand. Besides, Khan et al. (2020) employed quota sampling to gather data from 200 respondents in India.

3.3.5 Sampling Size

According to "Krejcie and Morgan (1970)", it mentioned that the research division of the National Education Association had released an equation to determine the sample size of a study based on different population sizes. The study also provided a table to decide the sample size needed for a given population size efficiently. This study determines the sample size by using "Table for Determining Sample Size from a Given Population" (Refer to Appendix 1.3). Based on Table 3.1, 21,325 UTAR students are pursuing bachelor's degree courses. Therefore, we require a minimum of 377 respondents for this study.

Table 3.1

The "population" of all "students in UTAR"

Faculty	Number of students	Percentage of overall students (%)	Number of respondents
"Faculty of Arts and Social Science (FAS)"	1,573	7.38%	62
"Faculty of Business and Finance (FBF)"	3,743	17.55%	195
"Faculty of Information and Communication Technology (FICT)"	1,567	7.35%	39
"Faculty of Science (FSc)"	1,507	7.07%	30
"Faculty of Engineering and Green Technology (FEGT)"	576	2.70%	25
"Institute of Chinese Studies (ICS)"	355	1.66%	6
"Lee Kong Chian Faculty of Engineering and Science (LKS FES)"	4,430	20.77%	21
"Faculty of Creative Industries (FCI)"	1,319	6.19%	10
"Faculty of Accountancy and Management (FAM)"	2,462	11.55%	24
"Faculty of Medicine and Health Sciences (FMHS)"	632	2.96%	15
"Centre of Foundation Studies (CFS)"	3,161	14.82%	57
Total	21,325	100%	484

3.4   Research Instrument

3.4.1 Questionnaire

This research paper, primary data is being used "as the research instrument to collect" the information and data about the "behavioural intention to adopt E-wallet among the" youth; Wilkinson and Birmingham (2003) indicate that the questionnaire was a preferable method and ideal technique for those wishing to engage the primary data in their research. Oluwatosin Victor Ajayi (2017) noted that primary data is suitable due to the first-hand data and direct information collected from the respondents. Moreover, even though the primary data was more time-consuming than the secondary data, in any case, primary data was aimed to solve the problems on hand as well as was intended to take care of the issues instead of collecting the data for other purposes than the problems. Respondents should affirm their answer by only choosing their viewpoint from the set of options, and we called it fixed-alternative questions "(Sekaran and Bougie, 2013)". Therefore, this research paper, the survey form is disseminated "by using Google Form" via "online" platforms such as Facebook and Instagram to achieve our objective.

In our questionnaire, it consists of a cover layout with two sections. Section A is the demographic profile and personal information related to the topic, which is the behavioural intention to adopt the E-wallet. Hence, there will be five demographic questions which include "gender, age, ethnicity, current year of study and faculty" and another five inquiries related to the topic. However, Section B is consisting of 35 questions about the determinants of behavioural intention to adopt E-wallet among undergraduate students, which included the questions from our dependent variable (behavioural intention to adopt E-wallet) and

independent variables (Perceived Usefulness, Consumer Confidence, Price Value, Facilitating Condition, and Social Influence).

"In Section B", "the five-point Likert scale" is being adapted to measure the data. "According to Joshi et al. (2015)", "the 5-points Likert scale" was a commonly used tool for most researchers to investigate their collected data. Respondents are requested to answer "the level of agreement" with the given statement within the range scale (Joshi, 2015). Thus, the quality of data is able to be improved by using this way.

3.4.2 Pilot Test

In this research study, "pilot test" is applied as a pre-testing for the questionnaire construction. Roland and Vanora Hundley (2002) stated that the pilot test is a feasibility test that is used to improve the main study's quality and efficiency in a miniature version of full-scale research. It has to ensure the scales are shown with clear and appropriate language, without any errors and according to the sequences of questions while constructing new scales. Indeed, a pilot test is conducted on a smaller scale before the real full-scale test being carried out to modify and plan for the main study (In, 2017). Hence, it measured the reliability and accuracy of the questionnaire to make sure the outcomes are of good quality.

Conversely, if the pilot test results are not qualified enough, the correction will be re-correct before the questionnaire is used in the full-scale study. Indeed, previous researchers recommended 30 sample sizes of respondents for the pilot test (Browne, 1995). The pilot test in this research study has been conducted for about one week, which started from 1 April 2021 to 7 April 2021. Thirty sets of questionnaires were sent through online email to all the undergraduate students with different faculties in UTAR. In the final step, all the primary data will be collecting from the undergraduate students and processed through the software SPSS 26.0 to measure and ensure the accuracy and reliability for the questionnaire.

3.5 Constructs Measurement (Scale and Operational Definition)

In this part, construct measurement plays a vital role in the study. Researchers show that more than 50 per cent of the previous studies adapted the questionnaire method (Muhammad Auwal Kabir et al., 2015). It is used to show the validity of all the results and findings.

3.5.1 Scale of Measurement

"The scale of measurement" considered a helpful instrument to characterise and comprehend the idea of data inside the numbers allotted to factors (Matthews, 2017). It was further helped by Sekaran (2003), the scale of measurement assists in differentiating how the individual reacts differently to the variable in the investigation. In this study, three scales of measurement: "nominal, ordinal (Likert scale)", and interval.

3.5.1.1 Nominal scale

"A nominal scale" is defined as a basic quantitative approach. It is a label for identification and classification in which the object is assigned to the letters or numbers (Dalati, 2018). Cooper and Schindler (2014) mentioned that nominal data is considered to collect the variables information. It able divided into more than two groups, such as "mutually exclusive and collectively exhaustive". Typically, "nominal" data is being adapted "to measure the gender,

marital status, and" nationality. In this survey, the nominal scale is categorised in Section A. The nominal scale that is used in this survey is gender.

"Example of nominal scale:"

"Gender"

- o "Male"

- o "Female"

3.5.1.2 Ordinal Scale

Consistent with Stevens "(1946)", the "ordinal scale" is the rank ordering scale of measurement. In light of the model from Nicholas (2017), he was demonstrating that the ordinal scale can be exemplified by the Likert scale where there has the rank from 1 (Strongly Disagree) to 5 scales (Strongly Agree), and the respondents just been permitted to answer response from the scale-dependent on the inquiries posed. Hence, Nicholas was additionally concluded that the ordinal scale allows researchers to make precise decisions. Likewise, Barua (2013) further upheld that the Likert scale is a customarily utilised apparatus. It was a psychometric scale that was generally used by the majority of analysts in their surveys. The range of the Likert scale captures the intensity of their feelings for a given item. In this way, we are ready to utilise the Likert scale as the ordinal scale in our investigation to ask the questions related to the dependent and independent variables as below.

Example of Ordinal Scale:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I have an E-wallet application in my smartphone.	1	2	3	4	5

3.5.1.3 Interval Scale

An "Interval scale" can show the order of measurements in the equal and meaningful interval located between the two points of the scale "(Brown, 2011)". Besides, it has the properties of nominal and ordinal scales. However, the break does not include the characteristic of absolute zero. Therefore, an absolute zero is the key characteristic to differentiate between ratio and interval scales (Zikmund et al., 2013). This scale is used in Section A. According to Jacobusse (2005), an interval scale can be used to measure the age of respondents in a study. Thus, we used an interval scale to indicate the age of respondents in this study as below.

"Example of interval scale":

"Your age"

- o 18-21

- o 22-25

- o 26-29

- o Above 29

3.5.2   Origin of Construct

Table 3.2

"Summary of Measures Used for Pilot Test"

Variables	Items	Adapted from	Scale
Dependent Variable: Behavioural intention to adopt E-wallet	6 items	Widayat et al. (2020) and Venkatesh et al. (2008)	Strongly Disagree (1) to Strongly Agree (5)
Independent Variables 1: Perceived Usefulness	5 items	Yang, Mamun, Mohiuddin, Nawi and Zainol (2021), Aji et al., 2020)	Strongly Disagree (1) to Strongly Agree (5)
Independent Variables 2: Consumer Confidence	6 items	Yang, Mamun, Mohiuddin, Nawi and Zainol (2021)	"Strongly Disagree (1) to Strongly Agree (5)"
Independent Variables 3: Price Value	"6 items"	Ridaryanto, Firmansyah, Kartono, and Sundjaja (2020) and Mathiraj, Geeta and Devi (2019)	"Strongly Disagree (1) to Strongly Agree (5)"
Independent Variables 4: Facilitating Condition	6 items	Widayat et al. (2020) and Venkatesh et al. (2008)	"Strongly Disagree (1) to Strongly Agree (5)"
Independent Variables 5: Social Influence	"6 items"	Yang et al. (2021), Widayat et al. (2020), Phan et al. (2020)	Strongly Disagree (1) to Strongly Agree (5)

3.5.3 Operational Definition: Measurement of DV and IV

In this research study, five determinants affect the behavioural intention to adopt E-wallets: Perceived Usefulness, Consumer Confidence, Price Value, Facilitating Condition, and Social Influence. The "five-point Likert scale" is being used for all the items below. The "five-point Likert scale", one means "Strongly Disagree" and five means "Strongly Agree".

3.5.3.1 Behavioural Intention to Adopt E-wallet

Behavioural "intention to adopt E-wallet" refers to the user's behaviour to adopt the new E-wallet technologies to do a cashless transaction "(Venkatesh et al., 2003)".

"Behavioural intention to adopt E-wallet" is measured using six items adapted from "VenKentesh et al. (2008) and Widayat et al. (2020)". The sample items for behavioural intention to adopt E-wallet are "*I have an E-wallet application in my smartphone*", "*I frequently use an E-wallet for my transactions*", "*I am willing to use an E-wallet all the time*", "*I prefer a cashless society in future*", "*I believe E-wallet is better than cash payment*", and "*I will use the E-wallet when the shops are available with the E-wallet code*".

3.5.3.2 Perceived Usefulness

According to the TAM framework, perceived usefulness can be explained by how much individuals accept and believe that utilising a detailed framework would make progress their work execution (Jahangir & Begum, 2008). "As indicated by Davis et al. (1992)", perceived usefulness insights regarding the result of the experience.

In this research, perceived usefulness is measured by five items. These items are adapted from Aji et al. (2020) and Yang et al. (2021). Sample items included "*E-wallet makes the payment transaction faster compared to cash payment*" and "*E-wallet improves the effectiveness for my daily transaction during Covid-19 pandemic*".

3.5.3.3 Consumer Confidence

Consumer confidence means the confidence level of the consumers towards the safety level of the E-wallet payment system. It also includes consumers' trust in Malaysia's consumer law and E-wallet payment system to protect E-wallet users (Yang et al., 2021).

Consumer confidence is measuring by five items that are selected in Widayat et al. (2020). The sample items include *"I believe that E-wallet payment is a safe and trustworthy online transaction method", "I believe that E-wallet applications will not share my personal information with third parties", "I believe E-wallet service providers will help to prevent the fraudulent transaction".*

3.5.3.4 Price Value

The "price value" is considered trade-off process between benefits a person gains with the cost of using the technology. Ming et al. (2020) mentioned that an individual would start to use the E-wallet application when the E-wallet provides some benefits, for instance cashback, discount, and reward points to the users.

The price value is measured using five items adapted by Mathiraj, Geeta & Devi (2019). There are some sample items such as *"I will use an E-wallet when there are cashbacks (Eg: Spend RM30 in 99 Speedmart to get RM5 cashbacks)"*, *"I will use an E-wallet when there are discounts (Eg: Get a 10% discount while purchasing goods by using Touch & Go E-wallet)"* and *"I will use an E-wallet when there is a bonus point (Eg: FAVE Pay, Mobile Pay)"*.

3.5.3.5 Facilitating Conditions

"Venkatesh et al. (2003)", Sivathanu (2019), "Lim et al. (2019)" and "Lee et al. (2019)" stated that the degree of facilitating condition refers to the customers and users believe the technology infrastructures can support them to adopt the E-wallet technologies which measured by the individual perceptions toward the access of resources, receive knowledge and the necessaries keep using the E-wallet system.

Facilitating condition is measured using six items adapted from "Venkatesh et al. (2008) and Widayat et al. (2020)". The sample items for facilitating conditions are *"I believe the stability of the internet network to support E-wallet System is important"*, *"I believe that all Smartphones can support the E-wallet System"*, *"I believe the knowledge to use the E-wallet System is important"*, *"I believe a customer service assistant to solve the difficulties are*

important when facing difficulties with using the E-wallet System", "I believe that I have all the necessary resources to use E-wallet" and *"I believe I have the skills in using the E-wallet System.*

3.5.3.6 Social Influence

Social influence means the influence and effect from critical social networks such as family members, friends and couples who give different feedback, opinions and suggestions that can affect the decision of individuals to adopt an E-wallet (Hunadi & Sfenrianto, 2015). Social influence also includes social media platforms such as advertisements and daily posts from friends that can affected the "behavioural intention to adopt the E-wallet".

Social Influence is measured by applying five items that are selected from Razif et al. (2020). The sample items to measure social influence include *"My friends are using E-wallet", "My family members are using E-wallet",* and *"There were social media platforms showing advertisements to influence me to use E-wallet service".*

3.5.4 Questionnaire Designing

The online questionnaire consists of "Section A and B". "Section A" have ten questions about the demographic's information and other related questions about the topic. Five questions of personal information such as "gender, age, ethnicity, current year of study and faculty", another five questions related to the topic by asking a few questions about the information of E-wallet. However, for Section A, we will measure it using the nominal scale for four questions:

demographic questions like age and current year of study. Also, with dichotomous questions like asking whether respondents use the smartphone and own an E-wallet account, the answers will be yes or no.

For section B, 35 questions related to the determinants of "behavioural intention to adopt" E-wallets among undergraduate students in UTAR will be asked and measured by the Likert scale. Respondents must choose the most suitable answers according to the range, and the range scale is between 1 to 5. "1 indicates" "Strongly Disagree", "2 indicates" "Disagree", "3 indicates" "Neutral", "4 indicates" "Agree", and the last one, 5 indicates "Strongly Agree". After collecting the data from the respondents by using Google form, the SPSS software is being adapted to investigate the reliability of the questionnaire.

3.6   Data Processing

3.6.1 Data Checking

The process of "data checking" is named as validation of data (Di Zio et al., 2016). Data checking ensured that all items and questionnaires are valid. The process to ensure the final data can match the aim of this study. Some reasons may cause the questionnaire to be invalid, such as omitted data, confusing questions, and inconsistent responses. Researcher's responsibility to ensure the questionnaires were gathered back from respondents are complete (Sekaran & Bougie, 2010). Therefore, we applied the "pilot test" to check the reliability of the questionnaires. Amendment will be made if there is any error detected in our questionnaire to improve the reliability of our data. In a nutshell, data checking is the crucial process to double-check all respondents' questionnaires to get more accurate and compatible data before proceeding to the next step "(Zikmund et al., 2013)".

3.6.2   Data Editing

Once data checking is done, data editing is compulsory. Data editing can be defined as a process to identify the error and mistakes done by the respondents in a questionnaire. The researchers have to ensure that the questionnaires collected have complete data and no missing or severe errors in the data. When the data collected from the questionnaires have missing answers, the researchers can review the data that failed to edit (Cox, Binder, Chinnappa, Christianson, Colledge & Kott, 2011). Therefore, to ensure the data is consistent, the data editing process is essential.

3.6.3   Data Coding

Then, "data coding" is unavoidable. In light of Skjott Linneberg & Korsgaard (2019), data coding is critical to transfer the raw qualitative data from the questionnaire into communicative coding. Therefore, the data will become meaningful and valuable for the researchers (Allen, 2017). After gathering the feedback from respondents, data will be key into the SPSS 26.0 and coding them from 1 to 5.

"For Section A", the answer to "each question is coded as below:"

No	Question	Coding
1	Gender	"Male" = 1

		"Female" = 2
2	Your age	"18-21" = 1
		"22-25" = 2
		"26-29" = 3
		"Above 29" = 4
3	Your ethnicity	"Malay" = 1
		"Chinese" = 2
		"Indian" = 3
		"Other" = 4
4	Current year of study	"Year 1" = 1
		"Year 2" = 2
		"Year 3" = 3
		"Other" = 4
5	Faculty	"Faculty of Arts and Social Science (FAS) " = 1
		"Faculty of Business and Finance (FBF)" = 2
		"Faculty of Information and Communication Technology (FICT)" = 3
		"Faculty of Science (FSC)" = 4
		"Faculty of Engineering and Green Technology (FEGT)" = 5
		"Institute of Chinese Studies (ICS)" = 6

		"Lee Kong Chian Faculty of Engineering and Science" = 7
		"Faculty of Creative Industries" = 8
		"Faculty of Accountancy and Management" = 9
		"Faculty of Medicine and Health Sciences" = 10
6	Do you own a smartphone device?	"Yes" = 1 "No" = 2
7	Do you have an E-wallet account?	"Yes" = 1 "No" = 2
8	Please select the E-wallets that you are currently using.	"Touch and Go" = 1 "Boost" = 2 "Fave" = 3 "Wechat Pay" = 4 "Apple Pay" = 5 "Grab Pay" = 6 "Shopee Pay" = 7 "Ali Pay" = 8
9	What is your amount of usage per week before pandemic?	"RM 0- RM 100" = 1 "RM 101 – RM 200" = 2 "RM 201 – RM 300" = 3 "RM 301 – RM 400" = 4

		"Above RM 400" = 5
10	What is your amount of usage per week during pandemic?	"RM 0- RM 100" = 1
		"RM 101 – RM 200" = 2
		"RM 201 – RM 300" = 3
		"RM 301 – RM 400" = 4
		"Above RM 400" = 5

Then, in Section B, each of the questions is coded with the "5-points Likert scale" as below:

"Strongly Disagree (SD)" "is coded as 1"

"Disagree (D)" "is coded as 2"

"Neutral (N)" "is coded as 3"

"Agree (A)" "is coded as 4"

"Strongly Agree (SA)" "is coded as 5"

3.6.4 Data Transcribing

"Data transcribing" action allowed all raw data to be changed into more practical information by the SPSS 26.0 data processing.

3.7   Data Analysis

Once data collection is done, following by the data analysis. Which can be defined as a process that collects and organises the data and concludes to accept or reject the hypothesis (Ibrahim, 2015). The SPSS 26.0 is a statistical software to analyse the data in this study. This software is helpful as it can be used to analyse data such as multicollinearity test, normality test, descriptive analysis, and reliability test.

3.7.1   Descriptive analysis

"Descriptive analysis" is expressed as the most fundamental data analysis to each research project. It summarises and simplifies vast amounts of data and presents it more accessible, such as simple graphics analysis (McFarland, Morris, Reber, Reardon, Dynarski and Loeb, 2017). Besides, the descriptive analysis also includes constructing tables for measuring central tendencies such as "mean, mode" and "median and measures of variability" such as "standard deviation, variance", skewness, and kurtosis (Hayes, 2021). In this study, standard deviation, mean, frequency and percentage of the data will be included in the tables. Moreover, pie charts are created to summarise the data collected from Section A.

3.7.2   Scale Measurement

3.7.2.1 Reliability Test

"Reliability test" is responsible for testing and identifying the reliability and validity of scale. According to Pallant (2013), the independence of random measurement error will result in the reliability of scales. This was further supported by Craig Wells & James Wollack (2003) that brings out the measurement errors by three reasons where it included first, "examinee-specific factors" for instance inspiration, attentiveness, fatigue, impatient in filling up the surveys, momentary lapses of memory, recklessness in checking answers, and luck in speculating; second, "test-specific factors", for example, the particular arrangement of inquiries chose for a test, vague or precarious items, and helpless headings; and third, "scoring-specific factors" like nonuniform grading rules, indiscretion, and then some computational booboos (Craig Wells & James Wollack, 2003). All of these blunders will directly impact the respondent's test score by providing answers wrongly, and results may not be accurate and precise anymore; the unwavering quality test may be fizzled. Hence, it is essential to utilise the reliability test to support the reliability of the scale.

Table 3.3

"Cronbach's Alpha" Rule of Thumb

Cronbach's Alpha	Level of Reliability
$\alpha < 0.05$	Unacceptable
$\alpha < 0.6$	Poor
$0.6 \leq \alpha < 0.7$	Fair
$0.7 \leq \alpha < 0.8$	Good

$0.8 \leq \alpha \leq 0.95$	Excellent

Source: Zikmund et al, 2010 & Habidin et al. (2015)

"Table 3" showing "Cronbach's Alpha" and the level of reliability. The scales are unacceptable when "the value of Cronbach's alpha is less" than 0.05. With an alpha value of less than 0.6, poor reliability will occur. Next, fair reliability of scale will be when the Cronbach's alpha falls between more than or equal to 0.6 and less than 0.7. However, starting from 0.7 until less than 0.8, it is showing good reliability of the scale. And more than or equal to 0.8 to less than or equal to 0.95 represent an excellent reliability scale.

3.7.3 Preliminary Data Screening

3.7.3.1 Multicollinearity

Detecting multicollinearity problems is a need and the first step in the preliminary data screening. Multicollinearity is a severe problem that happens between explanatory variables which have a high associated relationship with each other (Norulhuda Abdullah et al., 2020). Thus, Multiple Linear Regression (MLR) is applied, which is the best method to check the multicollinearity problems (Pallant, 2005; Spector, 2006; Ong and Fadilah Puteh, 2017).

Undeniably, in order to avoid the explanatory variable leading to the error term value increasing when it is highly associated with each other, two calculations in Multiple Linear Regression test results showed the multicollinearity problem was detected, the Variance Inflation Factors (VIF) and Tolerance calculations. The SPSS calculated both. Zikmund, Babin, Carr and Griffin

(2013) claimed that "the value of the Variance Inflation Factor (VIF)" must be smaller than four, and the tolerance value must be higher than two (Miles & Shevlin,2001). Otherwise, high multicollinearity is detected.

3.7.3.2 Normality

Running a normality test is the second preliminary data screening for the data. In order to proceed into the step of inferential statistical analysis, the normality's assumptions need to be fulfilled as the samples collected from populations are assumed to be normally distributed (Keya Das,2016). It is essential that the normality assumptions must be fulfilled to prevent statistical errors. In the past studies of Curran-Everett and Benos (2004), around 50 per cent of published articles contained at least one statistical error. Indeed, holding normality assumptions to get better accurate and reliable results (Ghasemi & Zahediasl, 2012).

In the final analysis, by looking at the skewness and kurtosis in the normality assumption. Hair (2007) and Kowang Owee Tan et al. (2020) stated that "Skewness and Kurtosis range" should be "-1.0 to +1.0" for all the variables. The histogram to check the normality of data, Keya Das (2016) claimed that the histogram is symmetrical and bell-shaped when the data is normally distributed. Lastly, the method of normal probability plot demonstrates the observed values in the X-axis, and the expected values will be on the Y-axis if it is in the situation of normal distribution (Keya Das, 2016).

3.7.4 Data Analysis

3.7.4.1 Inferential Analysis

"Inferential analysis" implies that it is used to make an observable measurement on random samples chosen from an interest population. The values that we obtained from the model are being used to estimate the actual value of the population (Aldrich, 2018). Therefore, it is possible to assess "the behavioural intention to adopt an E-wallet" among all the students in UTAR by using our sample data of 484 students from different faculties in UTAR. In this paper, multiple regression analysis is being adapted to analyse the connexion between the dependent variable, the "behavioural intention to adopt an E-wallet" among all the students in UTAR and independent variables, which are perceived usefulness, consumer confidence, price value, facilitating condition and social influence.

3.7.4.2 Multiple Linear Regression Analysis

Aldrich (2018) argued that multiple linear regression analysis being adapted when X variable and Y variable more than one. The multiple regression concerns how the X variables affected the Y variable inside the model. Therefore, this analysis method can be applied in this paper since there are five X variables and one Y variable. This method was also used by Ridaryanto et al. (2019) and Nguyen et al. (2020) to study the behavioural intention of adopting an E-wallet.

After running the multiple linear regression, we evaluate the model based on the "Model Summary table, ANOVA table and coefficients table". "In the Model Summary table", we used "R-square" to measure the proportion of the variance of the Y variable that can be influenced

by all X variables (Pallant, 2020). Besides that, we utilise the ANOVA table to assess the significance of the model. While using F-statistic, we can know whether the model's changes of dependent variables can be explained significantly. If the P-value of the F-statistic is below 10% significance level, it means the model can define the dependent variable significantly (Pallant, 2020). At the same time, the coefficients table will be adapted to measure the effect of every X variable towards the Y variable. If the P-value is below 10% significance level, it indicates that exogenous variable is significantly related with endogenous variable (Pallant, 2020).

"The equation of the multiple linear regression for this study is":

$$BITE_i = \beta_0 + \beta_1 PU_i + \beta_2 CC_i + \beta_3 PV_i + \beta_4 SI_i + \beta_5 FC_i + \mu_i$$

Where $BITE_i$ = Behavioural Intention to adopt E-wallet

PU_i = Perceived Usefeulness

CC_i = Consumer Confident

PV_i = Price Value

SI_i = Social Influence

FC_i = Facilitating Condition

μ_i = Error term

The Multiple Linear Regression analysis of this study will be applied based on the equation above. The right-hand side of the equation stated all independent variables affect the dependent variable significantly on the left-hand side of the equation, which is the same as the discussion of hypothesis development in Chapter 2.

3.8   Conclusion

In short, chapter 3 has explained the methods we used in our research. It is quantitative research. Before we do the actual test, we must do the pre-test and pilot test. The questionnaires are given out using primary data to 500 students from all the faculties in UTAR Kampar and Sungai Long. After questionnaires are collected, the data is processed. The descriptive and inferential analysis is analysed in the data. The results are discussed in chapter 4.

CHAPTER 4: RESEARCH RESULTS

4.0   Introduction

Data analysis is adopted for research result in "Chapter 4". In the beginning, the descriptive analysis is done, followed by the reliability test to ensure the scales' reliability. Preliminary data screening is unavoidable to carry out to test whether the existence of multicollinearity and the problem of non-normality. Hence, the data is analysed using Multiple Linear Regression Analysis and the latest SPSS 26.0 version is used in this research data analysis.

4.1   Descriptive Analysis

"Descriptive analysis" is done to ensure the data can easily be understood, which is based on the questionnaire survey from the demographic data gathered in Section A. Besides, the descriptive analysis will be applied for the Section B and Section C data. In short, analysis results will be shown in tables, pie charts, chi-square test, bar chart and histogram to conclude all the data.

4.1.1 Respondents Demographic Profile

This research thesis included the five categories of demographic data, which is "gender, age group, ethnicity, the current year of study", and faculties. Each of them will be analysed in each of the following sections.

4.1.1.1 Gender

Table 4.1

"Descriptive Analysis for Gender"

Gender	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Frequency (%)
Male	229	47.3	229	47.3
Female	255	52.7	484	100

Figure 4.1

"Descriptive Analysis for Gender"
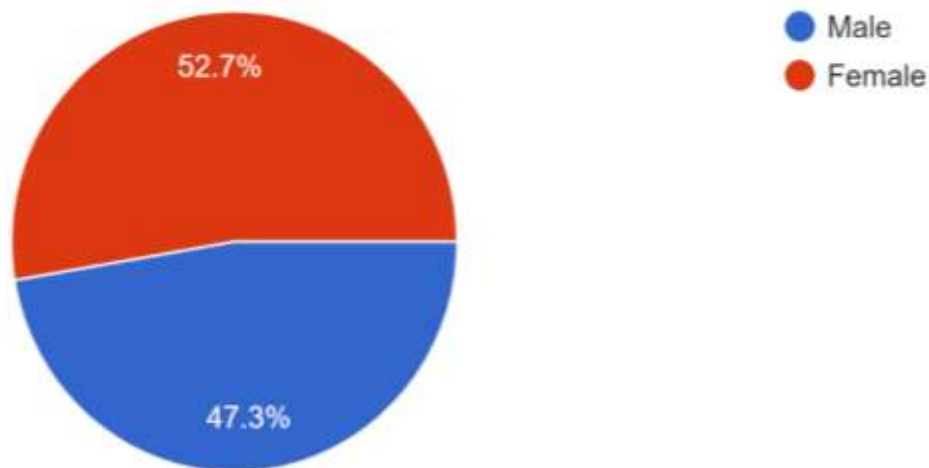
First and foremost, the respondents are grouped based on their gender. There are 500 respondents from UTAR Sg Long and UTAR Kampar to participate in the survey. From "Table 4.1 and Figure 4.1", 47.3% (229 respondents) are male while 52.7% (255 respondents) are female. Thus, female respondents participate more than male respondents in the survey.

4.1.1.2 Age Group

Table 4.2

"Descriptive Analysis for Age Group"

Age Group	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
18-21	259	53.5	259	53.5

22-25	197	40.7	456	94.2
26-29	23	4.8	479	99.0
Above 29	5	1.0	484	100.0

Figure 4.2

"Descriptive Analysis for Age Group"
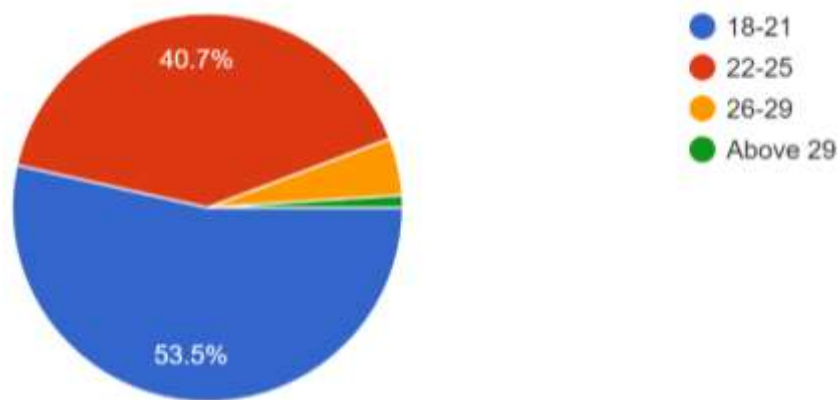
On the other hand, the respondents also have been grouped according to their age. "Table 4.2 and Figure 4.2" show there are 53.5% which consists of 259 respondents aged between 18-21 years old, and this is the largest population among the four categories of age group. Then, the second-highest population age group in our results was 40.7% where it included 197 respondents aged between 22-25 years old. Following the age group between 26-29 years old and above 29, there are 23 respondents and 5 respondents respectively, consisting of 4.8% and 1% for each.

4.1.1.3 Ethnicity

Table 4.3

"Descriptive Analysis for Ethnicity"

Ethnicity	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
Malay	54	11.2	54	11.2
Indian	35	7.2	89	18.4
Nepalese	1	0.2	90	18.6
Chinese	394	81.4	484	100

Figure 4.3

"Descriptive Analysis for Ethnicity"
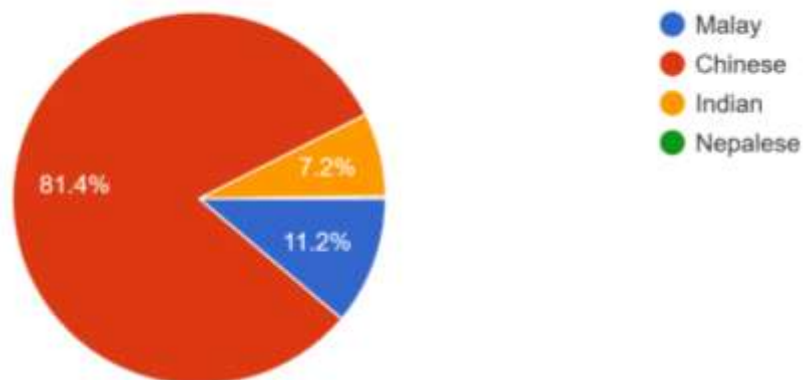
Following by is the ethnicity. Derived from the "Table 4.3 and Figure 4.3", there are 4 types of ethnicities among the participants which is Chinese, Indian, Malay and Nepalese. From the pie chart given, most of the respondents are Chinese which stand around 81.4 % (394 respondents) out of 484 participants. Following by the second highest is Malays which stand for 11.2% (54 respondents) and the third highest is Indians which only stand for 7.2 % (35 respondents) of the total 484 participants. Lastly, the least number of ethnicities is Nepalese which only stand 0.2% because it only has 1 Nepalese among the 484 participants.

4.1.1.4 Current Year of Study

Table 4.4

"Descriptive Analysis for Current Year of Study"

Current Year of Study	Frequency	Percentage (%)	Cumulative Frequency	Cumulative Percentage (%)
Year 1	110	22.7	110	22.7
Year 2	111	22.9	221	45.6
Year 3	159	32.9	380	78.5
Year 4	47	9.7	427	88.2
Foundation	54	11.2	481	99.4
Master	3	0.6	484	100

Figure 4.4

"Descriptive Analysis for Current Year of Study"
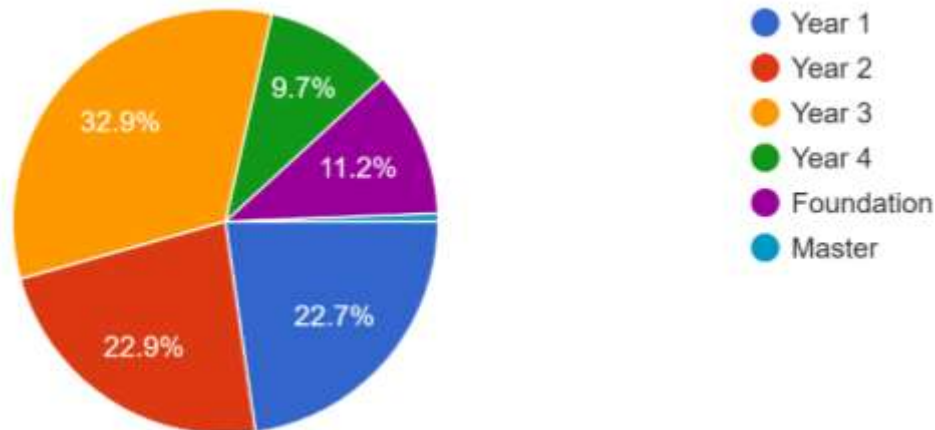
The fourth is the "Current Year of Study". It can be classified into six kinds of students which are "Year 1, Year 2, Year 3, Year 4, Foundation" and Master. Derived from "Table 4.4 and Figure 4.4", Year 3 has the massive number current years of study which are 32.9 % (159 respondents) out of 484 participants. The second highest is Year 2 students, which accounted for 22.9 % (111 respondents), and the third highest is Year 1 students, who stand at 22.7 % (110 respondents) out of 484 participants. In short, the least three types of students are Year 4 stands 9.7 % (47 respondents), Foundation stands 11.2 % (54 respondents), and Master stands 0.6 % only (3 respondents) respectively.

4.1.1.5 Faculty

Table 4.5

"Descriptive Analysis of Faculty"

Faculty	Frequency	Percentage (%)	Cumulative Frequency	Cumulative percentage (%)
"Faculty of Business and Finance (FBF)"	195	40.29%	195	40.29%
"Faculty of Arts and Social Science (FAS)"	62	12.81%	257	53.10%
"Centre of Foundation Studies (CFS)"	57	11.78%	314	64.88%
"Faculty of Information and Communication Technology (FICT)"	39	8.06%	353	72.93%
"Faculty of Science (FSc)"	30	6.20%	383	79.13%
"Faculty of Engineering and Green Technology (FEGT)"	25	5.17%	408	84.30%

"Faculty of Accountancy and Management (FAM)"	24	4.96%	432	89.26%
"Lee Kong Chian Faculty of Engineering and Science (LKS FES)"	21	4.34%	453	93.60%
"Faculty of Medicine and Health Sciences (FMHS)"	15	3.10%	468	96.69%
"Faculty of Creative Industries (FCI)"	10	2.07%	478	98.76%
"Institute of Chinese Studies (ICS)"	6	1.24%	484	100.00%

Figure 4.5

"Descriptive Analysis for Faculty"
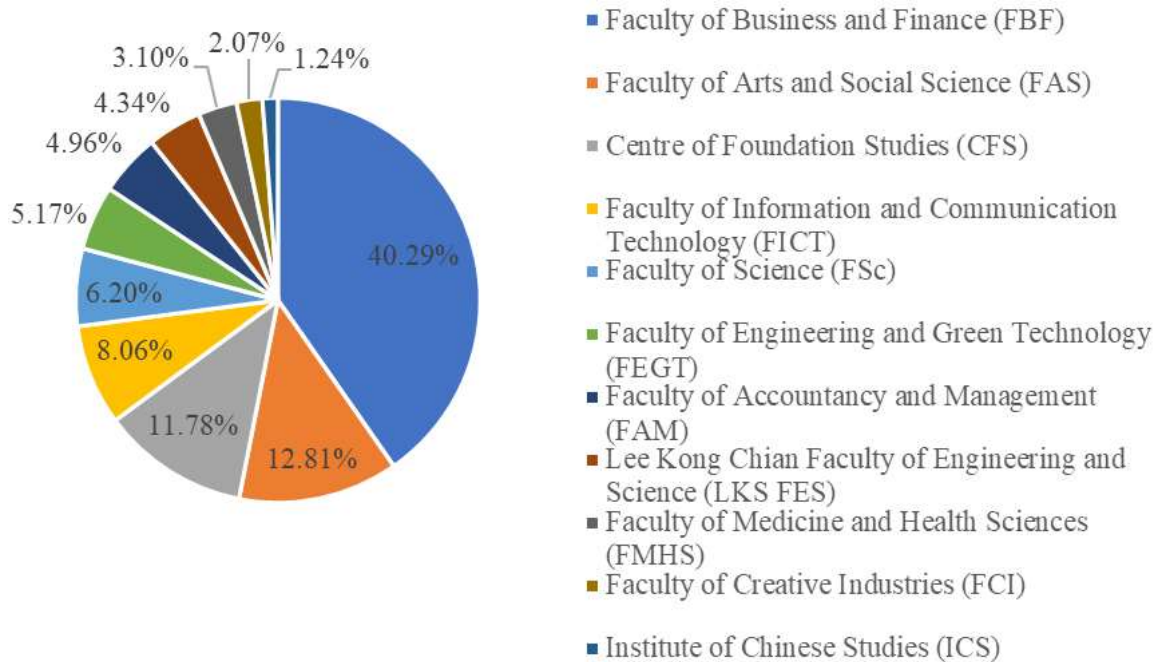
The respondents are also grouped according to their faculties. "Table 4.5 and Figure 4.5" show "Faculty of Business and Finance (FBF)" occupy the largest proportion of respondents with 40.29%, or 195 respondents. Next is 12.81%, or 62 respondents come from the "Faculty of Arts and Social Science (FAS)". Then, 11.78% or 57 respondents are from the "Centre of Foundation Studies (CFS)". Furthermore, 8.06% or 39 respondents come from the "Faculty of Information and Communication Technology (FICT)". Besides that, 6.20%, or 30 respondents come from the Faculty of Science (FSc). And 25 respondents represent 5.17% of our total respondents from the "Faculty of Engineering and Green Technology (FEGT)". At the same time, respondents from the "Faculty of Accountancy and Management (FAM)" and "Lee Kong Chian Faculty of Engineering and Science (LKS FES)" are 4.96% (24 respondents) and 4.34% (21 respondents), respectively. In addition, there are 15 students, or 3.10% of respondents come from the "Faculty of Medicine and Health Sciences (FMHS)". Lastly, only 2.07% or 10 respondents come from the Faculty of Creative Industries (FCI), and 6 respondents, 1.24%, are students from the Institute of Chinese Studies (ICS).

4.1.2   Central Tendencies and Dispersion Measurement of Constructs

All the responses on Section B and Section C questions are analysed in relation to the dependent variable and the five independent variables. Mean, dispersion measures, and standard deviation as measures of central tendency are included in the analysis. All the variables will be analysed and show the results in the following section.

4.1.2.1 Behavioural Intention to adopt E-wallet

Table 4.6

"Central Tendencies Measurement of Behavioural Intention to Adopt E-wallet"

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
BI 1	I have an E-wallet application in my smartphone.	484	4.54	0.720	1	5
BI 2	I frequently use an E-wallet for my transactions.	484	3.84	0.903	6	2
BI 3	I am willing to use an E-wallet all the time.	484	4.11	0.914	3	1

BI 4	I prefer a cashless society in future.	484	4.06	0.861	4	3
BI 5	I believe E-wallet is better than cash payment.	484	4.13	0.914	2	1
BI 6	I will use the E-wallet when the shops are available with the E-wallet code	484	4.02	0.857	5	4

All the questions related to the behavioural intention to adopt E-wallet are examined. The Table 4.6 result above clearly shows that all have the same sample size (N), which is 484. BI1 has the largest mean of 4.54 among the rest of the BI questions. The second-largest mean is BI5, which is 4.13, and the third-largest mean is BI3, which is 4.11. The following mean for BI4. BI6 and BI 2 are 4.06, 4.02 and 3.84, respectively.

In contrast, the largest mean of BI1 has the smallest standard deviation of 0.720. The second and third smallest standard deviations are BI6 and BI4, which are 0.857 and 0.861. In short, the top two highest rankings for standard deviation are BI3, BI5 and BI2, which is 0.914, 0.914 and 0.903, respectively.

4.1.2.2 Perceived Usefulness

Table 4.7

"Central Tendencies Measurement of Perceived Usefulness"

Questions	Statement	Sample size, N	Mean	Mean Ranking	Standard Deviation	Standard Deviation Ranking
PU1	E-wallet make the payment transaction faster compared to cash payment.	484	4.30	2	0.829	2
PU2	E-wallet is convenient to use than cash.	484	4.12	5	0.777	5
PU3	E-wallet improves the effectiveness for my daily transaction during Covid-19 pandemic.	484	4.31	1	0.804	3
PU4	E-wallet can save more time in the payment process (Eg: save time in exchanging coins)	484	4.18	4	0.801	4
PU5	I believe that E-wallet applications are friendly to use.	484	4.23	3	0.842	1

The first explanatory variable is "perceived usefulness" towards the "behavioural intention to adopt E-wallet" among the youth in "UTAR". According to Table 4.7, the highest mean among the five questions in perceived usefulness is PU3 whereby the mean is 4.31 and standard deviation is 0.804. Besides, PU1 has the second-highest mean, which is 4.30 and 0.829 of its standard deviation. Following the PU5, the mean is 4.23. It has the massive "standard deviation" of 0.842. PU2 and PU4 have their mean lower than 4.10, which are 4.12 and 4.18, respectively. However, PU4 has 0.801 of its standard deviation and PU2 has the lowest standard deviation among the five questions, 0.777.

4.1.2.3 Consumer Confidence

Table 4.8

"Central Tendencies Measurement of Consumer Confidence"

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
CC1	I believe that E-wallet payment is a safe and trustworthy online transaction method.	484	3.98	0.923	1	1
CC2	I believe that E-wallet applications will not share my	484	3.67	0.921	6	2

	personal information with third parties.					
CC3	I believe that an E-wallet can transfer my money safely.	484	3.96	0.885	2	4
CC4	I believe that E-wallet will not have any fraudulent transactions.	484	3.68	0.910	5	3
CC5	I believe E-wallet service providers will help to prevent the fraudulent transactions.	484	3.95	0.883	3	5
CC6	I believe with Malaysia's consumer law in protecting E-wallet users.	484	3.85	0.850	4	6

Next, the following variable will be consumer confidence. Derived from "Table 4.8", CC1 has the massive "mean" of 3.98 and the massive "standard deviation" of 0.923. The second-massive "mean" which is 3.96 goes to CC3 and the standard deviation is 0.885, ranked as number four. The third-highest mean, which is 3.95, goes to CC5 and the standard deviation is 0.883, ranked as number five. The fourth-highest mean which is 3.85 goes to CC6 and the standard deviation is 0.850, ranked as the lowest. The fifth-highest mean which is 3.68 goes to CC4 and the standard deviation is 0.910, ranked as number three. Lastly, the lowest mean, which is 3.67, goes to CC2 and the standard deviation is the second highest of 0.921.

4.1.2.4 Price Value

Table 4.9

"Central Tendencies Measurement of Price Value"

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
PV1	I will use an E-wallet when there are cashbacks (Eg: Spend RM30 in 99 Speedmart to get RM5 cashbacks)	484	4.20	0.883	1	3
PV2	I will use an E-wallet when there is discount (Eg: Get a 10% discount while purchasing goods by using Touch & Go E-wallet)	484	4.16	0.842	2 or 3	5
PV3	I will use an E-wallet when there is a bonus point (Eg: FAVE Pay, Mobile Pay)	484	4.05	0.936	5	2

PV4	I will use an E-wallet when there is a voucher given (Eg: Get a free shipping voucher by using Touch & Go E-wallet while making payment in Lazada)	484	4.16	0.841	2 or 3	6
PV5	E-wallet is expensive to me as I need to buy a data plan to enjoy the E-wallet services (Eg: Touch & Go E-wallet needs data to make the payment).	484	3.44	1.239	6	1
PV6	I will use an E-wallet when there are no extra charges to utilise it (Eg: Subscription fees and service charges).	484	4.12	0.865	4	4

Price value will be the following variable to be examined. "Table 4.9" shows that the largest mean is PV1 which is 4.20, and a standard deviation of 0.883, ranked as number three. There is no second-highest, and third-highest mean as the mean for PV2 and PV4 are the same, which is 4.16. The standard deviation for PV2 is 0.842, ranked as number five, while the standard deviation for PV4 is 0.841, ranked as the lowest. The fourth-highest mean which is 4.12 goes

to PV6 and the standard deviation is 0.865, ranked as number four. The fifth-highest mean which is 4.05 goes to PV3 and the standard deviation is 0.936, ranked as number two. Lastly, the lowest mean, which is 3.44, goes to PV5, but the standard deviation is the highest, which is 1.239.

4.1.2.5 Facilitating Conditions

Table 4.10

"Central Tendencies Measurement of Facilitating Conditions"

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
FC1	I believe that the stability of the internet network to support the E-wallet System is important.	484	4.37	0.778	1	4
FC2	I believe that all smartphones can support the E-wallet	484	4.04	0.800	5	3
FC3	I Believe the knowledge to use the E-wallet	484	4.31	0.741	2	5

	System is important.					
FC4	I Believe the customer service for E-wallet is able to assist me when I face any difficulty.	484	3.95	0.849	6	1
FC5	I Believe that all the necessary resources to use E-wallet.	484	4.17	0.807	3	2
FC6	I Believe I have the skill in using the E-wallet System	484	4.15	0.736	4	6

The questions of Facilitating Conditions are being tested and analysed as well. Based on the "Table 4.10" result above, all the questions obviously have the same Sample Size (N), which is 484. The FC1 has the largest mean, 4.37, followed by the second and third largest mean are FC3 and FC5, which is 4.31 and 4.17. According to the descending sequences, the rest of the mean ranking are FC4, FC2 and FC6, which is 3.95, 4.04, and 4.15, respectively. Conversely, the FC4 has the lowest mean ranking, but it also shows that the highest standard deviation is 0.849, and it is the first ranking of standard deviation. Lastly, the following sequences ranking of standard deviation are FC5, FC2, FC1, FC3 and FC6 which are 0.807, 0.800, 0.778, 0.741 and 0.736.

4.1.2.6 Social Influence

Table 4.11

"Central Tendencies Measurement of Social Influence"

Question	Statement	Sample Size, N	Mean	Standard Deviation	Mean Ranking	Standard Deviation Ranking
SI1	People who are close to me are using E-wallet.	484	4.07	0.866	1	4
SI2	My friends are using E-wallet.	484	4.07	0.768	2	6
SI3	My family members are using E-wallet.	484	3.94	0.966	6	1
SI4	The E-wallet services is broadly used in my community participate in.	484	3.95	0.830	5	5
SI5	My university is offering E-wallet payment during events and activities (Eg: E-recruitment).	484	3.96	0.934	4	2

SI6	There are social media platforms showing advertisements to influence me to use E-wallet service.	484	3.98	0.871	3	3

The questions for the fifth independent variable, which is social influence, are analysed. According to the table above, SI1 and SI2 have the largest mean value of 4.07. However, SI2 has the lowest value for standard deviation, 0.768, while SI1 has a standard deviation of 0.866. Subsequently, SI6 owns the third-largest mean value amounting to 3.98, with a standard deviation of 0.871. SI5 has the fourth-largest mean value of 3.96 and a standard deviation of 0.934. Furthermore, the mean and standard deviation for SI4 is ranked the fifth among the questions, 3.95 and 0.830, respectively. Lastly, although SI3 has the smallest mean value of 3.94, it has the largest standard deviation of 0.966.

4.2 Scale Measurement

4.2.1 Reliability Test

Table 4.12

"Cronbach's Alpha Reliability Analysis"

No.	Types of the Variable	Name of the Variable	Number of Items	Cronbach's Alpha	Reliability test
1	Dependent Variable	Behavioural Intention to Adopt E-wallet	6	0.888	Excellent
2	Independent Variable	Perceived Usefulness	5	0.901	Excellent
3	Independent Variable	Consumer Confidence	6	0.928	Excellent
4	Independent Variable	Price Value	6	0.870	Excellent
5	Independent Variable	Facilitating Conditions	6	0.897	Excellent
6	Independent Variable	Social Influence	6	0.884	Excellent

"Cronbach's Alpha values for all the" variables are derived from Table 4.12. According to the findings, "behavioural intention to adopt E-wallet" has a "Cronbach's Alpha" of 0.888.

"Cronbach's Alpha value" as well as 0.901 of perceived usefulness, 0.928 of consumer confidence, 0.870 of price value, 0.897 of facilitating conditions and 0.844 of social influence. From the table, the largest value of is 0.928 fall to price value, and the least value is the social influence which is 0.884. However, according to Zikmund et al. (2010) and Habidin et al. (2015), the value of "Cronbach's Alpha" that falls between 0.8 to 0.95 is considered excellent. Hence, the level of reliability for the dependent variable and independent variables from our examinations are superior. "Cronbach's Alpha values" for each variable are above 0.8 and below 0.95, indicating that the scales of all variables are extremely trustworthy.

4.3   Diagnostic Test

We performed preliminary data analysis before conducting inferential analysis to ensure the result of this research paper is reliable. Two preliminary data analyses will be applied to this study which is the multicollinearity test and normality test.

4.3.1 Multicollinearity Test

At the point when the autonomous factors in a relapse model have a high connection, multicollinearity issue will emerge. (Sekaran & Bougie, 2016). If the problem occurs in our model, it will lead to a high error term, causing the result to be unreliable. In order to detect multicollinearity problems in this research, we will apply the two standard measures to identify "multicollinearity", which are "tolerance value and variance inflation factor (VIF)". "VIF" is the inverse of tolerance value. If the "tolerance value is less than 0.1" and "the value of VIF is more than 10", there is a multicollinearity problem in the model (Sekaran & Bougie, 2016).

Table 4.13

"Tolerance Value and Variance Inflation Factor (VIF)"

	Collinearity statistics	
Independent variables	Tolerance Value	VIF
Perceived Usefulness (PU)	0.500	1.998
Consumer Confidence (CC)	0.484	2.064
Price Value (PV)	0.506	1.976
Facilitating Condition (FC)	0.396	2.528
Social Influence (SI)	0.475	2.105

"Table 4.13" point out that the "tolerance value" for all "independent variables" is more than 0.1. In comparison, their values of VIF are less than 10. Therefore, we can confirm that no multicollinearity problem occurs among the model's independent variables.

4.3.2 Normality Test

"Normality tests" are to govern the normality of the data once the multicollinearity test has been completed. There are three methods to assess the information's normality: the value of skewness and kurtosis, histogram, and "chi-square test".

Table 4.14

"Normality Test Result"

Variables	Skewness	Kurtosis
Dependent Variable: **Behavioural intention to adopt E-wallet**	(1.001)	1.688
Independent Variable 1: **Perceived Usefulness**	(1.323)	3.169
Independent Variable 2: **Consumer Confidence**	(0.352)	(0.090)
Independent Variable 3: **Price Value**	(1.102)	2.183
Independent Variable 4: **Facilitating Condition**	(0.997)	2.601
Independent Variable 5: **Social Influence**	(0.576)	0.925

Firstly, the coefficient of skewness and kurtosis are shown in Table 4.14. According to Fuey and Idris (2018), normal distribution will occur when the skewness coefficient falls between negative two to positive two, and the kurtosis coefficient falls between negative seven to positive seven if the sample size is larger than 300. Based on Table 4.14, every skewness and kurtosis coefficient fall between negative two to positive two and negative seven to positive seven. The largest skewness coefficient goes to consumer confidence (0.352), while the lowest skewness coefficient goes to perceived usefulness (1.323). However, the largest kurtosis coefficient goes to perceived usefulness, which is 3.169, while the lowest kurtosis coefficient goes to consumer confidence (0.090). As a result, it is normally distributed as all the skewness coefficient falls between negative two to positive two, and the kurtosis value falls between negative seven to positive seven.

Figure 4.6

Histogram
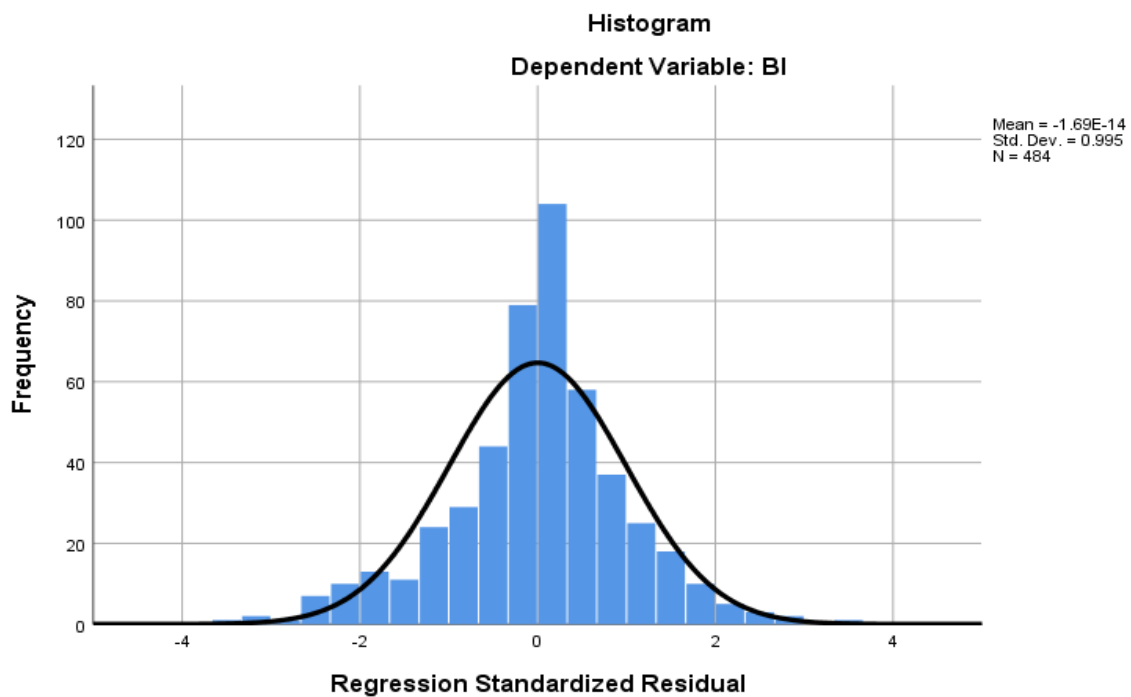
Next, the histogram is conducted to ensure the data meets the normality assumption. "A histogram" is a graphical depiction of a group of data points organised into user-defined ranges. "The histogram" condenses a data series into an easily comprehended graphic by dividing them into logical fields (Chen, 2021). The histogram above shows the data collected from our dependent variable of behavioural intention to adopt E-wallet. The distribution plot is constructed in the histogram, and the normal distribution curve is placed on the plot. We can see that the distribution plot is considered normally distributed. The Frequency of the data moves from the lowest to the highest, reaches the peak, and starts to decline. Hence, it forms symmetrical and bell-shaped. In conclusion, the normal distribution has occurred in this study.

4.3.3 Chi-Square Test

Table 4.15

Chi-Square Test

Variables	Asymptotic Significance (2 -sided)	Pearson Chi-Square	Degree of freedom
Behavioural intention to adopt E-wallet and Perceived Usefulness	0.000	1599.870	304
Behavioural intention to adopt E-wallet and Consumer Confidence	0.000	1163.066	361
Behavioural intention to adopt E-wallet and Price Value	0.000	1051.976	380

Behavioural intention to adopt E-wallet and Facilitating Condition	0.000	990.858	304
Behavioural intention to adopt E-wallet and Social Influence	0.000	873.331	342

The Chi-square test assesses how well observed data distribution fits the anticipated distribution when the variables are independent. It is also named the "goodness of fit" statistic (Chen, 2021). Asymptotic Significance is the p-value, while the Pearson Chi-square is the test statistic. If the Asymptotic Significance value falls below the 5% significance level, it means rejecting the null hypothesis, and therefore, a significant relationship will occur. Since the value of Asymptotic Significance for each variable is 0.00, which is less than 5% significant level, shows a significant relationship between all explanatory variables and the response variable. Besides p-value, "Pearson chi-square" also takes into consideration. If the chi-square test statistic is larger than the "critical value, disapprove null hypothesis, significant relationship" will occur. The crucial value for ($X^2_{0.05}$) and degree of freedom 100 is 124.342. Since the degree of freedom of every variable is more than 100, the critical value will be 124.342. Also, since each chi-square "test statistic is huge than the critical value" (123.342), "null hypothesis" will be disapproved. It shows all the explanatory variables are significant to response variable. Perceived usefulness, consumer confidence, "price value", "facilitating condition", and "social influence" are depending on "behavioural intention to adopt E-wallet".

4.4 Inferential Analysis

4.4.1 Multiple Regression Analysis

Table 4.16

"Multiple Regression Analysis"

	Unstandardised Coefficient Beta	Coefficient Standard Error	Standardised Coefficient Beta	t-statistics	P-value
Constant	0.406	0.139		2.922	0.004
PU	0.557	0.039	0.552	14.154	0.000
CC	0.161	0.036	0.178	4.499	0.000
PV	0.057	0.036	0.061	1.562	0.119
FC	0.040	0.047	0.037	0.843	0.400
SI	0.085	0.040	0.086	2.146	0.032
R-squared					0.636
Adjusted R-squared					0.633

F-test	167.338
P-value	0.000
Durbin Watson	1.847

The relationships between behavioural attention and perceived usefulness (PU), consumer confidence (CC), price value (PV), facilitating condition (FC), and social influence (SI), are examined. According to Table 4.16, perceived usefulness, consumer confidence, and social influence are significant at t-statistics 14.154, 4.499 and 2.146, respectively and their P-values for each t-statistics are smaller than 0.05. However, the result shows that price value and facilitating condition are insignificant at t-statistics 1.562 and 0.843 since the P-values are more than 0.10 at a 90% confidence level.

The first independent variable, which is perceived usefulness, is significant at a 99% confidence level. "P-value" (0.00) is lower than the 0.01 "significant level". It conforms to the findings of Ooi and Tan (2016), "Liebana-Cabanillas et al. (2018) and Koenig-Lewis et al. (2015)", shows that "perceived usefulness" is significantly related to behavioural intention to adopt E-wallets. Moreover, unstandardised coefficient beta is 0.557, which positively correlates to all the variables. If there is one unit increase in perceived usefulness, it increases 0.557 units in "behavioural intention to adopt E-wallet" among the youth in UTAR, ceteris paribus.

In addition, consumer confidence, which is the second independent variable, is proven as significant at a 99% confidence level. P-value, which is 0.00, is beneath the significance level of 0.01. This result confirms the study findings of Chiew & Perera (2019), Kurniasih (2020), Chresentia & Suharto (2020) and Nawi and Zainol (2021). It shows consumer confidence is significant to "behavioural intention to adopt E-wallet". The unstandardised regression coefficient is recorded as a positive value at 0.161, revealing a positive correlation between all

the variables. It illustrates that a unit rise in consumer confidence can rise 0.161 units in "behavioural intention to adopt E-wallet" among the youth in UTAR, ceteris paribus.

In contrast, the result shows that our third independent variable, which is price value, is insignificant at a 90% confidence level. P-value is 0.119 more than the 0.10 significance level. The result is similar to the study from Abidin et al. (2017), "Aydin and Burnaz (2016), and Oliveira et al. (2016)". Hence, price value has "insignificant positive relationship" to "behavioural intention to adopt an E-wallet". Besides, the unstandardised coefficient beta is recorded as a positive value at 0.057, showing a positive correlation between all the variables. This indicates a one-unit increment in price value will increase the "behavioural intention to adopt E-wallet" among the youth in UTAR by 0.057-unit, ceteris paribus.

Furthermore, the fourth independent variable, which is facilitating conditions, is also insignificant at a 90% confidence level. P-value is 0.400 more than the 0.10 significance level. The result agrees with the study from Dong (2018) and Yang et al. (2021). Hence, facilitating condition has insignificant positive relationship to "behavioural intention to adopt E-wallet". In addition, the unstandardised coefficient beta is recorded as a positive value at 0.040, showing a positive correlation between the all the variables. It indicates that when facilitating conditions rise by one-unit, "behavioural intention to adopt E-wallet" among the youth in UTAR will rise by 0.040-unit, ceteris paribus.

The last independent variable is social influence It is significant at a 95% confidence level. Its P-value is recorded as 0.032, which is less than 0.05 significance level. It is similar to "Ridaryanto et al. (2019), Widodo et al. (2019) and (Dong, 2018)". Hence, "social influence" has "significant relationship" to "behavioural intention to adopt E-wallet". Also, the unstandardised coefficient beta is recorded as a positive value at 0.085, revealing a positive correlation between all the variables. It can be illustrated that an increment of one unit of social influence tends to increase 0.085 units of the "behavioural intention to adopt an E-wallet" among the youth in UTAR, ceteris paribus.

Moreover, the R-squared (R^2), also known as the coefficient of determination, is a statistical measurement that interprets the proportion changed independent variable as explained by the proportion change in independent variables (Filho, Silva & Rocha, 2011). Our result shows 0.636 R^2 explains that 63.6% of the variation in "behavioural intention to adopt E-wallet" among the youth in UTAR is defined by the combination of independent variables: perceived usefulness, consumer confidence, price value, and facilitating condition, and social influence. In contrast, the remaining 36.4% of the variation in "behavioural intention to adopt E-wallet" among the youth in UTAR is explained by other related determinants.

Other than that, adjusted R-squared explains the variation change in independent variables that are affected by variation change in an independent variable after considering the degree of freedom of the model. Our result shows the adjusted R-squared of our model is 0.633. It means that there are 63.3% in "behavioural intention to adopt E-wallet" among the youth in UTAR can be interpreted by combined variables of perceived usefulness, consumer confidence, price value, facilitating condition, and social influence after considering the degree of freedom.

Moreover, the result also shows our regression model is significant statistically at the confidence level of 99% because the "P-value of F-test" statistic is 0.000 beneath the "significance level of 0.01". The F-test statistics can show the overall significance of our multiple linear regression. Therefore, the F-statistics of 167.338 is significant. To illustrate the value, the model can explain the relationships between "behavioural intention to adopt E-wallet" among the youth in UTAR and the five independent variables: perceived usefulness, consumer confidence, price value, facilitating condition, and social influence. It also means our added variables can improve the regression model compared to the intercept-only model.

Durbin-Watson Test is a measurement to test the presence of an autocorrelation problem, which is also called the serial correlation of a regression analysis. The autocorrelation problem will cause underestimation of the standard error and misleading our result. The value of the Durbin-

Watson test usually falls between zero and four. If the value of Durbin-Watson is equal to two, no autocorrelation problem will occur. However, a positive autocorrelation will occur on condition that the "Durbin-Watson value is more than" two. At the same time, a negative autocorrelation will occur on condition that Durbin-Watson value is less than two. Based on our result, the Durbin-Watson statistic value is 1.847. There is no autocorrelation problem since the test statistic value is close to two.

4.5   Conclusion

To carry out the data analysis, a Version of SPSS 26.0 is being used. The study and summarisation of the data gathered from the questionnaire survey are practical and efficient enough due to SPSS. Besides, the scales used in the questionnaire are reliable, and there are no multicollinearity and non-normality problems found. In the final analysis, the multiple linear regression analysis shows Perceived Usefulness, Consumer Confidence, and "Social Influence", are significant to the behavioural intention to adopt E-wallet, but the Price Value and Facilitating Condition are insignificant "to the behavioural intention to adopt E-wallet".

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0   Introduction

In "Chapter 5", the outcomes and discoveries from Chapter Four will be profoundly additionally examined. The inferential analysis results will be summarised, and the results will be justified deeply. Hence, the recommendations for the findings as well as to make some improvement. To put it plainly, the limitations of this examination theory and ideas for future exploration will be expressed.

5.1   Summary of Statistical Analysis

Table 5.1

"Summary of the Statistical Finding"

Independent Variables	T-statistics	P-value	Results
Perceived Usefulness	14.154	0.000	Significant
Consumer Confidence	4.499	0.000	Significant
Price Value	1.562	0.119	Insignificant

| **Facilitating Conditions** | 0.843 | 0.400 | Insignificant |
| **Social Influence** | 2.146 | 0.032 | Significant |

Based on the Table 5.1 result above, the independent variables in the table are perceived usefulness, consumer confidence, "price value", "facilitating condition" and "social influence". The result shows that the perceived usefulness, consumer confidence and "social influence" have critical connections with the "behavioural intention to adopt E-wallet". However, the price value and facilitating condition do not substantially connect with the "behavioural intention to adopt E-wallet". In short, these all-independent variables are considered robust estimators for the behavioural "intention to adopt E-wallet among the" youth in UTAR.

5.2 Discussion on Major Findings

In this section, the findings from Section 5.1 will be further discussed about the efforts done by the university independently.

5.2.1 Perceived Usefulness and Behavioural Intention to Adopt E-wallet

"According to the" outcomes in our examination, perceived usefulness showing a significant nexus "with the dependent variable, which is the" behavioural "intention to adopt E-wallets

among" youth in UTAR. Based on the previous studies, perceived usefulness was described as the degree of individuals accepting innovation by utilising it (Shankar & Datta, 2018) and the consumer perception after using the creation (Khayati and Zouaoui,2013). By comparing our results with previous studies, similar findings were supported by Ooi and Tan (2016), where their result showed a huge connection between "behavioural intention to adopt the E-wallet" in Malaysia.

Besides that, with further supports by "Nyaboga et al. (2015)", "Liebana-Cabanillas et al. (2018)" and "Koenig-Lewis et al. (2015)", they were performed their research by distributing the questionnaires to their targeted audiences which included students and also public in order to examine the elements influencing the behavioural intention and adoption of E-wallet services in Kenya, Spain and French respectively. And based on their studies, they found out that the "perceived usefulness" of the E-wallet has a more passionate and more precise meaningful relationship with users.

Therefore, with the supports by all of the similar findings, the significant result between "perceived usefulness" and "behavioural intention to adopt E-wallet" can be concluded whereby the youth in UTAR believed that the use of E-wallet bringing conveniences to them as well as E-wallet that introduced by UTAR is user friendly like Social Wallet. Besides that, by using the E-wallet on campuses, they assumed all the transactions could be done within a few seconds, enabling them to save time. Hence, our examination was consistent with the previous studies, whereby both results show a considerable nexus between the independent and dependent variables.

5.2.2 Consumer Confidence and Behavioural Intention to Adopt E-wallet

Next, the result also uncovers a considerable nexus between consumer confidence and behavioural "intention to adopt E-wallet among the" youth in UTAR since the "P-value", which is 0.00, is smaller than the significance level of 0.01. The outcome is like the examination discoveries of Chiew & Perera (2019), Kurniasih (2020), Chresentia & Suharto (2020) and Nawi and Zainol (2021). Consumer confidence is defined as a subjective belief that individuals feel safe, feasible and valuable when using an E-wallet (Chiew & Perera, 2019). Especially when the transaction process is going on, the payment system can ensure that funds can be transferred safely from one account to another. Consumer confidence includes the trust and security risk that may arise when there is a potential loss due to the system failure and unusual activity of online hackers.

A previous study by "Yang, Mamun, Mohiuddin, Nawi and Zainol (2021)" also supports that perceived trust and intention to use E-wallet have positive and significant relationships. Razif, Misiran, Sapiri and Yusof (2020) also studied that trust has a positive huge impact on the behavioural intention to acknowledge E-wallet stages among youthful grown-up buyers. Hidayanto et al. (2015) also support that consumers' trust will significantly affect the intention to adopt E-wallet. Other than that, Widodo, Irawan and Sukmono (2019) and Ajmera & Bhatt (2020) support that trust significantly influences consumers to adopt E-wallet.

With the support from the previous research that shows similar results, several reasons help conclude the significant consequence between consumer confidence and "behavioural intention of" consumers to adopt E-wallet. The respondents believe that the E-wallet providers and related banking institutions will protect their private information and act in their best interest. In recent years, Malaysia's government has put many efforts and support in attracting more consumers to adopt cashless payment (New Straits Time, 2019). This will enhance the UTAR students' confidence towards the E-wallet because the government and Bank Negara

Malaysia give strong support. Furthermore, the E-wallet providers ensure a safe and secure cashless payment environment that will provide a trustworthy impression to the consumers. This can be achieved by obtaining an E-wallet license from "the central bank of Malaysia", which is "Bank Negara Malaysia" and provides secure servers to the consumers.

5.2.3 Price Value and Behavioural Intention to Adopt E-wallet

Next, Taufan and Yuwono (2019), Dawi (2019) and Soodan and Rana (2020) shows a critical nexus between price value and the behavioural intention to adopt E-wallet. However, it is in contrast with our result. The result shows an inconsequential correlation between price value and behavioural intention to adopt an E-wallet among the youth in UTAR. In other words, price value will not be giving impacts to the "behavioural intention to adopt E-wallet". Some researchers showed the same result, such as Aydin and Burnaz (2016) and Oliveria et al. (2016). Not only that, Abidin et al. (2017) mentioned that price value is insignificant to the behavioural intention to adopt E-wallet due to some respondents might not be users of E-wallet, and they had no idea what resources they would need to use for the mobile payments.

According to Chia, Wei, Ching, Vian and Yee (2014), there is an irrelevant nexus between price value and behavioural intention to adopt E-wallet. It mentions that a questionnaire-based technique itself is not particularly suited respondents' response for analysing reactions to the price. It is better to include more details information such as the real price of the item on sale, pricing of competing products as well as the trade-off benefits to the respondents (Koeing-Lewis, Palmer and Moll, 2010). As a result, there are no prices mention in the questionnaire and UTAR students is hard to make the judgement on it while answering the question. Therefore, UTAR students does not have access to the price value information, so they are powerless to appraise the price of E-wallet services in relation to their benefits. Thus, price value is insignificant to the "behavioural intention to adopt E-wallet".

5.2.4 Facilitating Conditions and Behavioural Intention to Adopt E-wallet

With retrospect back with the facilitating conditions and it is found that there is an insignificant relationship to the behavioural intention to adopt E-wallet among the youth in UTAR. Previous researchers have proven the insignificant results as well (Intarot and Beokhaimook, 2018). The facilitating conditions refers to the degree of the user believed that the current latest technical infrastructure supported them to the use of E-wallet system "(Venkatesh et al., 2003)".

Undeniably, the infrastructure of E-wallet is important as well as the facilitating condition also. It is to make sure the youth in UTAR knows how to use the E-wallet application and the needs of guidance to use which provided and clearly stated in the E-wallet application. Pal et al. (2019) showed that the facilitating conditions are sufficient in aspect of the availability of internet network with the smartphone, the users are having the knowledge of using the e-wallet technology system, smartphone is fully supported installation with the E-wallet technology and skillful in using E-wallet. The youth in UTAR experienced the bad internet networking with their smartphone in UTAR areas such as the Heritage Hall inside and Block H building which the internet signal is relatively low caused hard to do transaction via E-wallet. Besides that, the youth emphasized the guidance to use the E-wallet is important as they experienced the complicated clicking procedure or topping up their money into the E-wallet to do the transaction and it needs the skill to understand the operation as well. The past research studies in Dong (2019) argued that "there is an insignificant relationship between" facilitating condition and behavioral intention to adopt E-wallet. However, the facilitating condition of E-wallet application that allowed to be used in UTAR did not affect the youth to adopt E-wallet.

In short, the result obtained from the data analysis here is consistent with previous researchers, which there is an insignificant nexus between the facilitating condition and the behavioural intention to adopt E-wallet among the youth in UTAR which same goes to the empirical result

in Yang et al. (2021) stated that the facilitating condition did not have huge impact to the "behavioural intention to adopt E-wallet".

5.2.5 Social Influence and Behavioural Intention to Adopt E-wallet

The outcome demonstrates that there is a critical connection between social influence and behavioural "intention to adopt E-wallet among the" adolescent in UTAR. Its P-value is recorded as 0.032, which is less than 0.05 significance level. The outcome conforms "to the research findings of Ridaryanto et al. (2019)", "Widodo et al. (2019)" and Dong (2018). "Social influence is described as the level to which" individuals perceive that others' suggestions are crucial to them whether to adopt an electronic wallet (Chresentia & Suharto, 2020). People who are essential to the individual are referring to family members, friends, and partners.

Besides that, Phan, Ho and Le-Hoang (2020) also support "that social influence has a significant effect on the intention of people to adopt E-wallet", especially the young generation. In the study of Phan et al. (2020), young people are easily and greatly influenced by different influential groups such as friends, family and favourite celebrities. Oliveira, Thomas, Baptista, and Campos (2016) mentioned that social influence reflects the effect of environmental, social factors such as opinion from an organisation's superior, individual's friends and relatives. Their study also showed that "there is a significant nexus between social influence and the consumer's behavioural intention to adopt an E-wallet".

Since our outcome shows a critical connection "between social influence and behavioural intention to adopt E-wallets", we can conclude that family members, friends, and spouses affect the UTAR students' decision to adopt E-wallet. It is an essential factor influencing the students' intention to adopt E-wallets because it can build an emotional perspective. Besides, the spread of advertisements on social media and television can also control the students' behavioural

intention. The E-wallet providers that promote their E-wallet application through the influence of celebrities and reputable characters will significantly giving impacts to the "behavioural intention of consumers to adopt E-wallet".

5.3   Implications of the study

The managerial implication was provided in this section. Actions that are made and can be taken by the organisations, which are universities, government and religious organisations, are able to be further explained in this section to improve the "behavioural intention to adopt E-wallet among the" youth in UTAR based on the results obtained from the data analysis.

5.3.1 Theoretical Implication

Extended UTAUT is one of the theoretical models that is having more flexibility to measure the behavioural intention and the technology acceptance. However, further enhancing is needed as the Nemer Aburumman and Robert (2020) argued that some studies proven that the weakness of adopting extended UTAUT2 in the research context of electronic applications. Venkatesh et. al and Chang (2012) claimed that to ensure the gap of extended UTAUT applicability, researchers should apply it differently in term of countries, age groups, and differ new technologies with new variables in the context of technology acceptance and behavioural intention to adopt E-wallet. Hence, in this research study we applied in "Universiti Tunku Abdul Rahman (UTAR)", Malaysia, and examine the youth age group from 19 to 29 above for the E-wallet application in UTAR with variables such as perceived usefulness, consumer confidence, price value, facilitating condition and social influence.

5.3.2 Managerial Implications

Technologies were becoming more advanced, and the appearance of the Covid-19 pandemic and enforcement of movement control order was quickening its growth. In order to improve the behavioural intention of adopting the E-wallet in our country, the government has to put their efforts into it. Firstly, from the standpoint of perceived usefulness and behavioural intention of adopting E-wallet, our government strongly supported the E-wallet applications like Touch N' Go, Boost, Grab Pay, Shopee Pay and so forth. They cultivate the society and move forward to a cashless environment by allowing and supporting businessmen to receive the money digitally. Besides that, end-users are not only able to pay their money by utilising the E-wallet but also giving permission to invest their funds with low-risk low return portfolios. For example, the Touch N' Go allowing people to upgrade their wallet becomes GO+ in order to receive the 1.43% of interest annually. Another initiative that is currently ongoing in our country is the DuitNow QR (Ismail, 2021). This is the standard and national QR that enables merchants to receive payment and users to make transactions via the QR code (Ismail, 2021). In this way, they are able to encourage the use of an E-wallet with the QR Code, as well as the conveniences of paying and investing and transferring money will be more straightforward and more direct with just a few clicks of the fingers. Simultaneously, they are able to track all the transactions easily from the records in the applications. As we have been aware, many shops around us begin to receive money from E-wallet from consumers. This was becoming the new trend of payment methods nowadays, especially during the pandemic. Individuals will feel more secure and satisfied with the current situation by using the E-wallet to make payments because they believe that the applications are user-friendly and enable them to make all the transactions fast and easy. Thus, together with a bit of push by the government, E-wallet providers are indeed boosting the acceptance of E-wallet services. Hence, the critical nexus between perceived usefulness and behavioural intention of adopting E-wallet in our country able to be explained.

Next, the second variable is consumer confidence. "There is a significant relationship between" consumer confidence "and behavioural intention to adopt E-wallet". In order to improve consumer confidence among Malaysians, the government, Bank Negara Malaysia (BNM) and other relevant authorities have put great effort into setting up a comprehensive regulatory framework. To enable the commercial banks to achieve the central bank's objective, they were given legal powers to regulate and monitor the digital financial system according to law and legislation set by Bank Negara Malaysia (BNM). In 2013, the government announced the Financial Services Act (2013), which can give guideline and oversight of monetary foundations, instalment frameworks and other related elements, as well as supervision of foreign exchange market and currency market, to promote the stability of financial market, consequential or incidental matter. It is the official law and regulation for BNM, banks, and other related entities to supervise the E-wallet payment system. Besides, the government also introduced "the Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act (2001)". The act supports "the offence of money laundering". This estimation should be taken to forestall illegal tax avoidance and psychological oppression financing offenses and stipulate the confiscation of property related to or derived from money laundering, proceeds of illegal activities, criminal instruments, and any incidental matters related to this. The demonstration expressed the danger the board technique that E-wallets suppliers should follow the homegrown enemy of tax evasion and against psychological militant financing administrative structure ("Laws of Malaysia, 2001"). The E-wallets providers must implement a robust security management framework to address user authentication, data confidentiality, system and data integrity.

Besides that, Perbadanan Insurans Deposits Malaysia (PIDM), the government agency protecting our deposits fund in the banks, also protects E-wallet users indirectly by protecting the funds deposited by E-wallet providers in PIDM member banks (Lee,2020). Furthermore, the parties who breach hacking, such as install the malware by using an electronic link under the Computer Crimes Act 1997, has to refer to the Royal Malaysia Police (PDRM) agency, while the parties who breach the Personal Data Protection Act 2010, such as misuse of the personal details has to refer to Ministry of Communications and Multimedia Malaysia (KKMM) agency ("Malaysian Communications and Multimedia Commission (MCMC), n.d.").

The last variable is social influence. Our result also shows there is a crucial connection between social impact and behavioural intention to adopt E-wallet. The government and E-wallet providers also play an essential role by encouraging more consumers to adopt E-wallet in terms of social influence. The government can organise public campaigns and talks, which can increase social awareness to adopt E-wallet. The public campaign and talks can promote E-wallet's safety and convenience and encourage the public to recommend their friends, family members, and spouses to adopt E-wallet. Besides that, the E-wallet providers can promote their E-wallet brand through different advertising channels such as online advertisement in social media, advertising in newspapers and magazines, and roadside banners.

On the other hand, other than the government, organisations like UTAR also have made few efforts in order to cultivate the use of technology and increase the behavioural intention to adopt E-wallets among youth. Between the years 2018 and 2019, the application called Social Wallet was introduced in both campuses of UTAR. The Social Wallet allowed students to top-up and scan when they took the UTAR bus to the campus. Besides, the Social Wallet also enables students to register clubs and society in our UTAR. The traditional ways like getting google forms, filling up the google forms, paying the registration fees from a bank account, etc., have been omitted due to all of these being able to be achieved by just scanning QR codes and pay. Students were encouraged to use the E-wallet at that time because they could save time in purchasing and avoid queuing up for the bus ticket at the finance department.

Furthermore, every transaction was recorded in the application; hence, they were able to get back the records to prove the registration of the club and society. After launching the application, it actually was getting both sides feedbacks from the students whereby some of them were satisfied with the functions inside the E-wallet because of user-friendly and saving time; however, some of them would suggesting fixing few bugs to make it perfect, for example, the system will delay or even breakdown when using it. Thus, cultivating a cashless environment was the responsibility of an organisation, especially during the pandemic crisis. Besides that, in order to make the use of E-wallet, they organised a research talk on FinTech

named "FinTech - The future of Financial Industry" in 2018. The speaker explained and described the concept of an E-wallet to the audience. As well as another activity that promotes E-wallet is "Key Significance and Impact of the 2020 Malaysian Budget Proposal". The speaker of the talk introduced different incentives and rewards on E-wallets, which the government pointed out to promote digital technology and a cashless society. For the purpose of improving social influence, instead of just using Social Wallet, UTAR also introduced the new E-wallet partner, which is eWANG, to the students. This will encourage students and their friends to use the E-wallet platform and utilise the convenience of cashless payment.

5.4   Limitation of Study

A few limits have been distinguished in this examination. Above all else, the objective populace in this examination is only all the students in UTAR Kampar and UTAR Sungai Long. This is because UTAR students are one of the users of the E-wallet application, and UTAR is also practising using the E-wallet application. However, this result does not consider the students from other universities in Malaysia. The development in this study might be affected when other universities in Malaysia are included in the study. The degrees of behavioural intention to adopt E-wallets from different students in different universities might be different.

Also, the objective populace of this examination just spotlights on understudies who are right now studying in UTAR regardless of foundation level, undergraduate level, or postgraduate level. All of our respondents are youth in UTAR, and their ages are around 19 to 24 years old. Hence, this study's result can only show the opinion of the youth in UTAR but not the public population opinion. The target consumer segmentation of E-wallet not only includes the youth but also targeting consumers of different ages. Different generations of consumers may have different views towards E-wallet compared to our sample respondents.

Furthermore, there are different acceptance levels of new technologies such as E-wallet among boom generation, "generation X, generation Y and generation Z". For instance, "Generation Z" may find it easier to adopt E-wallet compared to other generations. Accepting new technology may be easy for the youth but not for the older generation. Therefore, this may affect the results of this study.

5.5   Recommendations for Future Research

Undeniably, some aspects are pointed out during this research thesis study for future researchers to study and examine the contributing factor of behavioural intention to adopt E-wallet, which enables the other researchers to make improvements and comprehensively critique this title. Thus, recommendations are suggested in this section.

First thing first, the recommendation for future researchers. In selecting respondents, it is recommended that the researchers selected other local public and private universities in Malaysia. So, it enables future researchers to see the differences of results studying the determinants of "behavioural intention to adopt" E-wallet. It is used to test the determinants again whether significant to the behavioural intention to adopt E-wallet. Hence, it is recommended to run a research thesis with the collaboration of other universities among the undergraduate students. It enables us to explore more, and the results will be more quality which helps the development of the economy in Malaysia.

Secondly, in selecting the age of 19 to 24 years old, it may also include the other ages and generations as the target respondents in the future. Future researchers consider not only the youth but also generation X and baby boomers. It is because different acceptance levels of new technologies such as E-wallet among different generations like boom generation, "generation X, generation Y and generation Z" will cause the difference in the result.

5.6   Conclusion

In the final analysis, "this research" thesis be centred to study "the determinants of behavioural intention to adopt E-wallet among the" youth in UTAR. All the data collected from questionnaires distributed online are processed and analysed by the latest version of SPSS 26.0. The results have proven that the hypotheses for H1, H2 and H5 are accepted while the rest are H3 and H4 not taken. However, all independent variables are significant with the behavioural intention to adopt E-wallet except the price value and facilitating conditions. Indeed, all these findings and implications are provided and comprehensively being discussed. Undeniably, the limitation of this research thesis is being discussed, and quality recommendations are stated for future researchers as references. In short, this research thesis might provide some essential elements "about the behavioural intention to adopt E-wallet" for future researchers in selecting respondents.

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Appendix

Appendix 1.1: Ethical Approval for Research Project

UNIVERSITI TUNKU ABDUL RAHMAN
Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

Re: U/SERC/72/2021

13 April 2021

Ms Thavamalar a/p Ganapathy
Head, Department of Economics
Faculty of Business and Finance
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak.

Dear Ms Thavamalar,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your student's research project from Bachelor of Economics (Hons) Financial Economics programme enrolled in course UBEZ3026. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Determinants of Willingness to Adopt E-payment Among Undergraduate Students in UTAR	Cheu Zhen Yar	Dr Foo Chuan Chew	13 April 2021 – 12 April 2022

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,

Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

c.c   Dean, Faculty of Business and Finance
       Director, Institute of Postgraduate Studies and Research

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel: (605) 468 8888 Fax: (605) 466 1313
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel: (603) 9086 0288 Fax: (603) 9019 8868
Website: www.utar.edu.my

Appendix 1.2: Survey Questionnaire

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE

BACHELOR OF ECONOMICS (HONS) FINANCIAL ECONOMICS

UNDERGRADUATE PROJECT

THE DETERMINANTS OF BEHAVIOURAL INTENTION TO ADOPT E-WALLET
AMONG THE YOUTH IN UNIVERSITI TUNKU ABDUL RAHMAN

A very good day to dearest respondent,

We are final year undergraduate students of Bachelor of Economics (HONS) Financial
Economics from Universiti Tunku Abdul Rahman Kampar Campus and currently conducting
our final year research project. The purpose of the research is to study the determinants of
behavioural intention to adopt E-wallet among the youth in UTAR. Hence, we are seeking for
your help in fulfilling this survey. We appreciate your participation in this research project.

Instructions:

This questionnaire consists of two sections (Section A and Section B). Kindly answer all the
questions provided below. This questionnaire will take approximately 15 minutes to complete.

All the information collected will be solely used for academic purposes and will be **kept under
private and confidential basis**. Information collected is very general and does not include
sensitive information.

Acknowledgment of Notice

[   ] I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.

[   ] I disagree, my personal data will not be processed.

If any enquiry, please feel free to contact our group leader via email address provided below.

Name	Student ID	Email Address
Cheu Zhen Yar	18ABB00187	cheuzhenyar@1utar.my

Section A

Demographic Profile

We would like to collect some information about your personal data details in order to have better understand your behavioural intention to adopt an E-wallet. Please choose only ONE answer for each question.

1. Your Gender:

   o   Male

   o   Female

2. Your Age:

   o   18-21

   o   22-25

   o   26-29

   o   Above 29

3. Your Ethnicity:

- o Malay

- o Chinese

- o Indian

- o Others, please state: _____

4. Your Current Year of Study:

- o Year 1

- o Year 2

- o Year 3

- o Year 4

- o Foundation

- o Master

5. Your Faculty:

- o Faculty of Arts and Social Science (FAS)

- o Faculty of Business and Finance (FBF)

- o Faculty of Engineering and Green Technology (FEGT)

- o Faculty of Information and Communication Technology (FICT)

- o Faculty of Science (FSc)

- o Institute of Chinese Studies (ICS)

- o Lee Kong Chian Faculty of Engineering and Science (LKS FES)

- o   Faculty of Creative Industries (FCI)

- o   Faculty of Accountancy and Management (FAM)

- o   Faculty of Medicine and Health Sciences (FMHS)

- o   Centre of Foundation Studies (CFS)

6. Do you own a smart phone device?

- o   Yes

- o   No

7. Do you have E-wallet account?

- o   Yes

- o   No

8. Please select the E-wallets that you currently using. (Answer can more than one)

- o   Touch & Go

- o   Boost

- o   Fave

- o   Wechat Pay

- o   Apple Pay

- o   Grab Pay

- o   Shopee Pay

- o   Ali Pay

9. What is your amount of usage per week before pandemic?

- o RM 0-RM 100

- o RM 101-RM200

- o RM 201-RM300

- o RM 301-RM400

- o Above RM 400

10. What is your amount of usage per week during pandemic?

- o RM 0-RM 100

- o RM 101-RM200

- o RM 201-RM300

- o RM 301-RM400

- o Above RM 400

Section B

Factors affecting behavioural intention to adopt E-wallet

This section is seeking your opinion regarding the determinants of behavioural intention to adopt E-wallet among the youth in University Tunku Abdul Rahman. Please indicate the extent to which you agree or disagree with each of the following statements by choosing the most appropriate option for each statement.

Dependent Variable

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I have an E-wallet application in my smartphone.	1	2	3	4	5
2. I frequently use an E-wallet for my transactions.	1	2	3	4	5
3. I am willing to use an E-wallet all the time.	1	2	3	4	5
4. I prefer a cashless society in future	1	2	3	4	5
5. I believe E-wallet is better than cash payment.	1	2	3	4	5
6. I will use the E-wallet when the shops are available with the E-wallet code.	1	2	3	4	5

Independent Variables

Perceived Usefulness

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. E-wallet make the payment transaction faster compared to cash payment.	1	2	3	4	5
2. E-wallet is convenient to use than cash.	1	2	3	4	5
3. E-wallet improves the effectiveness for my daily transaction during Covid-19 pandemic.	1	2	3	4	5
4. E-wallet can save more time in the payment process (Eg: save time in exchanging coins)	1	2	3	4	5
5. I believe that E-wallet applications are friendly to use.	1	2	3	4	5

Consumer Confidence

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I believe that E-wallet payment is a safe and trustworthy online transaction method.	1	2	3	4	5

2. I believe that E-wallet applications will not share my personal information with third parties.	1	2	3	4	5
3. I believe that an E-wallet can transfer my money safely.	1	2	3	4	5
4. I believe that E-wallet will not have any fraudulent transactions.	1	2	3	4	5
5. I believe E-wallet service providers will help to prevent the fraudulent transactions.	1	2	3	4	5
6. I believe with Malaysia's consumer law in protecting E-wallet users.	1	2	3	4	5

Price Value

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I will use an E-wallet when there are cashbacks (Eg: Spend RM30 in 99 Speedmart to get RM5 cashbacks).	1	2	3	4	5
2. I will use an E-wallet when there is discount (Eg: Get a 10% discount while purchasing goods by using Touch 'n Go E-wallet).	1	2	3	4	5
3. I will use an E-wallet when there is a bonus point (Eg: FAVE Pay, Mobile Pay).	1	2	3	4	5

4. I will use an E-wallet when there is a voucher given (Eg: Get a free shipping voucher by using Touch n' Go E-wallet while making payment in Lazada).	1	2	3	4	5
5. E-wallet is expensive to me as I need to buy a data plan to enjoy the E-wallet services. (Eg: Touch n' Go E-wallet needs data to make the payment).	1	2	3	4	5
6. I will use an E-wallet when there are no extra charges to utilise it. (Eg: Subscription fees and service charge).	1	2	3	4	5

Facilitating Condition

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I believe that stability of the internet network to support the E-wallet System is important.	1	2	3	4	5
2. I believe that all Smartphones can support the E-wallet System.	1	2	3	4	5
3. I believe the knowledge to use the E-wallet System is important. (Eg: important of E-wallet)	1	2	3	4	5

4. I believe the customer service for E-wallet able to assist me when I face any difficulty.	1	2	3	4	5
5. I believe that I have all the necessary resources to use E-wallet (Eg: Application's guide, Information guide)	1	2	3	4	5
6. I believe I have the skill in using the E-wallet System. (Eg: skill in operating the E-wallet application)	1	2	3	4	5

Social Influence

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. People who are close to me are using E-wallet.	1	2	3	4	5
2. My friends are using E-wallet.	1	2	3	4	5
3. My family members are using E-wallet.	1	2	3	4	5
4. The E-wallet services is broadly used in my community participate in.	1	2	3	4	5
5. My university is offering E-wallet payment during events and activities (Eg: E-recruitment)	1	2	3	4	5

6. There are social media platforms showing advertisements to influence me to use E-wallet service.	1	2	3	4	5

PERSONAL DATA PROTECTION STATEMENT

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

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-

   • For assessment of any application to UTAR

   • For processing any benefits and services

   • For communication purposes

   • For advertorial and news

   • For general administration and record purposes

   • For enhancing the value of education

   • For educational and related purposes consequential to UTAR

   • For the purpose of our corporate governance

   • For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

1. By submitting this form, you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfil our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at cheuzhenyar@gmail.com.

Thank you and your participation is highly appreciated.

~ The End ~

Appendix 1.3: Table for Determining Sample Size from a Given Population

TABLE 1

Table for Determining Sample Size from a Given Population

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—N is population size.
S is sample size.

Appendix 1.4: Reliability Test Analysis Results for Pilot Test

Scale: Behavioural Intention to adopt E-wallet

Case Processing Summary

		N	%
Cases	Valid	484	100.0
	Excluded[a]	0	.0
	Total	484	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.888	.888	6

Scale: Perceived Usefulness

Case Processing Summary

		N	%
Cases	Valid	484	100.0
	Excluded[a]	0	.0
	Total	484	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.901	.901	5

Scale: Consumer Confidence

Case Processing Summary

		N	%
Cases	Valid	484	100.0
	Excluded[a]	0	.0
	Total	484	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.928	.928	6

Scale: Price Value

Case Processing Summary

		N	%
Cases	Valid	484	100.0
	Excluded[a]	0	.0
	Total	484	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.870	.889	6

Scale: Facilitating Conditions

Case Processing Summary

		N	%
Cases	Valid	484	100.0
	Excluded^a	0	.0
	Total	484	100.0

a. Listwise deletion based on all
   variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.897	.899	6

Scale: Social Influence

Case Processing Summary

		N	%
Cases	Valid	484	100.0
	Excluded[a]	0	.0
	Total	484	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.884	.886	6

Appendix 1.5: Chi-Square Test

Perceived Usefulness and Behavioural Intention to Adopt E-wallet

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1599.870[a]	304	.000
Likelihood Ratio	662.570	304	.000
Linear-by-Linear Association	283.077	1	.000
N of Valid Cases	484		

a. 312 cells (91.8%) have expected count less than 5. The minimum expected count is .00.

Consumer Confidence and Behavioural Intention to Adopt E-wallet

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1163.066[a]	361	.000
Likelihood Ratio	605.397	361	.000
Linear-by-Linear Association	184.214	1	.000
N of Valid Cases	484		

a. 385 cells (96.3%) have expected count less than 5. The minimum expected count is .00.

Price Value and Behavioural Intention to Adopt E-wallet

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1051.976[a]	380	.000
Likelihood Ratio	508.660	380	.000
Linear-by-Linear Association	153.906	1	.000
N of Valid Cases	484		

a. 403 cells (96.0%) have expected count less than 5. The minimum expected count is .00.

Facilitating Usefulness and Behavioural Intention to Adopt E-wallet

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	990.858[a]	304	.000
Likelihood Ratio	490.601	304	.000
Linear-by-Linear Association	164.813	1	.000
N of Valid Cases	484		

a. 319 cells (93.8%) have expected count less than 5. The minimum expected count is .00.

Social Influence and Behavioural Intention to Adopt E-wallet

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	873.331[a]	342	.000
Likelihood Ratio	478.571	342	.000
Linear-by-Linear Association	151.410	1	.000
N of Valid Cases	484		

a. 363 cells (95.5%) have expected count less than 5. The minimum expected count is .00.

Appendix 1.6: Multiple Linear Regression Analysis Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.798[a]	.636	.633	.41950	1.847

a. Predictors: (Constant), SI, PV, PU, CC, FC

b. Dependent Variable: BI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	147.244	5	29.449	167.338	.000[b]
	Residual	84.120	478	.176		
	Total	231.365	483			

a. Dependent Variable: BI

b. Predictors: (Constant), SI, PV, PU, CC, FC

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.406	.139		2.922	.004		
	PU	.557	.039	.552	14.154	.000	.500	1.998
	CC	.161	.036	.178	4.499	.000	.484	2.064
	PV	.057	.036	.061	1.562	.119	.506	1.976
	FC	.040	.047	.037	.843	.400	.396	2.528
	SI	.085	.040	.086	2.146	.032	.475	2.106

a. Dependent Variable: BI