DOES CONFIDENCE MATTERS IN ADOPTING DIGITAL BANKING SERVICES? A STUDY ON UNIVERSITY STUDENTS' PERCEPTION

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DEPARTMENT OF BANKING AND RISK MANAGEMENT

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

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DECLARATION

We hereby declare that:

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

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

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

(4) The word count of this research report is 16801.

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DEDICATION

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
ATM	Automated Teller Machine
AVE	Average Variance Extracted
CB-SEM	Covariance-Based Structural Equation Modeling
COVID-19	Coronavirus Disease 2019
CR	Composite Reliability
C-TAM-TPB	Combined Technology Acceptance Model and Theory of Planned Behaviour
CTT	Commitment-Trust Theory
DTPB	Decomposed Theory of Planned Behaviour
EE	Effort Expectancy
FC	Facilitating Conditions
FSA	Financial Services Act
HTMT	Heterotrait-Monotrait
IDT	Innovation Diffusion Theory
IFSA	Islamic Financial Service Act
IT	Information Technology
ITA	Intention to Adopt Digital Banking Services
MM	Motivational Model
MPCU	Model of PC Utilization
PE	Performance Expectancy
PIDM	Perbadanan Insurans Deposit Malaysia
PLS-SEM	Partial Least Squares Structural Equation Modeling
PT	Perceived Trust
SCT	Social Cognitive Theory

SEM	Structural Equation Modeling
SI	Social Influence
SPSS	Statistical Package for Social Sciences
TAM	Technology Acceptance Model
TAM2	Technology Acceptance Model 2
TPB	Theory of Planned Behavior
UTAR	Universiti Tunku Abdul Rahman
UTAUT	Unified Theory of Acceptance and Use of Technology
UTAUT2	Unified Theory of Acceptance and Use of Technology 2
VIF	Variance Inflation Factor
Wi-Fi	Wireless Fidelity

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PREFACE

This study is very important for the completion of our undergraduate course which is Bachelor of Business Administration (Honours) Banking and Finance offered by Universiti Tunku Abdul Rahman. The topic of this study is "Does confidence matters in adopting digital banking services? A study on university students' perception". Hence, this study mainly focuses on investigating the factors that influence the intention to adopt digital banking services among university students in Malaysia.

Due to the advanced technology and the pandemic COVID-19, the development of banking industry had advanced rapidly and brought the appearance of digital banking. This is considered a new system in Malaysia. Recently, there are three out of five applicants can start their operations. Therefore, the factors influencing the intention to adopt digital banking services are significant to the digital banking industry.

This study investigates the influences of five factors which are performance expectancy, effort expectancy, social influence, facilitating conditions, and perceived trust. Besides, this research can offer useful information to the academic, industry, and government and help them to enhance their products and services.

ABSTRACT

This study aims to investigate the intention to adopt digital banking services among Malaysian university students. In order to collect the data for this study, questionnaires were given to 50 Malaysian university students by using convenience sampling in non-probability sampling. In this study, several tests have been used to analyse the data such as descriptive analysis, internal consistency reliability, discriminant validity, collinearity, and multiple linear regression by using PLS-SEM. The result of this study examines the five independent variables which are performance expectancy, effort expectancy, social influence, facilitating conditions, and perceived trust. Then, the results show that performance expectancy has a significant influence on the intention to adopt digital banking services while the remaining independent variables which are effort expectancy, social influence, facilitating conditions, and perceived trust have an insignificant relationship with the intention to adopt digital banking services. Therefore, it is important to provide useful information to the academic sectors, industry, and government to focus when they make policy to enhance the intention to adopt digital banking services.

Keywords: Intention to Adopt Digital Banking Services, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Perceived Trust.

CHAPTER 1: INTRODUCTION

1.1 Introduction

First and foremost, the background of the research was covered in chapter one. Hereafter, a list of the study-related concerns is given below the problem statement. After presenting the general and specific goals, the presentation of the research questions and the study's significance are discussed. At last, a conclusion marks the chapter's finish.

1.2 Research Background

The Malaysian financial sector is made up of two divisions which are monetary and nonmonetary entities. Monetary entities include commercial banks and the central bank, Bank Negara Malaysia. Conversely, nonmonetary entities encompass finance companies, discount houses, government departments and agencies, insurance companies, and so on (Oh, 2000). A dual banking system comprising conventional and Islamic banking is implemented in Malaysia's banking system. The conventional bank operates on an interest-based banking system which means the bank provides interest to depositors and collects interest from borrowers. However, Islamic banks do not involve any interest in all the transactions because it is required to comply with the Syariah principles (Ramlan & Adnan, 2016). Both conventional and Islamic banking offer the customers offline and online services.

However, the rapid advancements in technology have accelerated the digitization in financial institutions. The banking industries in many countries have started to involve technological innovation and develop their banking systems digitally. In addition, the COVID-19 pandemic

also stimulates the banking industry to digitize due to people being required to stay at home to avoid the transmission of viruses (Khan, 2022). Therefore, due to the swift development of technology and the occurrence of the COVID-19 pandemic, customer behaviours and preferences have altered promptly, and people prefer to make their transactions online rather than visiting financial institutions physically. Furthermore, the majority of people nowadays rely on their electronic devices such as smartphones, laptops, tablets, and so on, and their lives are unthinkable without the internet and Wi-Fi. For example, people will place food orders and purchase products through online platforms like Grab Food, Food Panda, Lazada, and Shopee. All of these platforms require customers to make their transactions online. Hence, customers look for financial services that are accessible at all times and any locations and are integrated with their daily activities (Nguyen et al., 2020). This has led to changes in the banking industry which creates an invention called digital banking.

Digital banking implies the provision of banking services to customers and perform banking transactions through technology. Customers use electronic devices for conducting banking transactions (Sardana & Singhania, 2018). Banking services provided by digital banking and conventional banking are comparable, for instance transferring funds, saving money, paying bills, and so on. However, digital banking is different from the conventional banking system where digital banking primarily utilizes technology without having a physical bank to deliver banking services to its customers (Khan, 2022). All the banking services of digital banking can be handled digitally by using digital devices. Hence, customers have the opportunity to conduct their transactions while staying at home rather than going to financial institutions physically (Kahveci & Wolfs, 2018). The difference is digital banking is more modern which digitizes all the banking process and operations whereas online banking is just an extra feature available from conventional banking that enables customers to conduct their transactions conveniently or manage their bank accounts through the internet and digital devices (Nguyen & Dang, 2018).

In Malaysia, there are five successful digital bank licenses as approved by the Minister of Finance Malaysia. The two sections of law that regulate the officially granted licenses are the Financial Services Act 2013 (FSA) and the Islamic Financial Services Act 2013 (IFSA). The

three consortiums licensed under FSA are Boost Holdings Sdn. Bhd. and RHB Bank Berhad, GXS Bank Pte. Ltd. and Kuok Brothers Sdn. Bhd, as well as Sea Limited and YTL Digital Capital Sdn Bhd. Meanwhile, there are two consortiums licensed under IFSA which include AEON Financial Service Co., Ltd., AEON Credit Service (M) Berhad and MoneyLion Inc. as well as KAF Investment Bank Sdn. Bhd (Bank Negara Malaysia, 2022). Currently, GX Bank and Boost Bank are launched while Aeon Bank is still not launched but is open for registration to its customers (Rahman, 2024).

According to Mansurovna (2023), digital banking brings a variety of advantages. Firstly, customers can easily create a bank account with paperless procedure as all the process is conducted digitally. Secondly, the digital bank has no physical branches, thereby their operational expenses are minimized. As a result of lower operating cost, customers can enjoy the benefit of low transaction fees. Furthermore, customers who are unable to apply for a loan from a conventional bank due to poor credit scores have higher opportunities to get approved loans from digital banks. Last but not least, customers can conduct transactions at any time from any location through the banking applications provided by the digital banks.

There are various studies conducted to examine the issues of intention to use financial institutions' services based on the customers' perspective. According to Khan (2022) and Anggraeni et al. (2021), the authors analysed the determinants influencing the tendency to use digital banking in China and Indonesia based on the UTAUT2 model through the PLS-SEM method. In the studies from Khan (2022) and Anggraeni et al. (2021), the results of performance expectancy and social influence are different while the findings in the areas of effort expectancy and facilitating conditions are similar which indicates that they are insignificantly influencing the intention to utilize digital banking services. Additionally, prior studies have been conducted to ascertain the variables influencing the adoption of mobile banking in Indonesia and green banking technology in Malaysia by using the SPSS method while internet banking by using SEM method on UTAUT model (Rachmawati et al., 2020; Bouteraa et al., 2022; Rahi et al., 2018). The findings of Rachmawati et al. (2020) and Bouteraa et al. (2022) are similar with regards to performance expectancy and facilitating conditions while having opposite results in effort expectancy and social influence. Furthermore, Rahi et

al. (2018) stated that Malaysians' intention to use Internet banking is significantly and positively affected by four UTAUT independent variables.

Apart from this, according to Nurmaliki and Mirza (2021) and Mufarih et al. (2020), the authors examined the variables influencing respondents' intentions of employing digital banking in Indonesia while the respondents are different which are digital saving customers and mobile banking customers by using TAM model. Both studies have the same results which are that attitude significantly affects perceived usefulness, social influence, and trust insignificantly affect the willingness to utilize digital banking services. Furthermore, studies using the TAM model have been done to investigate the variables affecting the intention to use digital banking services (Tiong, 2020), online banking services (Hossain et al., 2020), internet banking (Kaur & Malik, 2019), mobile banking (Ho et al., 2020), and cardless banking system (Ali et al., 2021).

This study will explain the intention to adopt digital banking services through five independent factors including performance expectancy, effort expectancy, social influence, facilitating conditions, and perceived trust. Since no prior research study has primarily focused on university students' perceptions, this study will focus on the university students' perception of adopting digital banking. Furthermore, university students are younger customers, they prefer more convenient banking services. They have the potential to become one of the customers of digital banking after being launched. Hence, this study will investigate their intention to utilize the services provided by digital banking.

1.3 Problem Statement

Digital banking is relatively new in Malaysia with conventional banking, where there is more uncertainty compared to conventional banking. Cybercrime or cybersecurity issue is the term

used to describe digital wrongdoing in which the offender uses a computer or other electronic device, the internet, and unauthorised access to commit crimes, including transferring funds and withdrawals from the account, which we can observe these offenses from the news like fraud and hacking cases (Nagaraju, 2022). The cybersecurity issue is one of the greatest uncertainties that needs to be tackled by digital banks. According to Jangirala et al. (2019), cybersecurity is the process of safeguarding data, software, and hardware from cyberattacks while maintaining the security of internet systems. Cybersecurity legislation is necessary to secure computer systems and information technology by mandating companies and others to take precautions against cyberattacks on their data and systems. Particularly for the digital banking sector, since data security is highly valued by customers, therefore it cannot be placed at risk (Rodrigues et al., 2022). Due to this intrinsic nature relationship between banks and customers, it is extremely crucial that digital banks work closely to ensure all customers' information is well protected. Aside from that, as more online transactions and services are made and used by customers, naturally, more of the data is stored in online databases than before (Duncan, 2023). Hence, it leads the digital banking sector to face larger cybersecurity issues than conventional banks do. In accordance with Windasari et al. (2022), since digital banks rely only on digital infrastructure to handle all forms of transactions made by customers, which collect a vast amount of sensitive customer personal data, it further extends the challenge to deal with cybersecurity issues for the digital banks where it might then influence the intention in adopting of the digital banking services by customers.

As one of the mitigation options for cybersecurity challenges, Artificial Intelligence (AI) is one of the knowledge areas that needs to be strongly focused on by digital banks. Artificial intelligence (AI) stands as a strong technology that empowers cybersecurity teams to quickly detect and respond to threats and raise the precision of actions to enhance defences against an extensive range of cyberattacks (Kaur et al., 2023). As more and more linked networks, systems, and devices, cybersecurity is getting more complex. The advancements in digital technology have made matters worse by leading to a large increase in cyberattacks with highly hazardous impacts (Kaur et al., 2023). As a result, digital banks have to heavily invest their time and resources in Artificial Intelligence (AI) to guard the operation safety and increase the reliability of the services in order to attract potential customers to adopt digital banking services.

According to Khatri (2023), a breach of personal information might result in a loss of confidence in digital systems. Hence, if the cybersecurity issue of digital banks is not well guarded, it might lead to lower confidence of the customer towards digital banks, as the customer will feel the digital banks are not able to protect personal data and other financial information of customer well and make their information exposed in risk. Furthermore, a lack of trust might prevent people from using new technology or participating in online activities (Khatri, 2023). In the extent of digital banking services, cybersecurity issues that are not well tackled can give rise to the refusal of potential customers of adopting digital banking services in the course of time, which will then cause an obstacle to the development of digital banks.

Since 2019, Bank Negara Malaysia has been working on digital banking by publicizing draft frameworks, releasing policy documents, and announcing the approval of five entrants for digital banking licenses (Bank Negara Malaysia, 2019; Bank Negara Malaysia, 2020; Bank Negara Malaysia, 2022). According to Business Today, David Rajoo, the head of system engineering at Palo Alto Network, said that customer trust is the component that digital banking should prioritize working on for it to build competitive power and compete with established conventional banks (BusinessToday, 2021). A new banking institution with a novel operating model needs to be trustworthy so that it will be welcomed by the public. Among Southeast Asia countries, customer trust is positively associated with the adoption of digital banking services (Team, 2023). The development of digital banking depends on customer trust as it influences the participation of customers in digital banks. Small and medium-sized businesses from a variety of industries tend to doubt the full digitization of banking processes ("Going Digital: The Banking Revolution," n.d.). According to Visa's most recent study report, four out of ten Malaysians are willing to utilise digital banks as their primary banks ("Going Digital: The Banking Revolution," n.d.). As a result, Malaysians do not have much faith in digital banks.

Without customer trust, the public might decide to continue using conventional banks rather than transacting money with a digital bank. Even the customers try to adopt digital banks, they will eventually switch back to conventional banks when they feel that the digital banks' performance falls short of their expectations (Asila Jalil & Anis Hazim, 2021). Hence, the customer retention rate for digital banks will stay low. Besides the retention rate, customers are resistant to cross-selling activities as they are unlikely to embrace numerous products from a

company they hardly trust. It is challenging for digital banks to compete with conventional banks due to a lack of customer trust. Investors are unwilling to put their money into a banking institution that is not competitive. Lack of customer trust causes digital banks to have a small customer base, low competitiveness, and lack of investment sources.

A successful digital bank is one that customers can fully trust to handle their money and personal information. In order to discover the best possible methods to boost customer trust, which eventually encourages the adoption of digital banking services in Malaysia, this research aims to examine the significant level of various variables including customer trust in the tendency to utilize digital banking.

1.4 Research Objectives

1.4.1 General Objectives

The primary aim of this study is to investigate the intention of adopting digital banking services among university students and identify the factors influencing it in Malaysia.

1.4.2 Specific Objectives

In consideration of the research purpose, the following objectives are crucial and should be covered in this study:

1. To examine the relationship of performance expectancy to the intention to adopt digital banking services in Malaysia.
2. To examine the relationship of effort expectancy to the intention to adopt digital banking services in Malaysia.
3. To examine the relationship of social influence to the intention to adopt digital banking services in Malaysia.
4. To examine the relationship of facilitating conditions to the intention to adopt digital banking services in Malaysia.
5. To examine the relationship of perceived trust to the intention to adopt digital banking services in Malaysia.

1.5 Research Questions

There are five research questions are created in order to provide the research study with a clear direction.

1. Is there a significant relationship of performance expectancy to the intention to adopt digital banking services in Malaysia?
2. Is there a significant relationship of effort expectancy to the intention to adopt digital banking services in Malaysia?
3. Is there a significant relationship of social influence to the intention to adopt digital banking services in Malaysia?
4. Is there a significant relationship of facilitating conditions to the intention to adopt digital banking services in Malaysia?
5. Is there a significant relationship of perceived trust to the intention to adopt digital banking services in Malaysia?

1.6 Significance of Study

The purpose of this study is to explore the impact of Malaysian university students' confidence in adopting digital banks' services. This study encompasses the following factors: performance expectancy, effort expectancy, social influence, facilitating conditions, and trust. After completing this study, there would be a clearer overview of the overall digital banking in Malaysia. Different parties can benefit in different ways from an understanding of the adoption factors for digital banking. This research contributes to a deeper understanding of digital banking for three parties which are finance-related academic fields, the banking industry, and policymakers.

First, not many researchers have studied digital banking which is a trending topic in recent years, particularly in Malaysia. As a result, doing this study helps to close the research gap and provide an elementary knowledge of digital banking in Malaysia. It helps the public eliminate misconceptions about digital banking and online banking. Malaysians are not well-informed about fully digitalized banking institutions. The acceptance of digital banking is aided by raising public knowledge of the contrasts between digital and internet banking. Moreover, identifying the significant factors of digital banking adoption helps future researchers in making recommendations for efficient digital banking platforms. When future researchers pool similar research from different time periods, this study can be used as one of the sources to help researchers study the changes in the significance of each factor in the future.

Second, research on the variables affecting the tendency to use digital banking aids to the transformation of the banking sector into a virtual one. COVID-19 has led to a rise in the public's acceptance of digitization in the banking sector. Thus, the digitalization of the banking industry in Malaysia is an inevitable trend. This research helps conventional banks comprehend current trends in the banking industry and the status of their competitors. Moreover, this study assists in the development of digital banking in Malaysia by assisting in the identification of successful strategies for encouraging the acceptance of digital banking. Providing a comprehensive understanding of digital banking in Malaysia encourages institutions to be more confident and interested in joining digital banking.

Third, this research supports the government in understanding the significant variable related to the intention to use digital banking. As digital banking is new for Malaysians, the government must observe how the public reacts to digital banking in order to respond appropriately and timely. Some consumers are worried about cybersecurity as cybercrime has become increasingly rampant in recent years. To increase those people's intention of adopting digital banking, public confidence towards digital banking in Malaysia needs to be paid attention to. The government should act to protect the consumer so that consumers feel safe and confident to adopt digital banking. Through this study, the government can have an overview of the public response to digital banking in Malaysia.

1.7 Conclusion

The overview of the study the background and the issue of digital banking are addressed in Chapter 1. By including factors like performance expectancy, effort expectancy, social influence, facilitating conditions, and trust that correspond with digital banking in Malaysia, it was possible to establish the research goals and questions. The chapter also covered the value of this research for three major groups, including the banking industry, policymakers, and academics that study finance.

CHAPTER 2: LITERATURE REVIEW

2.1 Theoretical Framework

2.1.1 Unified Theory of Acceptance and Use of Technology

The Unified Theory of Acceptance and Use of Technology model (UTAUT) proposed by Venkatesh et al. (2003) is believed to be a suitable theory and is applied in this research on the intention to adopt digital banking services amid university students within Malaysia. This theory was founded on four theoretical categories that describe factors of usage behaviour or intention to use, and which serve as replacements for technology acceptance. **Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions** are four categories included in the UTAUT model (Ahmad, 2014). According to the UTAUT model, effort expectancy, social influence, and performance expectancy were suggested and reported to affect behavioural intention to use a technology whereas intention and facilitating conditions dictate technology use (Venkatesh et al., 2016).

According to Venkatesh et al. (2003), **performance expectancy** refers to the extent to which someone anticipates that utilizing a system is going to enhance their performance or productivity at work. Also, perceived usefulness, extrinsic motivation, job fit, relative advantage, and outcome expectations are the five aspects that are associated with performance expectancy in TAM, MM, MPCU, IDT and SCT model respectively. In accordance with this study, an individual's performance expectancy is determined by how much they believe using digital banking services would help him or her to enhance their performance in banking activities. For instance, users are particularly interested in the advantages a service provides them after using it (Alsheikh & Bojei, 2012). In short, before deciding to adopt, the consumer hopes to be sure of the value a service will contribute to his or her life. This idea is also

applicable to digital banking services, in which if a customer feels the digital banking services can help him or her in enhancing the performance in banking activities, such as more convenience, timesaving, and others, the customer is more inclined to accept digital banking services. Hence, it is presumed that performance expectancy positively correlates with university students' intention to adopt digital banking services.

The second variable in the Unified Theory of Acceptance and Use of Technology (UTAUT) is **effort expectancy**. Effort expectancy corresponds with how easy it is to use the system (Venkatesh et al., 2003). In addition, three components similar with effort expectancy are ease of use, complexity, and perceived ease of use from IDT, MPCU, and TAM model, respectively. In accordance with this research, effort expectancy mentions the extent of easiness involved in using digital banking services. The crucial connection in effort expectancy stands for how effortlessly and comprehensively users will be able to handle their efforts through digital banking technology. It is suggested that effort expectancy has a persuasive function in influencing the behavioural intentions of Chinese and Pakistani bank clients (Khan, 2022). As a result, it is believed that effort expectancy is favourably linked to the intention to adopt digital banking services among university students.

Besides that, **social influence** implies the extent to which a person believes people who are important to them expect them to use the contemporary system (Venkatesh et al., 2003). As a straight indicator of behavioural intention, social influence was regarded as the subjective norm, image, and social factors in C-TAM-TPB, IDT, and MPCU model. In accordance with this study, social influence relates to how much a person feels that their important persons expect them to use digital banking services. According to Khan (2022), one's opinion of using any sort of technology is shaped by their friends', coworkers', relatives', and informal and close company ideas. Hence, this may also result in a strong effect on one's desire to use digital banking services. Consequently, among university students, social influence is believed to positively correlate with the intention to use digital banking services.

In accordance with Venkatesh et al. (2003), the extent to which an individual senses that the technological and organizational framework present to assist his or her use of the system is defined as **facilitating conditions**. There were three distinct constructs that were used to represent the ideas of this variable in the UTAUT model, which are perceived behavioural control (C-TAM-TPB, TPBI DTPB) compatibility and enabling conditions (MPCU). In this study, facilitating conditions related to the level to which an individual perceives organizational and technological frameworks are available to assist his or her use of the digital banking system. If service representatives of digital banking are accessible and skilled at listening to, recognizing, and resolving the issues of the users, the quality of service may be improved, which may then result in satisfaction between the users and the members of the service team interaction. This may then lead to a positive influence on users' intention to use if the usage concerns are acknowledged and catered to well with only a phone call away (Sharma & Sharma, 2019). Hence, it is believed that facilitating conditions can positively affect the intention to adopt digital banking services among university students.

The Unified Theory of Acceptance and Use of Technology model (UTAUT) is believed to be useful in this study due to the significant number of elements in this model. It has the greatest explanatory effects of any standard acceptance model, which then helps in the technology development process (Innovation Acceptance Lab, 2023). In this study, the technology development process refers to the digital banking services development. Moreover, in accordance with Venkatesh et al. (2003), the UTAUT model has the capability to explain up to 70% of the variation (adjusted R2) in usage intention which implies a significant advancement above all of the original eight models and their modifications. Furthermore, despite the UTAUT model and the Technology Acceptance Model (TAM) having some similarities, there were studies that believe UTAUT model is more pertinent. From the research of De Blanes Sebastián et al. (2022), the authors mentioned that from their findings, albeit both UTAUT model and TAM model are still in use today by researchers, UTAUT model is more pertinent model regarding developing topics, publications, and references. Therefore, the UTAUT model was selected as the theory for this research.

2.1.2 Commitment Trust Theory

Morgan and Hunt initially proposed the Commitment-Trust Theory in 1994. It holds that effective relationships are developed, expanded, and sustained via commitment and trust (Morgan & Hunt, 1994). Trust is the belief in the dependability and integrity of a partner while commitment is the willingness of parties to put effort into the work (Morgan & Hunt, 1994). When applying the theory to digital banking, the services offered by digital banks are seen as the commitment to luring customers whilst customer trust is seen as their willingness to develop relationships with the banks due to the customers view the banks as reliable. The degree of trust that customers build in digital banks shapes their future commitment (Mukherjee & Nath, 2003).

Building client trust is crucial to increasing the likelihood that they will opt for digital banking services. Thus, to evaluate the role that trust plays in influencing people's intentions to employ digital banking in Malaysia, trust was included as one of the independent factors in this research. It represents the subjective experiences of customers when considering adopting digital banks (Saif et al., 2022). Customers' trust in digital banking is based on its ability to protect client data, resist fraud and cyber risks, and sustain ethical and transparent business practices (Aldboush & Ferdous, 2023). It aids digital banks in motivating customers to form a long-lasting relationship with them, deter customers from shifting to competing services, and consider digital banking as an advantageous choice.

2.2 Review of Literature

2.2.1 Intention to Adopt Digital Banking Services

To put it simply, the intention is how hard someone is willing to try and how much commitment is planned to put into carrying out a behaviour (Mamman & Ogunbado, 2016). It is the probability that an individual will act out a particular behaviour (Saif et al., 2022). It typically happens prior to decision-making and is vital in predicting future decision-making behaviour. People with high intentions to carry out a behaviour are strongly motivated to do said behaviour (Fishbein & Ajzen, 2011). According to Saif et al. (2022), customers' tendency to adopt financial technology services is increased when they are aware of the benefits. High public intention to use digital banking facilitates the acquisition of new customers for digital banks. Understanding consumer behaviour enables digital banks to apply appropriate strategies to retain existing customers. To sum up, customers' intention to accept digital banking services indicates the probability that they will use digital banking services.

Despite online banking, which has physical branches, digital banking does not; therefore, some customers who used to visit branches may find it difficult to swiftly adopt this culture. In fully digital processes, customer experiences and customer spending habits are changed (Windasari et al., 2022). An easy-to-use and streamlined banking experience that provides more interaction, transparency, and trust is what customers are looking for (Saif et al., 2022). It is necessary to investigate customer behaviour in order to have an overview of the impact of new changes (Saif et al., 2022). In this digitalized environment, the increased use of technology is evitable, and it helps to improve human life quality. To understand the changes, there are also other researchers' studies on similar topics. Suhaimi and Hassan (2018) studied the acceptance of digital banks among Generation Y in Malaysia and the Technology Acceptance Model (TAM) was used in the research.

Kusumawati and Rinaldi (2020) claimed that there is a distinction between digital banking and online banking. Digital banking involves digitizing all banking operations and activities while online banking offers fundamental online transactions like bill payment, money transfers, and so on. Online banking is just an added convenience offered by conventional banking for the customers whereas digital banking encompasses all banking processes online. Schmidt-Jessa (2022) also stated that digital banking is an entity that only provides services to customers via

modern technology. In the research of Schmidt-Jessa (2022), ten countries are included as the research sample including China, the United Kingdom, and Germany.

Technology has advanced quickly over the past few decades, which has changed people's lifestyles and methods of conducting business (Sardana & Singhania, 2018). Significant adjustments have also been made in customer behaviour and preferences. According to Saif et al. (2022), the digital bank has not achieved the level of adoption that was anticipated although it is one of the most recent developments in fintech. Thus, it is essential to investigate the variables that contribute to the adoption of digital banking. A variable from the Commitment-Trust Theory (CTT) is adopted as a self-determinant variable (Saif et al., 2022). Besides that, customer acceptance of digital banking has a big impact on how the industry develops (Anggraeni et al., 2021). It is crucial for banks to understand the customer motivation in using digital banking. In Anggraeni et al.'s research, the UTAUT model is applied in a digital banking context (Anggraeni et al., 2021). Therefore, in order to comprehend the variables that impact customers' intention to utilize digital banking services, it is crucial to conduct research on this topic.

2.2.2 Performance Expectancy

Performance expectancy, as defined by Venkatesh et al. (2003), represents the extent to which a person perceives that adopting a system could improve job performance. To put it simply, a person with performance expectations is an individual who is aware of the benefits of utilizing a technological innovation that enhances performance (Zhou, 2010). It may also be referred to as a level at which Malaysian university students believe that adopting digital banking services will enable them to attain better service performance. It is a personal comparison of the advantages and disadvantages of switching to digital-only banks (Sewandono et al., 2022). Performance expectancy is a construct of the UTAUT model (Chao, 2019). As per Chau, Stephens, and Jamieson (2004), the Technology Acceptance Model's (TAM) perceived usefulness and performance expectancy are comparable. It has been discovered that

performance expectancy uniquely, significantly, and positively impacts one's behavioural intention to adopt and utilize an IT system (Venkatesh et al., 2003). It is an essential trait in determining how someone feels about utilizing any technology system.

Prior articles have demonstrated that the tendency to utilize technology-related services in the banking sector is significantly and favourably affected by performance expectancy. Saif et al. (2022) supports that a strong and positive correlation is between performance expectancy and Malaysians' tendency to switch to digital-only banking. Customers are looking for financial services with high perceived value that satisfy their individual demands (Kaabachi et al., 2022). The perceived value in Saif et al. (2022) study is known as performance expectancy in this research. Similar to the data collection method employed in this study, Saif et al. (2022) gathered their data via an online survey aimed at 25 to 54-year-old Klang Valley residents (Saif et al., 2022). Moreover, the research by Khan (2022) supports that the correlation between performance expectancy and the intention to use digital banking is favourable and strong. As the majority of people are constantly striving in the ways to improve their personal and organizational life quality, a more advanced, modern, and effective task performance is desired. The focused countries in the research of Khan (2022) are Pakistan and China which both are developing countries similar to this research's focus country, Malaysia.

Additionally, Mohamad et al. (2023) provide evidence in favour of the claim that performance expectancy has a favourable and strong association with the intention to use digital banking. Perceived usefulness positively influences bank customers' attitude while attitude in turn has a favourable and significant effect on their intention in adopting digital banking. As a result, the intention to use digital banking is indirectly affected by perceived usefulness. Before deciding to adopt digital technology services, consumers will subjectively evaluate the pros and cons of technology. Thus, digital banking is urged to enhance customers' perceived value with the goal of boosting adoption rates and thriving in the dynamic financial industry (Saif et al., 2022). Similar to this study, Mohamad et al. (2023) evaluate their data using partial least squares structural equation modelling (PLS-SEM). In addition, Catherine et al. (2018) and Leong et al. (2021) claimed that the correlation between performance expectancy and behaviour intentions to utilize digital banking services is positive and significant. The intention of adopting ATMs

with fingerprint identification is studied by Catherine et al. (2018) whereas the intention to adopt mobile payment is studied by Leong et al. (2021). According to Ariffin and Lim (2020), the Malaysian government is promoting a cashless society by implementing the Financial Sector Blueprint 2011-2020. Although Malaysia did not meet its goal, the trend of a cashless society contributes to the growth of digital banking by promoting a more cashless service system.

Conversely, some earlier research supports that the performance expectancy insignificantly affects the intention to utilize digital banks. A minority finding on a related topic states that performance expectancy is insignificant in affecting the tendency to use digital banking services (Anggraeni et al., 2021). The possible reason is the adoption of customers is not forced by managers or other people. In the research by Anggraeni et al. (2021), partial least squares structural equation modelling (PLS-SEM) is adopted to analyse their collected data. Furthermore, Mufarih et al. (2020) claimed that in Yogyakarta, Indonesia, perceived usefulness which is known as performance expectancy has little bearing on the intention to utilize digital banking. Digital banking adoption is motivated by outside factors rather than by perceived usefulness (Mufarih et al., 2020). According to the research of Dong (2019), performance expectancy had little impact on the utilization of mobile payments in Bangkok since customers did not believe that mobile payment facilitated payments in a shorter time and improved financial operations. Customers who use mobile payment comment that their income has not increased (Dong, 2019). Anggraeni et al. (2021) stated that additional digital banking context research is needed in order to reveal the connection between performance expectancy and the propensity to utilize the services offered by digital banks. So, the hypothesis for this variable is:

H1: Performance expectancy positively influences the intention to adopt digital banking services.

2.2.3 Effort Expectancy

As per Venkatesh et al. (2003), effort expectancy is the extent of easiness related to using an information system. In other words, effort expectancy relies on the notion that there exist relationships between the level of effort put at work, the performance achieved, and the benefits that are obtained (Ghalandari, 2012). It can also be defined as the extent to which Malaysian university students expect using digital banking to be void of both mental and physical effort. The majority of people prefer flexible, useful, and user-friendly technology (Wang & Wang, 2010). Giesing (2005) asserts that the tendency to adopt is substantially significantly affected by effort expectancy. It was highlighted as an essential indicator of a user's behavioural intention (Wong et al., 2015). There is various previous research indicated that both the intention to utilize technology and its actual use were significantly determined by effort.

According to the research by Saif et al. (2022), the connection between effort expectancy and the intention to utilize services provided by digital banks is significant and positive. The example of effort expectancy in the study of Saif et al. (2022) is related to 24/7 remote accessibility, performing financial services without going to a physical branch and direct channel. The concept of digital banking enables the public to open a digital bank account in ten minutes without any location constraints. In addition, as digital banks no longer require physical branches, their overhead costs are reduced, giving them a competitive advantage over traditional banks by enabling them to provide higher interest rates and lower processing fees (Saif et al., 2022). Moreover, Windasari et al. (2022) also support that the correlation between effort expectancy and the intention to utilize digital-only banks is positive. In the study of Windasari et al. (2022), generation Y and Z in Indonesia is targeted. Despite getting accustomed to utilizing technology in their daily lives, it does not represent that lengthy instructions and complicated features are favoured by these two generations (Windasari et al., 2022). The majority of customers always select financial technology services that are straightforward and easy to get started with.

In addition, Leong et al. (2021) and Mohamad et al. (2023) corroborate that the correlation between effort expectancy and the tendency to embrace digital-only banks is favourable. Financial technology service providers should improve their platforms' user-friendliness by prioritizing the accessibility and features of the platform to accelerate the adoption rate of services (Mohamad et al., 2023). The study by Catherine et al. (2018) indicates that the intention to adopt fingerprint identification in ATMs has a substantial positive association with effort expectancy. People tend to adopt fingerprint identification when the services is user-friendly enough (Catherine et al., 2018). From the standpoint of digital banking, when customers are aware that digital banks' platform is user-friendly enough, they tend to utilize digital banking services. Besides that, Dong (2019) asserted that effort expectancy is notable in influencing the propensity to use mobile payment. As long as customers can utilize mobile payment without any issues, the customers' tendency to utilize mobile payment is boosted. With an array of previous research, it is clear that customers are concerned about the effort required to adopt technology services (Dong, 2019).

On the other hand, Nurmaliki and Mirza (2021) stated that there is an insignificant correlation between effort expectancy and the propensity to utilize digital banking services as customers prioritize banking system usability over the general usability of technology. Moreover, Anggraeni et al. (2021), Nguyen (2020) and Mufarih et al. (2020) also support that there is an insignificant association between effort expectancy and the intention of digital banking adoption. The reason is customers do not require training to use digital banking technology and may readily access the application without seeking assistance, Kano's theory holds that digital banking, which uses high technology should be convenient, so users no longer take convenience into account when deciding to adopt the service or not and it is essential for customers to access digital banking applications, so digital banking adoption will not be influenced by the beliefs of simplicity. Therefore, the hypothesis can be concluded as:

H2: Effort expectancy positively influences the intention to adopt digital banking services.

2.2.4 Social Influence

Social influence refers to the degree to which people value something as significant when their social circles advise them to utilize a new system. It is also known as the subjective norm in the Technology Acceptance Model 2 (TAM2) and Theory of Planned Behavior (TPB), social factors in the Model of PC Utilization (MPCU), and image in Innovation Diffusion Theory (IDT) (Venkatesh et al., 2003). People will seek suggestions and opinions from their social circles such as parents, friends, colleagues, and others who are important to them (Khan, 2022). In order to gain acceptance from society and construct stronger relationships with their social circles, people may adhere to social standards or conform to the recommendations made by their social groups. Additionally, they may also choose to utilize the same products and services that their social circles use. As a result, the intention of customers to employ digital banking services may be affected by other parties (Anggraeni et al., 2021).

There are different results found in the social influence impacting the adoption of digital banking services. Several past studies stated that social influence has a significant positive influence on the intention to use digital banking services in Indonesia (Anggraeni et al., 2021; Windasari et al., 2022) and China (Khan, 2022). It is because if social circles that previously used digital banking services and discovered benefits in their daily life will let them have a positive feeling then they will introduce this service to the individuals. Hence, people will be more likely to accept digital banking services if their social circles feel good about this service (Anggraeni et al., 2021). However, if the social circles of customers did not suggest they use any items or they said that some items are not useful, the customers may have a higher opportunity to not use the items. Besides that, Windasari et al. (2022) indicated that Generations Y and Z have a higher connection to their peers. Therefore, advice and suggestions from their friends will be more valuable when they make decisions.

In addition, there are many previous studies observed that social influence is a vital component when examining the intention to use banking services such as internet banking in Pakistan (Rahi et al., 2018) and mobile banking in Indonesia (Rachmawati et al., 2020; Wibowo &

Sobari, 2023). According to Jadil et al. (2021), if the people surrounding the individuals such as their relations or friends suggest or believe they should use mobile banking services, there is a high possibility that the individual will use the services. Therefore, a positive opinion is very crucial whereby an individual will be affected by the opinions of his or her family, friends, colleagues, or other people surrounding them. It is important that the banking institutions emphasize ways to enhance customer experience based on their preferences when designing the banking application to let them spread their positive opinions to others.

Apart from this, Thaker et al. (2021) claimed that there is a negative relationship between social influence and the adoption of digital banking services in Malaysia. It could be due to personal financial data and information being private and well protected, customers refuse to disclose their financial information to others because this is a sensitive topic. Therefore, opinions from others may not be so important. It means that customers will decide whether to use digital banking based on their needs and wants.

On the other hand, some researchers found that social influence has an insignificant impact on the adoption of digital banking services in Malaysia (Tiong, 2020), Indonesia (Nurmaliki & Mirza, 2021; Kusumawati & Rinaldi, 2020), Pakistan (Khan, 2022), and Vietnam (Nguyen et al., 2020). According to Nurmaliki and Mirza (2021), customers will choose to access digital banking services based on their preferences rather than recommendations from others. It is because every individual has different financial situations and objectives, so they will make decisions that are more in line with them. Moreover, Khan (2022) explained that the lack of significance may be related to people's growing concerns about online fraud and theft. Hence, opinions from social media may not be valuable and followed by individuals. Furthermore, the respondents' high education levels might also influence the results. Wang et al. (2018) stated that people with higher education levels are less easily influenced by social pressure and social norm. So, the hypothesis is:

H3: Social influence positively influences the intention to adopt digital banking services.

2.2.5 Facilitating Conditions

Facilitating conditions is described as the extent to whereby an individual thinks that technological and organizational facilities are in existence to assist the usage of the system. This factor has two different names which are perceived behavioural control in the combined Theory Acceptance Model and Theory of Planned Behaviour (C-TAM-TPB) and compatibility in the Innovation Diffusion Theory (IDT) (Venkatesh et al., 2003). For instance, the elements have customers have the necessary levels of digital literacy and knowledge, effective digital devices and internet connection, and resource limitations when using technology (Khan, 2022; Anggraeni et al., 2021). The UTAUT model showed that facilitating conditions significantly affect customers' propensity to utilize any technology (Venkatesh et al., 2012).

The results of earlier research also indicated that there were conflicting findings on the facilitating conditions impacting the utilization of digital banking services. The association between facilitating conditions and the adoption of digital banking services is discovered to be significant and strong in several countries including Malaysia (Thaker et al., 2021), Vietnam (Nguyen et al., 2020), and India (Pavithra, 2021). This is due to the customers are more inclined to employ digital banking services in the presence of better facilitating conditions such as basic facilities and internet connection support. Nevertheless, customers will not choose to utilize digital banking services if they have technical difficulties, and the system is too complex. In addition, Pavithra (2021) also found that the probability of customers adopting digital banking services increases when the technology and system are compatible with their lifestyles such as customers can connect with the system with less effort.

In addition, Seesuk (2020) discovered that facilitating conditions had a substantial effect on the adoption of mobile banking in Bangkok. The majority of participants had the requisite

knowledge and resources for working with mobile banking through their smartphones. When they encounter difficulties, they can also solve the problems easily and immediately by finding assistance from the people around them. The finding is matched with the earlier study of Baptista and Oliveira (2015), which concluded that the facilitating conditions were the essential infrastructure for the customers to utilize a banking application effectively. For example, they require to have a Wi-Fi connection, a device to access banking applications, knowledge to use the devices, and so on. Customers will benefit greatly from the favourable facilitating conditions that enable them to make transactions anytime and anywhere.

On the contrary, an insignificant relationship between facilitating conditions and the adoption of digital banking services emerged in various nations such as China, Pakistan (Khan, 2022), and Indonesia (Anggraeni et al., 2021; Nurmaliki & Mirza, 2021; Kusumawati & Rinaldi, 2020). According to Anggraeni et al. (2021), this insignificant influence may be caused by the clients do not need complicated and substantial facilities to access digital banking services. They simply need a basic device with an internet connection such as a laptop, tablet, smartphone, or so on and these devices are often owned by the customers. Furthermore, Kusumawati and Rinaldi (2020) noted that clients do not require assistance from others or some experts since they have sufficient tools.

Furthermore, Baptista and Oliveira (2015) also discovered that facilitating conditions have an insignificant effect on the intention to adopt mobile banking services. The reason may be concluded that African regions do not anticipate having adequate and robust institutional support to enable them to adopt mobile banking services, then facilitating conditions become not so important. This is because many African countries lack adequate telecommunications infrastructure including internet connectivity, especially in rural areas. Besides that, they may also lack awareness and trust to access mobile banking services. Therefore, different respondents will cause a difference in the results with prior studies. Discrepancies in the respondents will cause them to have different behaviours which include their lifestyle, economic conditions, income, available resources, and so on. Moreover, according to Jadil et al. (2021), the authors suggested that suitable virtual assistants, appropriate online consultations, sufficient training programs, and so on will be effective methods to enhance the

customer experience and help them overcome difficulties when using financial services. Thus, the hypothesis in this research is:

H4: Facilitating conditions positively influence the intention to adopt digital banking services.

2.2.6 Perceived Trust

Perceived trust means the individual's level of confidence in their beliefs about the behaviour of others. Normally, this confidence in expectations is based on past experiences although the previous behaviour of the other party cannot ensure that the behaviour would be exactly as expected (Gefen, 2000). According to Mohamad et al. (2023), trust refers to the personal view of a person that a specific entity or institution is trustworthy. It has a significant effect on consumer behaviour. Hence, perceived trust is the confidence of customers believe that digital banking will offer valuable services.

There are contradictory results examined by the previous studies on perceived trust influencing the use of digital banking services. The use of digital banking services is strongly and favourably influenced by perceived trust in Malaysia (Mohamad et al., 2023; Saif et al., 2022; Ismail et al., 2023), Indonesia (Nurmaliki & Mirza, 2021), and Vietnam (Nguyen et al., 2020). It implies that higher adoption of digital banking services may result from increased levels of trust. According to Nguyen et al. (2020), this situation may be because customer has confidence in the securities system and the ability to complete the procedure by themselves as well as the problem-solving strategies of the digital banking services. In addition, perceived trust also significantly affects the tendency to utilize mobile banking in Malaysia (Leong et al., 2021) and Indonesia (Wibowo & Sobari, 2023). If a person has confidence in the services, then it will increase the possibility to adopt the services. According to Dachyar and Hananto (2014), perceived ease of use has an impact on customers' perceived trust. Therefore, it means that

when the service is simple for users to use, users will be satisfied and then enhance perceived trust in that service. Besides that, Chen and Teng (2013) also observed that in the e-commerce industry, the more user-friendly website, the more satisfied users which in turn increases customer's perceived trust.

Additionally, Leong et al. (2021) and Wibowo and Sobari (2023) also discovered that perceived trust greatly affects the intention to utilize mobile banking in Malaysia and Indonesia. These results indicate the necessity of managing customer security concerns and providing sufficient security to enhance the confidence of customers and thus increase the intention to utilize mobile banking services (Merhi et al., 2019). In addition, trust also increases satisfaction and influences the propensity to continue using mobile banking services. It is further proposed that service providers should raise the quality of their offerings to boost customers' experience and encourage continued usage. Trust is not only significant in motivating users to adopt mobile banking but also in building a favourable impression of mobile banking. Additionally, security and privacy will also impact the customers' trust. Then, in order to let the customers feel secure while making transactions through their devices, the service providers should enhance the security and privacy system of mobile banking.

On the contrary, AlNemer (2022) observed that trust is adversely and strongly affecting the adoption of digital banking in the Kingdom of Saudi Arabia. This outcome may be due to customers not trusting digital banking services because they are more concerned about theft and fraudulent activities. Besides that, banks may not provide adequate transparency about their policies, safety procedures, and other details to their customers. Hence, the author provides some recommendations for which the bank should give priority to protecting customer privacy and security during online transaction processes. Furthermore, the banks should also regularly update their information to their customers such as their digital banking regulations, services provided, convenient characteristics, and security measures used to safeguard the interests of consumers.

Nevertheless, Kim et al. (2009) stressed that the adoption of digital banking services is not strongly influenced by trust. It may be caused by the potential liability of the customer is not clearly limited in digital banking so trust may not be vital when customers make their decision. Additionally, if the potential benefits that the customers can get are high, they will decide to adopt digital banking with lower levels of trust. Hence, the hypothesis is constructed for this statement:

H5: Perceived trust positively influences the intention to adopt digital banking services.

2.3 Conceptual Framework

Figure 2.1 *Conceptual Framework*

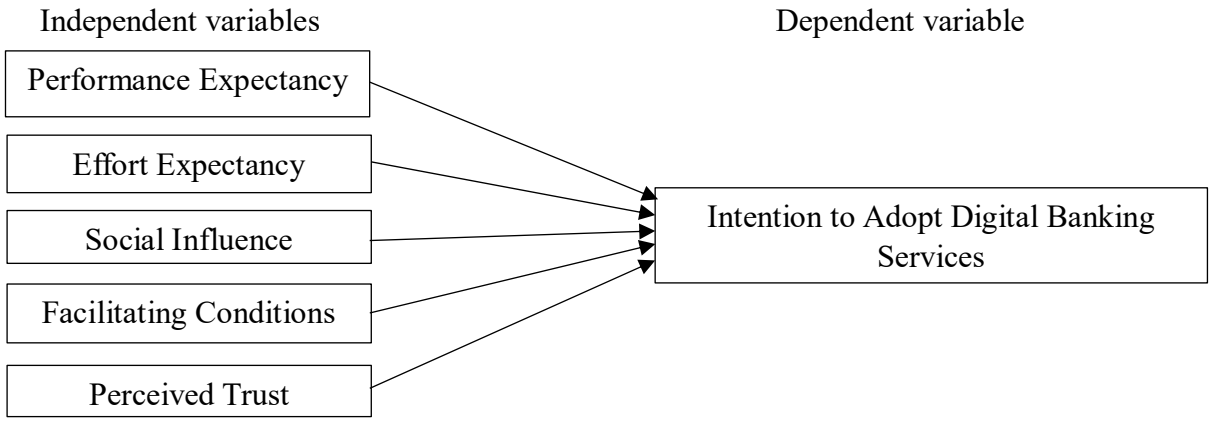


Figure 2.1 demonstrates a conceptual framework for assessing the intention of adopting digital banking services grounded on the prior theoretical frameworks that were described in the previous section. The five independent variables included in conceptual framework namely Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, as well as Perceived Trust. According to earlier research, it is assumed that the mentioned independent variables might have a big influence on university students' intention in adopting digital banking services. This framework will then be applied to determine the validity of the inference.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Research Design

The selection of procedures for collecting and evaluating data as well as the strategies for solving research problems. The initial purpose of research design is to ensure that the evidence gathered can resolve the issues of the research (Rezigalla, 2020). Research design can be categorised into two areas which include qualitative and quantitative research.

According to Streefkerk (2023), graphs and numbers are employed to represent quantitative research. The examples that are frequently used in quantitative research comprise experiments, quantified observations, and surveys with closed-ended questions. The present study utilises quantitative research in exploring the variables affecting the intention in adopting digital banking services. In this study, closed-ended survey questionnaires are implemented in order to provide respondents with guidance on answering the questions.

3.2 Data Collection Method

3.2.1 Primary data

Data collection refers to one of the standard processes for investigating the factors influencing the utilization of digital banking. Researchers have access to two different sorts of data sources: primary and secondary data. In this research, the information required to meet the goals of this

research is gathered via primary data. Primary data defined as authentic information that was acquired by the scholars firsthand via a variety of techniques, including surveys, case studies, interviews, experiments, and more. Utilizing primary data enables researchers to get information about a particular topic. In this research, a survey is done by distributing questionnaires to specific respondents to ascertain the factors that affect the intention in adopting digital banking. The questions are aimed at extracting the data required for this investigation. The questionnaire was chosen for this study due to it is a quick, efficient, and affordable tool to collect data from large sample sizes.

3.3 Sampling Design

3.3.1 Target Population

The aimed population indicates the group of people that a research's focus is aimed at exploring in order to derive results from (Akman, 2023). The complete group of participants who have characteristics that are of interest to the research team is the target population (Martínez-Mesa et al., 2016). Therefore, it is crucial for the researchers to ensure that the respondents in the study are eligible and meet the characteristics in order to have a more precise research outcome. The target of this study is to examine variables that may have an effect on the intention in adoption of digital banking services among university students. Malaysia university students were chosen to be the target population was due to the reason of university students are referred to as "digital natives" (Prensky, 2001), which means university students in this era are raised within the age of modern technology and therefore conversant with the internet usage from a young age. Then, digital banking started to launch in Malaysia in 2024, therefore in this study, it is aimed to explore university students in Malaysia's intention of adopting digital banking services, which may then provide insight to related parties to promote the intention in digital banking services adoption. Hence, an estimation of 1,202,202 university students in Malaysia is included in this study as the target population (Ministry of Higher Education Malaysia, 2023).

3.3.2 Sampling Frame and Location

The sampling frame refers to a list or instrument utilized by researchers to determine the population they are interested in (Villegas, 2023). This can facilitate researchers in choosing a sample from the population by utilizing a specific set of components. Whereas the sampling location refers to the location where sample data will be collected. In this study, Malaysian university students are selected to be the sampling frame. The sampling location was chosen in Peninsular Malaysia.

3.3.3 Sampling Technique

A sampling technique involved non-probability sampling and probability sampling (McCombes, 2023). Random selection indicates a fundamental aspect of probability sampling that allows researchers to determine statistically reliable conclusions towards the whole group. In contrast, non-probability sampling requires non-random selection on the basis of practicality or other reasons, simplifying the data collection process. For the questionnaires that are designed for university students in Malaysia, a non-probability sampling technique was chosen to gather the data, particularly convenience sampling. In accordance with McCombes (2023), convenience sampling generally costs little funding and is easy to do with readily accessible respondents. The researcher's convenience is the main reason that researchers select convenience sampling as a sampling technique. The convenience may include factors such as easy accessibility, locational linkage, and connections within the target population (McCombes, 2023). In short, convenience sampling can be used in this research, and we can easily gain responses which are any university students in Malaysia, like University Tunku Abdul Rahman (UTAR) students.

3.3.4 Sampling Size

The number of respondents or observations incorporated into the research is known to as the sample size (Kibuacha, 2022). According to the author, with the intention to ensure that the complete sample effectively mirrors the entire population, the sample size denotes the sum of the number of participants involved in the research. The study by AlNemer (2022) resulted in a value of 0.263 of Pseudo-R-square. Also, there were studies similar to the intention in adopting digital banking services by Tiong (2020) and Mohamad et al. (2023) that obtained value of 0.367 in adjusted R-squared and R-squared value of 0.450 respectively. Based on the studies above, in order to get better model fit for this research, this research has obtained a higher minimum R squared of 0.50 to set the sampling size. According to *Appendix 3* in the appendices, the recommended sampling size at the significant level of 5% with a minimum R squared of 0.50 was 45 respondents (Hair et al., 2014). In this research, the actual sampling size to study the intention of adopting digital banking services in Malaysia is 50.

3.4 Research Instrument

3.4.1 Questionnaire Design

A questionnaire is used to collect the data of respondents in this study. This is because the questionnaire can be distributed either online or offline to everyone and enables the obtaining of information in an efficient way. The questionnaire for this study contains a cover layout and seven sections. The objective of Section A is to collect demographic information from the respondents. In this survey, there are six demographic questions that involve gender, age, nationality, state, ethnicity, and current year of study. Then, there are also six questions in

Section B aimed at evaluating the university student's intention of adopting digital banking services. After that, the independent variables that influence the intention of adopting digital banking services which consist of performance expectancy, effort expectancy, social influence, facilitating conditions, and perceived trust are covered in a total number of 30 questions which have 6 questions in each part in Section C to G. All of the questions in Section B to G are assessed by five-point Likert scales. According to Mcleod (2023), a five-point Likert scale which ranges from strongly agree to strongly disagree is used to assess the level at which respondents agree or disagree with a certain statement.

3.4.2 Variable Measurement

3.4.2.1 Nominal Scale

When analysing qualitative data, a nominal scale is employed for identifying specific objects by using numbers without consideration for the order. Gender classification often uses a nominal scale (Brown, 2011). Therefore, a nominal scale is suitable to be used for gender and ethnicity in Section A of the questionnaire.

Example of nominal scale:

Gender: ( ) Male ( ) Female

Ethnicity: ( ) Malay ( ) Chinese

( ) Indian

3.4.2.2 Ordinal Scale

The ordinal scale is also known as the ranked scale. It is used for qualitative data, but the key difference is the ordinal scale is to distinguish the objects by utilizing the ranking. For instance, sequence the activities from the most interesting to the least interesting (Brown, 2011). As a result, age is collected in the way of the ordinal scale in this study.

Example of ordinal scale:

Age: ( ) 18-19 ( ) 20-21 ( ) 22-23 ( ) 24 and above

3.4.2.3 Interval Scale

Interval scale is applied to present quantitative data, it demonstrates the order of things and the differences between the numbers are meaningful. It is typically used for temperature and test results (Brown, 2011). Joshi et al. (2015) stated that the Likert scale can be an example of interval scale. As a result, the Likert scale is constructed in Sections B to G of the survey questionnaire and the interval scale is utilized as a measurement tool. It means that respondents are required to convey their ideas by answering the questions on a scale of 1 to 5 which is strongly disagree to strongly agree.

Example of interval scale:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe digital banking will serve most of the people well in the future.	1	2	3	4	5

3.5 Data Analysis

3.5.1 Descriptive statistics

In accordance with Aldrich (2019), any statistical or mathematical process that condenses or summarises numerical and category-based information into a more comprehensible format is referred to as a descriptive statistical analysis. The initial step in statistical analysis in quantitative study is to define the characteristics of the responses. Measures of distribution shape (such as skewness, and kurtosis), central tendency (such as mean, mode, and median), and dispersion (such as standard deviation, and variance) are frequently included in this analysis. Additionally, to help with visualization and interpretation, descriptive statistics often uses pie charts, histograms, box plots, scatter plots, and others to portray data graphically (Simplilearn, 2023).

3.5.2 Inferential Analysis

Among the various analyses, inferential analysis is essential as it inference the sample statistics to the population parameters. Hence, it is possible to comprehend Malaysia's adoption of

digital banking through the use of sample data from 50 individuals across a diversity of age groups, genders, and ethnicities. This study employed Partial Least Square Structural Equation Modelling (PLS-SEM) as its inferential analytical method. It is applied to investigate the connection between dependent and independent variables.

When there is an advanced model with adjustable data requirements, PLS-SEM is appropriate. Wold (1982) is the author who initially introduced PLS-SEM. In this study, PLS-SEM is adopted since it can explain the variance of dependent variable and identify mediation effects with less conflicting results than regression modelling (Ramli et al., 2018). Compared to covariance-based structural equation modelling (CB-SEM), PLS-SEM shows better construct reliability and validity as seen by its higher average variance extracted (AVE) and composite reliability (CR) values (Dash & Paul, 2021). In addition, it can use flexible data to express the relationships between independent and dependent variables. In PLS-SEM, regression analysis is required to determine the connections between dependent and independent variables. It aids in forecasting how the independent variables will affect the dependent variable.

3.5.2.1 Internal Consistency Reliability

The reliability of surveys that use the Likert scale is assessed using **Cronbach's Alpha**. A good Cronbach's alpha is one that is more than 0.7. However, when the score is higher than 0.95, it indicates that the questionnaire has been duplicated. Hence, a score of 0.9 is advised as maximum but it is still appropriate for a score greater than 0.9. Low Cronbach's alpha indicates that more pertinent questions should be added to the questionnaire (Tavakol & Dennick, 2011).

While PLS-SEM prioritizes the indications based on each indicator's reliability, Cronbach's alpha implies that every indicator has the same outer leadings. Hence, Cronbach's alpha is inappropriate when PLS-SEM is used. Moreover, Cronbach's alpha is responsive to the Likert scale thus it may underestimate the reliability (Hair et al., 2014). When PLS-SEM is used,

composite reliability, a measure of internal consistency reliability, is appropriate. In **composite reliability**, varying indicators have varying outer loadings. A value between 0.7 and 0.9 is preferred since less than 0.7 implies low-reliability performance in internal consistency and a value more than 0.90 shows that there are redundant questions (Hair et al., 2021).

Average variance extracted (AVE), in addition to composite reliability, is one method for assessing convergent validity. It aids in measuring the proportion of variance attributable to the concept as opposed to that resulting from measurement error. It is advised that the AVE score be at least 0.50 (Hair et al., 2021). A value of less than 0.5 for AVE is permitted if the composite reliability is more than 0.6 (Pervan et al., 2017).

3.5.2.2 Discriminant Validity

Discriminant validity describes the actual degree of difference between constructs. It can also measure the extent of difference between overlapping constructs. There are three methods used in discriminant validity which consists of cross-loadings, Fornell-Larcker Criterion, and Heterotrait-Monotrait (HTMT) ratio.

The first method applied in this study to evaluate discriminant validity is the **Fornell-Larcker Criterion**. In this method, the correlation between latent constructs is compared with the square root of the average variance extracted (Hamid et al., 2017). A latent construct means that the concept is hidden in the mind of the respondent which cannot be directly measured such as attitudes, satisfaction, and so on (El-Den et al., 2020). So, it is like the customer's intention to adopt digital banking services in this research. On the contrary, the average variance extracted (AVE) is to assess the variance of the construct and the variance caused by measurement error and it is frequently adopted to evaluate constructs (Santos & Cirillo, 2021). As a result, the value of the square root of AVE should have a larger value compared to the correlations with other hidden constructs.

Furthermore, the second measurement is the **Heterotrait-monotrait (HTMT) ratio**. According to Henseler et al. (2009), the authors claimed that when comparing to the Fornell-Larcker which has only a specificity and sensitivity rate of 20.82%, HTMT can obtain higher rates of 97% to 99%. In this method, the discriminant validity is weakened when the HTMT values are close to 1. Therefore, it is better if the HTMT values are lower (Hamid et al., 2017). Kline (2011) stated that the values of HTMT ought to be smaller than 0.85 while Gold et al. (2001) suggested that a value of 0.90 was acceptable.

3.5.2.3 Collinearity Statistics (Variance Inflation Factor)

In this research, the Variance Inflation Factor (VIF) is utilized in accessing collinearity statistics. VIF estimates the degree to which the variance from the predicted regression coefficient is increased when the independent variables have a correlation (Goldstein & Belsley, 1993). According to the mentioned authors, the VIF score of 1 implies that the independent variables are not interrelated. Then, a VIF with scores of more than 1 and less than 5 indicates a mild correlation between variables. VIF value ranges from 5 to 10 reflecting significant connections between the independent variables. Furthermore, if the VIF is equivalent or more than 5 and up to 10, the independent variable is having multicollinearity issues within in the regression model. With a value of VIF more than 10, the regression coefficients are weakly assessed due to multicollinearity.

3.5.2.4 Multiple Linear Regression Analysis

The equation for regression analysis is shown below:

$$ITA_i = \beta_0 + \beta_1 PE_i + \beta_2 EE_i + \beta_3 SI_i + \beta_4 FC_i + \beta_5 PT_i + \mu_i$$

Where,

ITA_i = Intention to adopt digital banking services

β_0 = Y-intercept

β_j = Slope coefficient for each of the independent variables, j = 1,2,3,4,5

PE_i = Performance expectancy

EE_i = Effort expectancy

SI_i = Social influence

FC_i = Facilitating conditions

PT_i = Perceived trust

μ_i = Error term

Multiple Regression refers to a statistical technique employed to access the relationship between multiple independent variables and a dependent variable (Moore et al., 2006). Hence, Multiple Linear Regression Analysis can be used in this research as there is one dependent variable and five independent variables. There were also other researchers who used this method in studying intention to adopt digital banking services such as Tiong (2020).

In this study, the result of the path coefficient was used in assessing the Multiple Linear Regression analysis. The result of the path coefficient was selected to analyse multiple linear regression is due the reason that it is a modified version of Multiple Linear Regression (Streiner, 2005). As mentioned by the author, this method goes beyond the scope of regression and can evaluate complex models.

Also, under the Multiple Linear Regression Analysis, the R-squared test was included in this study. R-squared is alternatively named as the coefficient of determination (Taylor, 2023). It is an indicator of statistical significance in regression models that assesses the extent to that the independent variables can justify the variation enclosed in the dependent variable. In other

words, R-squared examines the level to which the data fits with the regression model. In social science research, an R-squared value of at least 0.10 is allowable when there is statistical significance for some or most explanatory factors (Ozili, 2023).

3.6 Pilot Test

In order to get optimal outcomes, it is imperative to conduct outstanding research with an appropriate experimental design and precise performance (In, 2017). The author highlighted that the evaluation of feasibility before conducting the major research might be quite valuable. Therefore, a pilot test was carried out in this study. According to Johanson and Brooks (2009), a minimum of thirty respondents from the target demographic is recommended for a preliminary evaluation for a pilot test. Hence, a number of 30 responses were received from the university students through the questionnaire distributed on an online platform named Google Forms. In order to analyse these data, all of the responses were gathered and introduced into SmartPLS 4 for data running. The results of Cronbach Alpha, Composite Reliability, and Average Variance Extracted (AVE) were obtained in accessing preliminary feasibility in this study.

3.6.1 Cronbach's Alpha of Pilot Test

Table 3.1 *Cronbach's Alpha Result of Pilot Test*

Variables	Cronbach's Alpha
Dependent Variable: Intention to Adopt Digital Banking Services	0.842
Independent Variable 1: Performance Expectancy	0.944

Independent Variable 2: Effort Expectancy	0.837
Independent Variable 3: Social Influence	0.919
Independent Variable 4: Facilitating Conditions	0.837
Independent Variable 5: Perceived Trust	0.944

Based on the result above, the values of Cronbach's Alpha of all variables are more than 0.7, which implies a strong internal consistency of reliability. Particularly, the Performance Expectancy variable and Perceived Trust variable have the highest values of 0.944. Whereas the Effort Expectancy variable and Facilitating Conditions variable had the lowest values among all.

3.6.2 Composite Reliability of Pilot Test

Table 3.2 *Composite Reliability of Pilot Test*

Variables	Composite Reliability
Dependent Variable: Intention to Adopt Digital Banking Services	0.866
Independent Variable 1: Performance Expectancy	0.956
Independent Variable 2: Effort Expectancy	0.880
Independent Variable 3: Social Influence	0.936
Independent Variable 4: Facilitating Conditions	0.870
Independent Variable 5: Perceived Trust	0.955

In the context of the composite reliability criterion, higher values signify greater levels of reliability (Sarstedt et al., 2017). In accordance with Hair et al., 2021, a value from 0.7 to 0.9 is preferred. From the result above, three variables are grades above 0.70, which can be

considered to be satisfactory in reliability. Then, the variables of Performance Expectancy, Social Influence, and Perceived Trust possesses values higher than 0.90. According to Hair et al. (2014), a greater than 0.9 composite reliability value reflect the redundancy of questions. As a remedy, some questions are removed, and the analysis is run repeatedly. However, the result remains unchanged which the three variables are still having greater than 0.9 composite reliability value. Hence, the questions are remained since the value of Cronbach Alpha and AVE are acceptable. Moreover, the issue of redundant question stated by Hair et al. (2014) are under a broad assumption. In notable PLS-SEM discussion forum, Dr. Jan-Michael Becker, the developer of SmartPLS believe that a greater than 0.9 composite reliability value may or may not adversely affect the result (Becker, 2015). As a result, the adopted questions and analysis result are retained.

3.6.3 Average Variance Extracted (AVE) of Pilot Test

Table 3.3 *Average Variance Extracted of Pilot Test*

Variables	Average Variance Extracted
Dependent Variable: Intention to Adopt Digital Banking Services	0.571
Independent Variable 1: Performance Expectancy	0.781
Independent Variable 2: Effort Expectancy	0.551
Independent Variable 3: Social Influence	0.710
Independent Variable 4: Facilitating Conditions	0.532
Independent Variable 5: Perceived Trust	0.781

Fornell and Larcker (1981) suggested if the AVE falls below 0.50, it indicates that the influence of measurement error is more significant than the variance accounted for by the construct itself. Consequently, both reliability of independent variables and the construct validity will become

questionable. As shown on the table above, it results the variables are adequate in convergent validity as all of them were higher than the benchmark of 0.50 with the highest value of 0.781 in the independent variables of Performance Expectancy and Perceived Trust, and the lowest value of 0.532 in Facilitating Conditions.

CHAPTER 4: RESEARCH RESULTS

4.1 Introduction

In chapter 4, the analysis and interpretation of the research's findings using 50 respondents who are university students in Malaysia is covered. Descriptive analysis is to transform raw materials to organized data while inferential analysis is to generate statistical results using SmartPLS 4 to have a deeper understanding of how the five independent factors relate to the dependent variable.

4.2 Descriptive Analysis

Descriptive analysis is the process of turning collected raw data into organized and understandable information (Zikmund et al., 2003). It serves as an organized summary of data by outlining the relationship between the variables in a sample (Kaur et al., 2018). Before making inferential statistical comparisons, it is essential to conduct a descriptive analysis of the research. Descriptive analysis consists of the respondents' demographic profile, including gender, age, state, ethnicity, and current year of study.

4.2.1 Gender

Figure 4.1 *Gender*

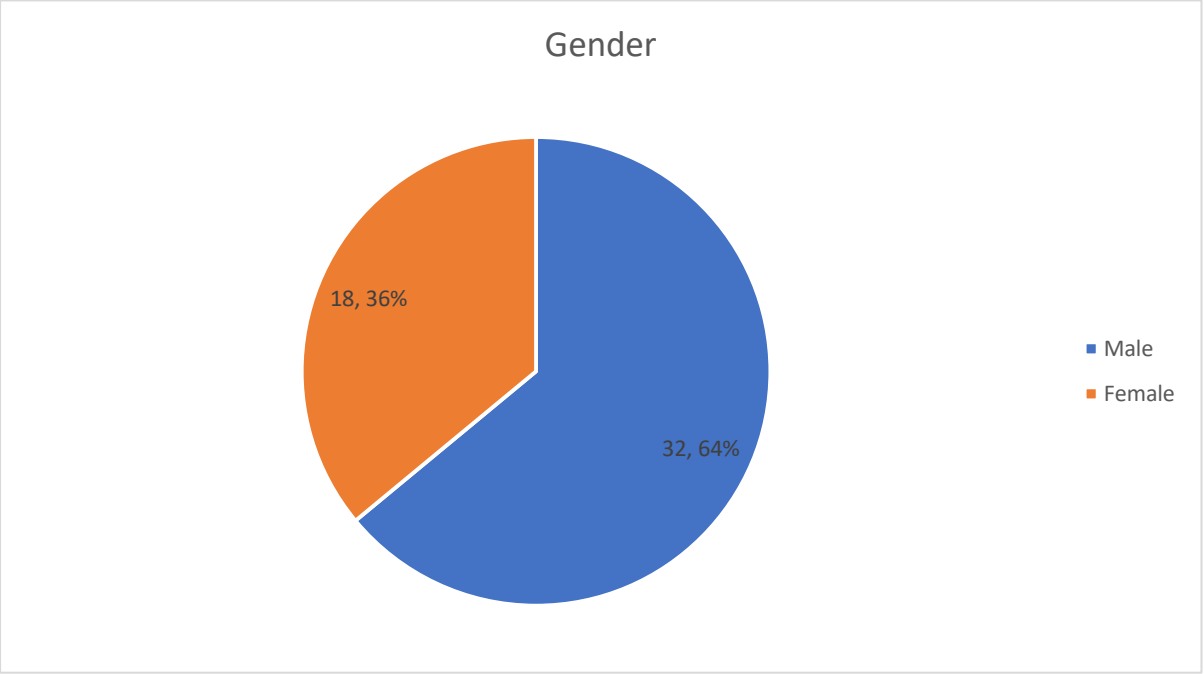


Figure 4.1 shows the gender ratio in the collected sample. There is a total of 50 samples used in this study. 32 male respondents (64%) and 18 female respondents (36%) participated in this research. In the sample that was gathered, there were somewhat more male respondents than female respondents.

4.2.2 Age Group

Figure 4.2 *Age Group*

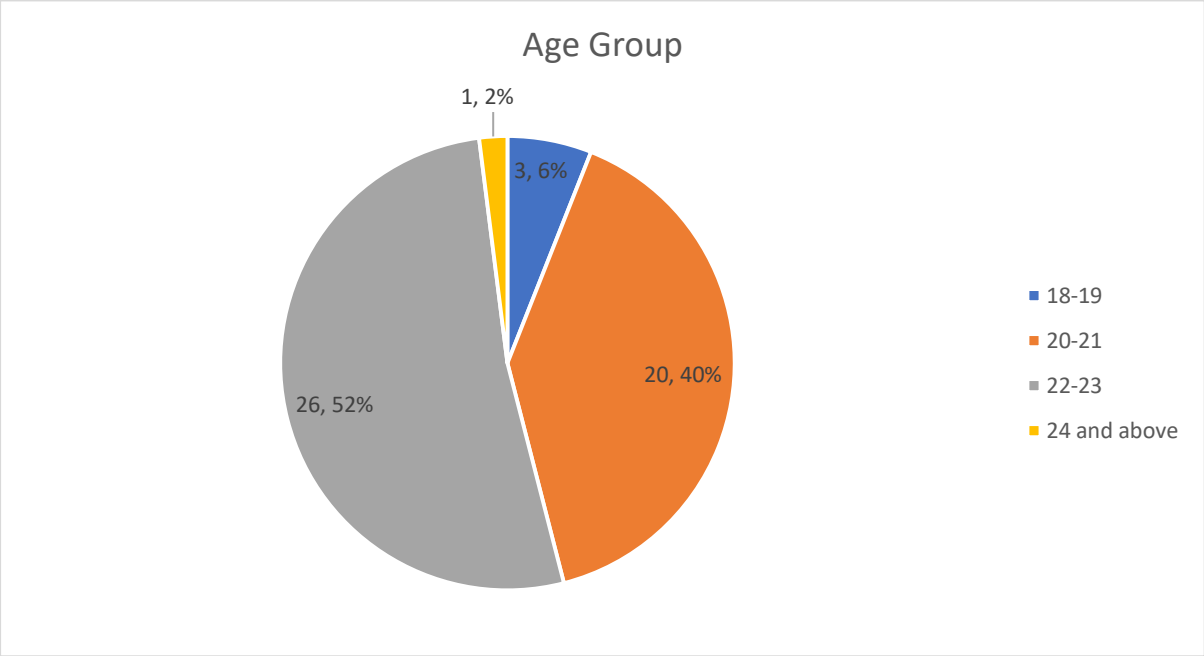
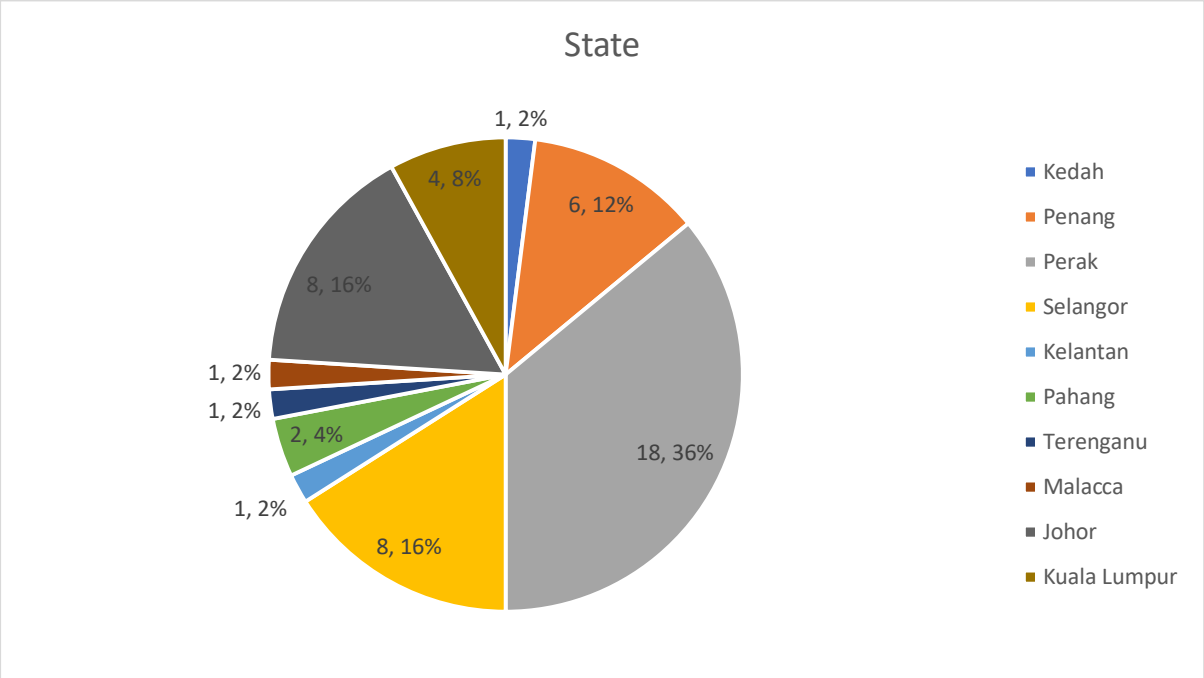


Figure 4.2 shows the age group of respondents. The age range is divided into four categories which are 18 to 19 years old, 20 to 21 years old, 22 to 23 years old, and 24 years and older. The majority of the sample is comprised of 26 respondents (52%) between the ages of 22 and 23. The second largest age group is those between the ages of 20 and 21. There are 20 respondents (40%) who are between 20 and 21 years old. In this research, there are three respondents (6%) from the 18 to 19 years old age group followed by one respondent (2%) from the age group of 24 years and older.

4.2.3 State

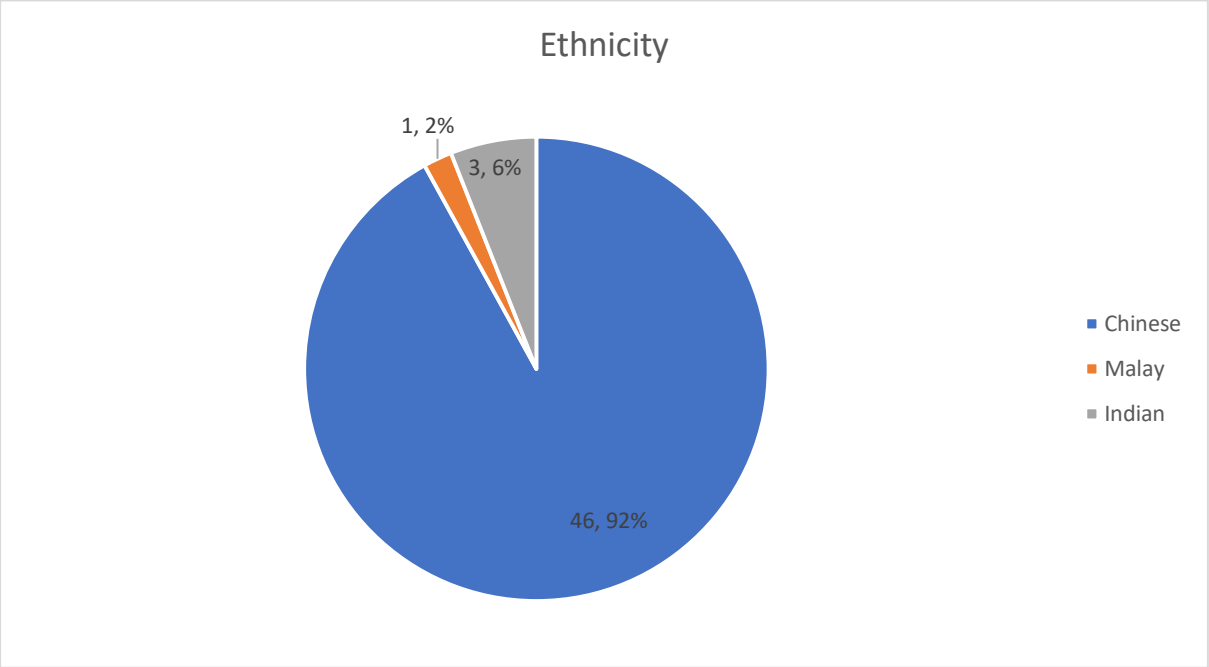
Figure 4.3 *State*



The state of the respondents is displayed in Figure 4.3. Ten states are collected in the group of 50 respondents including Kedah, Penang, Perak, Selangor, Kelantan, Pahang, Terengganu, Malacca, Johor, and Kuala Lumpur. Perak is the state with the highest number of respondents which has 18 out of 50 respondents (36%) followed by Selangor and Johor which each state has 8 out of 50 respondents (16%). The respondents from Penang are 6 out of 50 respondents (12%) and the respondents from Kuala Lumpur are 4 out of 50 respondents (8%). There are 2 out of 50 respondents (4%) from Pahang. From Kedah, Malacca, Terengganu, and Kelantan, each state has one respondent (2%) who contributed to this research. As the sample is targeted in Malaysia, it is essential to understand the state of respondents to have an overview of the covered area of this research.

4.2.4 Ethnicity

Figure 4.4 *Ethnicity*



The respondents' ethnicity is displayed in Figure 4.4. The sample comprises respondents from three distinct ethnic backgrounds including Chinese, Malay, and Indian. The majority of respondents are of Chinese ethnicity which has 46 respondents (92%), followed by three respondents (6%) of Indian ethnicity. There is one respondent (2%) of Malay ethnicity is included in the sample.

4.2.5 Current Year of Study

Figure 4.5 *Current Year of Study*

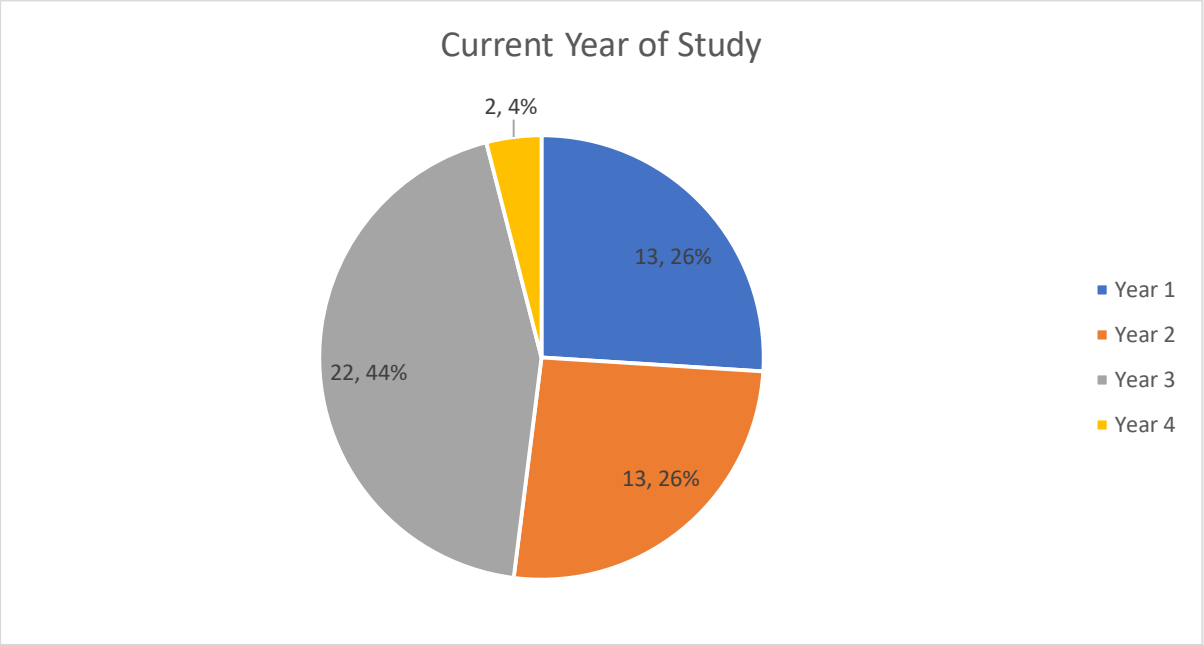


Figure 4.5 shows the current year of study of respondents. There are Year 1, Year 2, Year 3, and Year 4 university student respondents collected in the sample. 22 respondents (44%) are from Year 3 university students which is the majority of the sample. For Year 1 and Year 2 university students, 13 respondents (26%) are collected from each year of study. In this research, 2 respondents (4%) are from Year 4 university students.

4.3 Inferential Analysis

4.3.1 Internal Consistency Reliability

Table 4.1 *Cronbach's Alpha, Composite Reliability, Average Variance Extracted (AVE)*

No.	Type of Variable	Name of Variable	Number of Items	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)	Results

1	DV	Intention to Adopt Digital Banking Services	6	0.837	0.881	0.557	Good
2	IV	Performance Expectancy	6	0.912	0.932	0.694	Good
3	IV	Effort Expectancy	6	0.827	0.874	0.538	Good
4	IV	Social Influence	6	0.875	0.905	0.615	Good
5	IV	Facilitating Conditions	6	0.834	0.875	0.539	Good
6	IV	Perceived Trust	6	0.928	0.944	0.737	Good

Table 4.1 shows the values of Cronbach's alpha, composite reliability, and average variance extracted (AVE) for all the variables. According to Tavakol and Dennick (2011), a good Cronbach's alpha has a range of 0.7 and 0.9. In composite reliability, a value between 0.7 and 0.9 is preferred, a value more than 0.9 shows that they are redundant questions while it is advised AVE to have at least 0.50 (Hair et al., 2021).

From the table, all the variables have good internal consistency because all the variables have Cronbach's alpha that is greater than 0.7. The highest value is having by perceived trust (0.928), the second highest is performance expectancy (0.912), the third one is social influence (0.875), and followed by the dependent variable which is the intention to adopt digital banking services (0.837), facilitating conditions (0.834) and effort expectancy (0.827) holds the lowest value among all the variables.

Furthermore, all the values of composite reliability are larger than 0.7 which means that they have acceptable reliability. The value held by perceived trust (0.944) is the highest one among

all the variables while the second highest value is performance expectancy (0.932) followed by social influence (0.905) which indicates that they may have redundant questions in the survey because their values are greater than 0.9. The remaining variables have acceptable reliability values which are intention to adopt digital banking services (0.881), facilitating conditions (0.875), and effort expectancy (0.874) respectively.

The table also shows that all the variables have satisfactory levels of average variance extracted (AVE) because all variables are more than 0.50. The greatest value is the same as composite reliability which is perceived trust (0.737). The following variables are performance expectancy (0.694), social influence (0.615), intention to adopt digital banking services (0.557), and facilitating conditions (0.539) respectively while the lowest value is effort expectancy (0.538).

4.3.2 Discriminant Validity

4.3.2.1 Fornell-Larcker Criterion

Table 4.2 *Fornell-Larcker Criterion*

Variables	ITA	EE	FC	PE	PT	SI
ITA	**0.746**					
EE	0.802	**0.733**				
FC	0.604	0.708	**0.734**			
PE	0.765	0.713	0.336	**0.833**		
PT	0.462	0.556	0.825	0.221	**0.858**	
SI	0.519	0.617	0.860	0.305	0.662	**0.784**

Notes: Bold is the square root of AVE.

The correlation of latent constructs and the square root of AVE will be compared in the Fornell-Larcker criterion. The value of the square root of AVE should have a greater value than the correlations with other latent constructs (Hamid et al., 2017).

Based on Table 4.2, there are four combinations of variables that have minimal issues where there are the values between intention to adopt digital banking services and effort expectancy (0.802), intention to adopt digital banking services and performance expectancy (0.765), facilitating conditions and perceived trust (0.825), as well as facilitating conditions and social influence (0.860) respectively because their values are larger than the square root of AVE. The differences between the latent constructs and square root of AVE are 0.056, 0.019, 0.091, and 0.126 respectively which means these four values lack discriminant validity. The remaining square roots of AVE have higher values than the latent constructs which states that the values are at acceptable levels to explain the discriminant validity.

4.3.2.2 Heterotrait-Monotrait Ratio (HTMT)

Table 4.3 *Heterotrait-Monotrait Ratio (HTMT)*

Variables	ITA	EE	FC	PE	PT	SI
ITA						
EE	0.955					
FC	0.683	0.838				
PE	0.855	0.793	0.359			
PT	0.528	0.655	0.951	0.242		
SI	0.611	0.738	0.990	0.333	0.730	

Henseler et al. (2009) found that HTMT can obtain greater accuracy as well as sensitivity rates of 97% to 99% but Fornell-Larcker can only achieve 20.82%. When the HTMT values are near

1, there is an absence of discriminant validity. Kline (2011) stated that the value of HTMT is appropriate to be smaller than 0.85 while Gold et al. (2001) suggested that a threshold of 0.90 was acceptable.

According to Table 4.3, the highest value of HTMT is held by the construct of facilitating conditions and social influence which is 0.990. The second highest value is intention to adopt digital banking services and effort expectancy (0.955) followed by facilitating conditions and perceived trust (0.951). Their values exceed 0.9 which states that the values may lack discriminant validity. Moreover, the HTMT obtained ranging from 0.85 to 0.9 is the value between intention to use digital banking services and performance expectancy (0.855). Lastly, the remaining constructs have good discriminant validity since their values are lower than 0.85.

4.3.3 Collinearity Statistics (Variance Inflation Factor)

Table 4.4 *Variance Inflation Factor (VIF)*

Independent Variables	Variance Inflation Factor (VIF)	Results
Performance Expectancy	2.314	Good
Effort Expectancy	4.084	Good
Social Influence	3.964	Good
Facilitating Conditions	8.331	Bad
Perceived Trust	3.259	Good

According to Goldstein and Belsley (1993), the value of the variance inflation factor (VIF) should be lower than 5 otherwise the collinearity problem appears among the variables. Based on Table 4.4, it is clear that one of the independent variables, facilitating conditions has a collinearity problem because its value of VIF is greater than 5 while there is no collinearity problem among the remaining independent variables which consists of performance expectancy, effort expectancy, social influence, as well as perceived trust respectively.

4.3.4 Multiple Linear Regression Analysis

Figure 4.6 *Structural Model (Bootstrapping)*

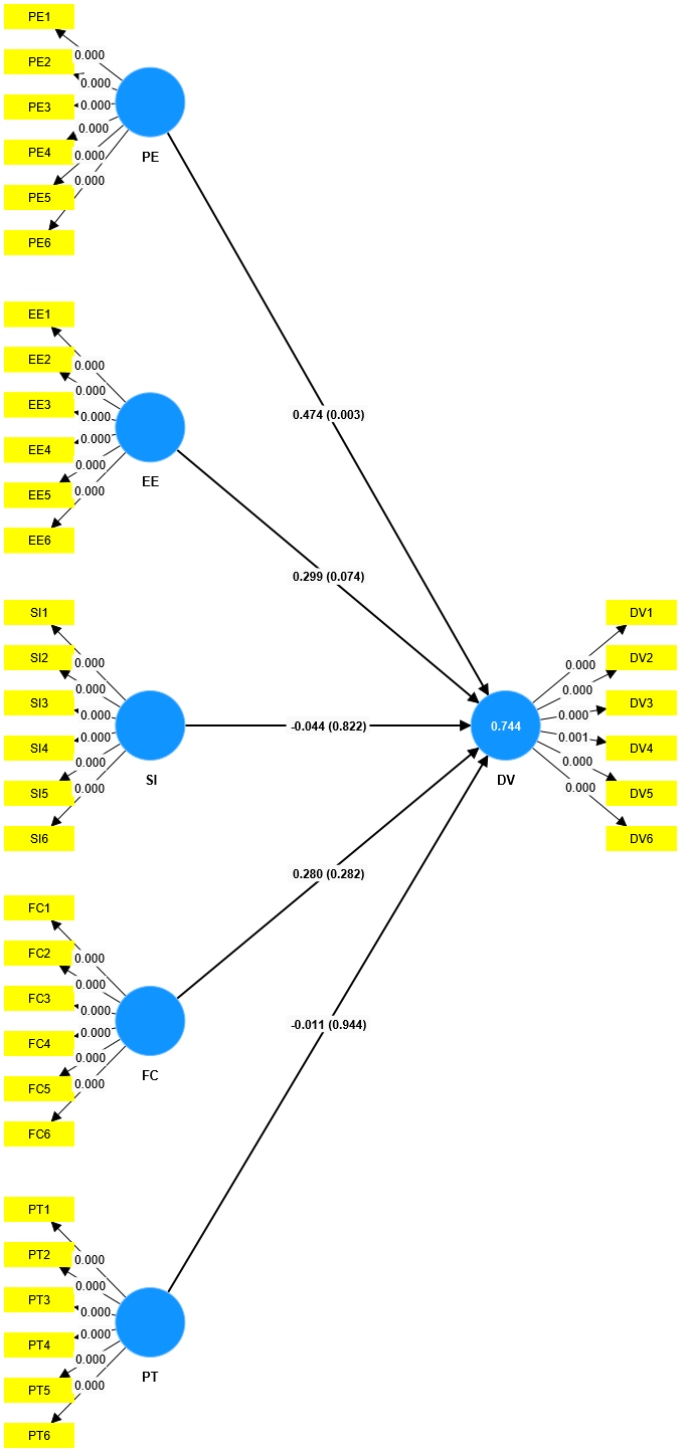


Table 4.5 *Summary of Structural Model (Bootstrapping)*

Hypothesis	Relationship	Path Coefficients	Sample Mean (M)	Standard Deviation	T-statistics (P-values)	Results
H_1	PE -> ITA	0.474	0.488	0.157	3.016 (0.003)	Significant
H_2	EE -> ITA	0.299	0.265	0.167	1.786 (0.074)	Insignificant
H_3	SI -> ITA	-0.044	-0.051	0.194	0.225 (0.822)	Insignificant
H_4	FC -> ITA	0.280	0.303	0.260	1.076 (0.282)	Insignificant
H_5	PT -> ITA	-0.011	-0.013	0.155	0.070 (0.944)	Insignificant
R-squared						0.744
Adjusted R-squared						0.714

In this study, the significance level is set at $\alpha = 0.05$, so the independent variable whose p-value has a larger amount than 0.05 ought to be rejected. According to Table 4.5, the first hypothesis shows that performance expectancy (PE) is significant to the intention to adopt digital banking services (ITA) since its p-value (0.003) is lower than 0.05. Besides that, it has the highest coefficient, which is positive at 0.474, which indicates that performance expectancy has a positive influence on the dependent variable. An increment by one unit in performance expectancy will lead to a rise of 0.453 units in the intention to adopt digital banking services.

Secondly, effort expectancy (EE) has an insignificant relationship with the intention of utilizing digital banking services (ITA) because it has a p-value larger than 0.05 which is 0.074. This result conflicts with the findings of Saif et al. (2022), Windasari et al. (2022), and Leong et al. (2021). The reasons that might be explained by the respondents are more focused on the usage and advantage derived from the services. Furthermore, its coefficient is positive at 0.299, which

states that effort expectancy positively influences the dependent variable. When effort expectancy increases by one unit, the intention to adopt digital banking services will increase by 0.299 units.

In addition, the third independent variable, social influence (SI) insignificantly affects the intention to adopt digital banking services (ITA) because its p-value which is 0.822 has a larger amount than 0.05. This result has a discrepancy with the findings of Anggraeni et al. (2021), Windasari et al. (2022), and Khan (2022). The authors discovered that social influence is significantly related to the intention to adopt digital banking services. This may be due to the respondents' emphasis on their own preferences when using the services. Additionally, the coefficient of social influence is negative at 0.044, which reveals that an increment of one unit in social influence will negatively decrease the intention to adopt digital banking services by 0.044 units.

Furthermore, the intention to adopt digital banking services (ITA) is insignificantly affected by facilitating conditions (FC) since its p-value which is 0.282 is more than 0.05. This result is different from the previous research of Thaker et al. (2021), Nguyen et al. (2020), and Pavithra (2021) whereby the authors discovered that facilitating conditions have a significant and positive relationship with the intention to utilize digital banking services. Moreover, it has a positive coefficient of 0.280. This means that an increase in one unit of facilitating conditions raises the intention to adopt digital banking services by 0.280 units.

The last independent variable, perceived trust (PT) also has an insignificant relationship with the intention to adopt digital banking services (ITA) due to its p-value which is 0.944 is larger than 0.05. This result conflicts with the findings of Mohamad et al. (2023), Saif et al. (2022), and Ismail et al. (2023). This may be because university students focus more on the usefulness and functionality of digital banking rather than their perceived trust in digital banking services. Moreover, the coefficient has a negative result at 0.011. This shows that when perceived trust increases by one unit will cause a decrease in intention to adopt digital banking services by 0.011 units.

Subsequently, the equation for this regression model is shown as such:

$$ITA_i = 0.474PE_i + 0.299EE_i - 0.044SI_i + 0.280FC_i - 0.011PT_i$$

Then, the result of the R-squared and adjusted R-squared for this study are 0.744 and 0.714, respectively. It implies that the regression explains 74.4% of the dependent variable, which in the context of this study, it refers to the intention in adopting digital banking services. When taking the degree of freedom into account, the independent variables justified 71.4% of the variation in the dependent variable. In accordance with Ozili (2023), this result is acceptable as it is more than 0.10, which is 10%.

4.4 Summary of Statistical Analysis

Table 4.6 *Summary of the Statistical Findings*

	Cronbach's Alpha	Composite Reliability	AVE	Results	VIF	Results	P-values (α = 0.05)	Results
ITA	0.837	0.881	0.557	Good				
PE	0.912	0.932	0.694	Good	2.314	Good	0.003	Significant
EE	0.827	0.874	0.538	Good	4.084	Good	0.074	Insignificant
SI	0.875	0.905	0.615	Good	3.964	Good	0.822	Insignificant
FC	0.834	0.875	0.539	Good	8.331	Bad	0.282	Insignificant
PT	0.928	0.944	0.737	Good	3.259	Good	0.944	Insignificant
Discriminant Validity								No

4.5 Conclusion

From the internal consistency reliability test, it is found that all the variables have acceptable reliability. Furthermore, some variables lack discriminant validity in the Fornell-Larcker criterion and HTMT ratio. Besides that, there is a collinearity problem that appears in the facilitating conditions in this study. According to multiple linear regression analysis, one independent variable which is performance expectancy has significant relationships while four independent variables which include effort expectancy, social influence, facilitating conditions, and perceived trust are insignificantly to the intention to adopt digital banking services.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.1 Introduction

Chapter 5 explores more into the findings drawn from Chapter 4. Firstly, the explanations for the reasons for how these outcomes are obtained will be discussed. Secondly, some suggestions for the applications of the results across different sectors are given. At last, the study's limitations are covered along with advice for how to overcome the limitations.

5.2 Discussion on Major Findings

5.2.1 Effort Expectancy and Intention to Adopt Digital Banking Services

The findings presented in Chapter 4 indicate that among Malaysian university students, effort expectancy had little to no impact on their intention to use digital banking services. This result differs from the findings of Saif et al. (2022), Windasari et al. (2022), and Leong et al. (2021) whereby the authors reveal that effort expectancy is significantly and favourably affecting the intention of adopting digital banking services.

The reason for this insignificant result might be explained by the priority of university students is the reliability and stability of the banking system rather than the usability of technology

(Nurmaliki & Mirza, 2021). This is because the reliability and stability may affect the security and effectiveness of the banking system. Customers' time will also be wasted if the banking system is down. Hence, the respondents may emphasize ensuring that the banking system is able to handle the transactions effectively before they consider adopting the service. Furthermore, university students may perceive that digital banking services should provide convenience to them since the services use advanced technology. Therefore, convenience is not taken into consideration by the respondents when deciding whether to use digital banking services, and as a result, effort expectancy has no bearing on the intention in utilizing these services.

5.2.2 Social Influence and Intention to Adopt Digital Banking Services

Next, the results show that among Malaysian university students, social influence has no bearing on their intention to adopt digital banking services. This result has a discrepancy with the findings of Anggraeni et al. (2021), Windasari et al. (2022), and Khan (2022). The results are from the opinions of employees in different sectors, students, housewives, and so on.

This insignificant result may be a result of university students having a high education level, so they have a clear understanding of their demands and are less easily influenced by social pressure and social norm (Wang et al., 2018). Additionally, university students may make a decision to utilize digital banking services based on their personal preferences rather than recommendations from others. It is because each person has different financial circumstances and objectives, so they will choose the best service that best suits their needs (Nurmaliki & Mirza, 2021). Furthermore, there are more and more online fraud cases in Malaysia which causes people to increase their awareness and not easily believe others. Therefore, the intention of adopting digital banking services may not be heavily influenced by the opinions of others (Khan, 2022).

5.2.3 Facilitating Conditions and Intention to Adopt Digital Banking Services

In addition, it is also found that the intention of Malaysian university students to adopt digital banking services is not significantly impacted by facilitating conditions. This finding contrasts with the findings of Thaker et al. (2021), Nguyen et al. (2020), and Pavithra (2021) whereby the authors discovered that the intention to use digital banking services was significantly and positively affected by the facilitating conditions.

This discrepancy in results with previous studies might be due to customers do not need complicated facilities to access digital banking services but only require a basic smart device with internet connectivity (Anggraeni et al., 2021). At the same time, university students belong to the younger generation known as Generation Z whereby the majority of them usually possess at least one smart device and the connection of Wi-Fi. Hence, there will not be a big problem when they are using digital banking applications. In addition, university students have the knowledge of how to use those banking applications. Even if they face difficulties when accessing the application, they may also find the solution to solve the problem by themselves by searching online or by asking for assistance directly from the people around them. Therefore, facilitating conditions slightly impact their intention to utilize digital banking services.

5.2.4 Perceived Trust and Intention to Adopt Digital Banking Services

Lastly, it was found that perceived trust was not significantly related to the customers' intention of adopting digital banking services among Malaysian university students. This result conflicts with those of Mohamad et al. (2023), Saif et al. (2022), and Ismail et al. (2023) whereby the

authors found that perceived trust substantially affects the intention to adopt digital banking services.

This conflict in outcomes might be due to university students focusing more on the usefulness and functionality of digital banking rather than their perceived trust in digital banking services. It is because although digital banking is considered a new service in Malaysia, it also has the advantage of PIDM protection for deposits up to RM250,000 whereby the same benefit which is also available in conventional or Islamic banks (Perbadanan Insurans Deposit Malaysia (PIDM), 2023). The confidence of customers has already grown as a result of this protection, so university students may pay more attention to how well digital banking performs in terms of security and stability of the system which enable them to conduct daily transactions effectively. In addition, university students as customers may put more emphasis on the benefits available from digital banking rather than perceived trust. For example, if digital banking can provide a higher interest rate for deposit accounts than the interest rates in conventional or Islamic banks, university students will be much more inclined to use digital banking services.

5.3 Implications of the Study

In this section, it is focused on how the result can provide insight for related parties. For instance, the policymakers, industry, and academic parties promote the intention of university students in adopting digital banking services with the research outcome in this study. This study reveals how components such as Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Perceived Trust affect university students' intention in adopting digital banking services which can be utilized by the stakeholders for further improvement actions.

First, for the **digital banking industry,** this study may help the digital banking industry players to improve the extent of the researched variables in order to elevate university students' intention of adopting digital banking services. This study shows that among Malaysian university students, performance expectancy, effort expectancy, and facilitating conditions have a positive association with the tendency to adopt digital banking services. Therefore, as suggestions, the digital banking industry may prioritize enhancing the digital performance of digital banking services by designing and adding more function that suits university students' needs. Then, digital banking industry stakeholders may simplify the effort needed for university students to access digital banking services to shove the university students' intention of adopting digital banking services. For example, the application on digital devices may be designed to be easier to navigate to improve the effort needed by the users. Other than that, this study may be a useful insight for the digital banking industry as in it results there is an effect of facilitating conditions towards the intention of digital banking services adoption. The digital banking industry may spread relevant information in everywhere, which can make the university students reach easily, especially online. By doing so, university students may feel there are sufficient resources available to resolve the difficulties when using digital banking applications. As a result, it will boost the effect of facilitating conditions which will then raise the intention of adopting digital banking services.

Furthermore, for **policymakers**, this study may assist in making appropriate policies and regulations to safeguard the soundness of the digital banking sector as well as the privacy safety of the digital banking services user. For instance, the result of this study indicates that perceived trust has an adverse linkage with the propensity to adopt digital banking services among university students. This suggests that university students lack trust in digital banking service providers, particularly concerning cybersecurity issues, which could potentially compromise the security of their private information. Thus, the policymakers may explore more details and introduce more stringent policies for digital banks to adhere to. Conversely, policymakers may use the finding of this research to find out ways to protect digital banking users to promote the intention of adopting digital banking services. For instance, policymakers may reinforce the consumer protection law to protect end users as cybersecurity issues are one of the major concerns with the use of digital banking.

It is believed that these stakeholders will have a deeper understanding and insights from this research to explore more and enhance the intention of adopting digital banking services amid university students.

5.4 Limitations of Study

After this study was conducted, several limitations have been identified which prevent the research from performing better and producing better results.

The first limitation is the questionnaire result's authenticity and applicability. The data collection tool used in this research is an online questionnaire. The online questionnaire is a method that requires low cost, quicker data collection and is user-friendly for respondents. However, it does ask for an internet connection and is vulnerable to survey fraud. As respondents who do not have internet access during providing the questionnaire will complete the questionnaire later, not all respondents are monitored by researchers. Moreover, some respondents who are rushing to class or have urgent personal matters might want to complete the questionnaire as quickly as possible. As a result, people might choose responses that do not reflect their viewpoint. Without supervision, it is plausible that the respondents fill in the questionnaire without understanding and provide incomplete and erroneous information. As a result, less precise and trustworthy data is obtained via online questionnaires.

The second limitation of this research is the adopted sampling techniques. Convenience sampling, a non-probability sample technique that offers easy access to data, was employed in this study. The chosen respondents are those people who are easily reachable by the researchers. The majority of the respondents gathered for this research came from researchers' friends, course mates in university, and passersby on Block H in the UTAR Kampar campus. Hence, applying convenience sampling may result in respondents who belong to particular groups. For

instance, in this study, most of the respondents are from Year 3 university students and Chinese ethnic. Collecting respondents from a certain group may result in significant bias and sampling error, making the analysis's conclusions incorrect and useless.

The third research limitation is the poor performance of one independent variable's collinearity. In this study, the variance inflation factor (VIF) is employed to examine the collinearity of the model. Among the five independent variables, four of them are lower than 5 while the VIF of facilitating conditions is greater than 5 which is 8.331. It shows that this independent variable has a significant correlation issue. When collinearity exists in a model, it might make it more difficult for the model to discern between the various effects of its variables. As a result, the study's findings may not accurately reflect the actual picture. Even small changes in the model will have sensitive results. Modest modifications to the model will provide sensitive outcomes.

5.5 Recommendations

To ensure the usability and reliability of data from online surveys, researchers are suggested to keep an eye on respondents as they complete the questionnaire. Although distributing questionnaires via social media saves more time than face-to-face, face-to-face enable researchers to assist respondents during answering questionnaires. Moreover, it is possible that some respondents are not proficient in the language used in the survey. Hence, it is encouraged to create surveys in multiple languages including Mandarin and Malay. In addition, physical questionnaires are useful in situations where respondents' internet connections are not strong enough to answer the questionnaire.

In addition, the convenience sample technique used in this study may result in collecting respondents from a specific demographic group of people. Planning the target respondent before distributing the questionnaire is advised for researchers, as gathering responses from a

particular group may lead to significant bias and sampling error. Outlining respondent criteria such as ethnicity, year of study, and age aids researchers in selecting suitable respondents and obtaining desired data. Since different people will perceive the questionnaire differently depending on their traits, all demographic groups of respondents should be equally collected.

In this research, the value of the variance inflation factor (VIF) in the inner model does not perform well for one independent variable. VIF values lower than five are recommended. A high VIF value indicates a collinearity issue. There are a few ways to lower the value of VIF. Firstly, a large sample size contributes to improve accuracy and reduces the collinearity between variables. The effect of collinearity decreases with increasing sample size. Hence, increasing the sample size is effective in reducing VIF value. Secondly, combining those strongly correlated predictors helps to reduce VIF value. Since those predictors are correlated, combining them will lessen the correlation in the model. Although some people suggest removing the correlated predictor, it is hazardous and not advised. However, it is appropriate to retain the result with collinearity so that future researchers have the most intuitive result of the study.

5.6 Conclusion

This study's main objective is to examine the factors influencing Malaysian university students' tendencies to employ digital banking services. The data in this study are analysed using the PLS-SEM method. The outcomes demonstrate that one independent variable, performance expectancy has a significant relationship while four independent variables which are effort expectancy, social influence, facilitating conditions, and perceived trust have insignificant relationships towards the intention to use digital banking services. Besides that, the discussion covers how this study can be implicated in different sectors. Lastly, the drawbacks of this research as well as suggestions for resolving them have been given. As a result, this study may provide some ideas and suggestions for future researchers when conducting the study.

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Appendices

Appendix 1: Ethical Approval for Research Project

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

Re: U/SERC/230/2023

21 September 2023

Mr Chong Tun Pin
Head, Department of Banking and Risk Management
Faculty of Business and Finance
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak.

Dear Mr Chong,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your students' research project from Bachelor of Business Administration (Honours) Banking and Finance programme enrolled in course UBFZ3026. 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.	Does Confidence Matters in Adopting Digital Banking Services? A Study on University Students' Perceptions	1. Low Siu Ann 2. Ong Zu Yi 3. Soon Han Ning	Mr Koh Chin Min	21 September 2023 - 20 September 2024
2.	An Empirical Study: Finding of Malaysian Intention to Use InsurTech	1. Lim Kah Yi 2. Sharon Chong Tze Wei 3. Tan Cin Ying 4. Tan Jin Ying	Mr Chong Tun Pin	
3.	A Study on the Impacts of Environmental, Social, and Governance (ESG) Factors on Investment Decisions Among Malaysians	1. Chiah Thong Yan 2. Gan Yu Qian 3. Hung Yee Wei 4. Jawen Teh		

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.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the 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

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
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Website: www.utar.edu.my

Appendix 2: Survey Questionnaire

Does Confidence Matters in Adopting Digital Banking Services? A Study on University Students' Perception.

Dear respondents,

We are Year 3 Semester 3 Bachelor of Business Administration (Honours) Banking and Finance students from University Tunku Abdul Rahman (UTAR). Currently, we are taking UBFZ 3026 Research Project entitled "Does Confidence Matters in Adopting Digital Banking Services? A Study on University Students' Perception". We would like to invite you to participate in this research by responding this questionnaire.

This questionnaire is divided into seven sections: Demographic Information, Adoption of Digital Banking Services, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Trust.

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 fulfill 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 zuyiong@1utar.my.

Acknowledgment of Notice

- I agreed that the response of this questionnaire will be used for academic purposes.
- I disagreed that the response of this questionnaire will be used for academic purposes.

Section A: Demographic Information

Please choose only ONE (1) answer for the questions below.

Gender:

- Male
- Female

Age:

- 18-19
- 20-21
- 22-23
- 24 and above

Nationality:

- Malaysian
- Others: _____

State:

- Perlis
- Kedah
- Penang
- Perak
- Selangor
- Negeri Sembilan
- Kelantan
- Pahang
- Terengganu
- Malacca
- Johor
- Kuala Lumpur

Ethnicity:

- Malay
- Chinese
- Indian

Current year:

- Year 1
- Year 2
- Year 3
- Year 4

About Digital Banking

There are 5 successful applicants for digital banking licenses by BNM. GX Bank is Malaysia's first launched digital bank while the second digital bank is Boost bank. Whereas, the AEON Bank has recently got its approval from BNM to launch. For the remaining two applicants, they are still in the progress of preparing for the approval of BNM. The difference between digital banking and online banking is **digital banking digitizes all the banking**

process and operates **without physical branches** while **online banking is just extra feature of conventional banking**.

- I understand what digital banking is.

Section B: Adoption of Digital Banking Services

Please choose only ONE (1) answer for each of the following question. Please be noted that Scale 1 = Strongly Disagree; Scale 2 = Agree; Scale 3 = Neither Agree nor Disagree; Scale 4 = Agree; Scale 5 = Strongly Agree.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe digital banking will serve most of the people well in the future.	1	2	3	4	5
I feel good about the occurrence of digital banking.	1	2	3	4	5
I will adopt digital banking in the future.	1	2	3	4	5
I would like to explore and learn more about digital banking services.	1	2	3	4	5
I am interested in using digital banking.	1	2	3	4	5
Using digital banking services would save me time.	1	2	3	4	5

Section C: Performance Expectancy

Please choose only ONE (1) answer for each of the following question. Please be noted that Scale 1 = Strongly Disagree; Scale 2 = Agree; Scale 3 = Neither Agree nor Disagree; Scale 4 = Agree; Scale 5 = Strongly Agree.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Digital banking enables me to manage my bank accounts effectively.	1	2	3	4	5
Digital banking enables me to monitor my account balance and transactions in real time.	1	2	3	4	5
Using digital banking can simplify the process of transferring funds.	1	2	3	4	5
I can save time by using a digital banking system.	1	2	3	4	5
I can pay bills and make transactions anytime and anywhere by using digital banking services.	1	2	3	4	5
I do not need to visit physical bank regularly.	1	2	3	4	5

Section D: Effort Expectancy

Please choose only ONE (1) answer for each of the following question. Please be noted that Scale 1 = Strongly Disagree; Scale 2 = Agree; Scale 3 = Neither Agree nor Disagree; Scale 4 = Agree; Scale 5 = Strongly Agree.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It is easy for me to learn how to use digital banking.	1	2	3	4	5
I think that it is simple to be familiar with the operation of digital banking.	1	2	3	4	5
Ease of use is important in the adoption of digital banking services.	1	2	3	4	5
Using digital banking services would require less efforts.	1	2	3	4	5
The operation of digital banking is not complex for me.	1	2	3	4	5

The use of digital banking is clear to me.	1	2	3	4	5

Section E: Social Influence

Please choose only ONE (1) answer for each of the following question. Please be noted that Scale 1 = Strongly Disagree; Scale 2 = Agree; Scale 3 = Neither Agree nor Disagree; Scale 4 = Agree; Scale 5 = Strongly Agree.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I expect that digital banking would be trendy in near future.	1	2	3	4	5
In the opinion of people important to me, I should use digital banking.	1	2	3	4	5
Most people surrounding me are starting to digital banking.	1	2	3	4	5
My friends and family will value the use of digital banking.	1	2	3	4	5
Having digital banking services is a status of symbol in my environment.	1	2	3	4	5
People who influence my behaviour think that I should use digital banking.	1	2	3	4	5

Section F: Facilitating Conditions

Please choose only ONE (1) answer for each of the following question. Please be noted that Scale 1 = Strongly Disagree; Scale 2 = Agree; Scale 3 = Neither Agree nor Disagree; Scale 4 = Agree; Scale 5 = Strongly Agree.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I believe digital banking can work without problems in all times.	1	2	3	4	5

I have the resources necessary to use digital banking.	1	2	3	4	5
I have the knowledge necessary to use the digital banking services.	1	2	3	4	5
I can get help from family when I have difficulties in using digital banking services.	1	2	3	4	5
It is easy for me to get the information about the use of digital banking.	1	2	3	4	5
Digital banking is compatible with other technologies I use.	1	2	3	4	5

Section G: Perceived Trust

Please choose only ONE (1) answer for each of the following question. Please be noted that Scale 1 = Strongly Disagree; Scale 2 = Agree; Scale 3 = Neither Agree nor Disagree; Scale 4 = Agree; Scale 5 = Strongly Agree.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
There is no doubt for me to trust the full digitization of banking processes.	1	2	3	4	5
I believe digital banking has the ability to fulfil its task.	1	2	3	4	5
I can fully trust digital banking in handling my money and personal information.	1	2	3	4	5
I believe digital banking can provide a secure, stable financial transaction information platform for me.	1	2	3	4	5
I am willing to participate in cross-selling activities as I think digital banking is trustworthy.	1	2	3	4	5

I have confidence that digital banking services will protect me from fraudulent activities.	1	2	3	4	5

Appendix 3: Sample size recommendation in a PLS-SEM for a statistical power of 80%

Maximum number of arrows pointing at construct	*Significance level*											
	1%				*5%*				*10%*			
	Minimum R^2				*Minimum R^2*				*Minimum R^2*			
	0.10	*0.25*	*0.50*	*0.75*	*0.10*	*0.25*	*0.50*	*0.75*	*0.10*	*0.25*	*0.50*	*0.75*
2	158	75	47	38	110	52	33	26	88	41	26	21
3	176	84	53	42	124	59	38	30	100	48	30	25
4	191	91	58	46	137	65	42	33	111	53	34	27
5	205	98	62	50	147	70	45	36	120	58	37	30
6	217	103	66	53	157	75	48	39	128	62	40	32
7	28	109	69	56	166	80	51	41	136	66	42	35
8	238	114	73	59	174	84	54	44	143	69	45	37
9	247	119	76	62	181	88	57	46	150	73	47	39
10	256	123	79	64	189	91	59	48	156	76	49	41

Source: Hair et al. (2014)