FACTORS AFFECTING THE ADOPTION OF DIGITAL BANKING AMONG MALAYSIANS

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DECLARATION

We hereby declare that:

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

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

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

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LIST OF ABBREVIATIONS

AI   Artificial Intelligence

API   Application Programming Interface

ATM   Automated Teller Machine

BIDB   Behavioral Intention to Adopt Digital Banking

BNM   Bank Negara Malaysia

CAP   Consumers Association of Penang

CON   Convenience

CTAMTPB   Combined TAM and Theory of Planned Behavior

FC   Facilitating conditions

FE   Faculty of Economics

IB   Internet banking

IDT   Innovation Diffusion Theory

MPCU   Model of PC Utilization

PEU   Perceived Ease of Use

PU   Perceived Usefulness

RM   Ringgit Malaysia

SPSS   Statistical Package for the Social Sciences

SSO   Single Sign On

TAM   Technology Acceptance Model

UII	Universitas Islam Indonesia
UTAUT	Unified Theory of Acceptance and Use of Technology
VIF	Variance Inflation Factor

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PREFACE

Information and communication technology's rapid advancement has changed many industries, most notably the financial sector. In addition to advancing financial technology, this rapid technological advancement is also radically altering the nature of banking services, which in turn is altering consumer preferences and expectations for technological advancements. As more customers opt for the speed and convenience of digital banking, physical bank branches are becoming increasingly less common. Additionally, the COVID-19 pandemic has triggered a shift in consumer and business behaviour towards an increased dependence on electronic products and services. Individuals are forced to incorporate digital banking into their lives due to the restrictions on movement globally.

Moreover, the first digital bank licenses were granted in Malaysia on December 31, 2020. A set of guidelines for the issuance of digital banking licenses is outlined in the Policy Document on Licensing Framework for Digital Banks, which was introduced by Bank Negara Malaysia. This demonstrates how digital banking is spreading quickly and how the need for these services is consuming the banking industry. Furthermore, there are many factors that can affect an individual's adoption towards digital banking services. Therefore, this study aims to investigate the factors that can affect digital banking adoption among the adults in Malaysia.

ABSTRACT

The majority of financial initiatives have moved from offline to online transactions and from manual to automated processes as a result of technological advancements. Digital banking is the transformation of all traditional banking services and operations into a digital environment, in which consumers do not have to visit physical branches in order to conduct any types of financial transaction. This study mainly focuses on the factors affecting the adoption of digital banking among adults in Malaysia. To be specific, the study will provide insights regarding whether convenience, perceived ease of use, perceived usefulness and facilitating conditions have a significant relationship on the behavioural intention to adopt digital banking among Malaysians. As such, the study has incorporated the theoretical frameworks: Extended Technology Model and Unified Theory of Acceptance and Use of Technology model, to further study the relationship between the independent variables and the dependent variable. Moreover, the primary research method used in this research was the survey questionnaire approach using Google Forms. With the use of non-probability sampling technique (convenience sampling), there was a total of 400 respondents, in which the data was then transferred to the Statistical Product and Service Solutions (SPSS) software to aid in our data analysis. To guarantee the calibre of the analysis results, the validity and reliability of the research items were examined. Some of the tests included in this research were Multicollinearity Testing, Normality Testing and Multiple Regression Analysis. Lastly, the research contains certain limitations and recommendations to improve the ideas for future scholars as well as the Malaysian Government to increase the awareness of digital banking and improve the digital financial literacy of individuals.

CHAPTER 1: INTRODUCTION

1.0 Introduction

The first chapter of the research will provide a detailed account of the study's background. This will involve an extensive exploration of the various aspects of the research problem, including its history, current state, and potential future developments. This chapter's primary objectives are to offer a thorough grasp of the research context and establish the research's importance and relevance. After the introduction, the problem statement will be presented, highlighting the key issues and challenges the study aims to address. This section will clearly and concisely describe the research problem, outlining its scope, significance, and potential impact. After the problem statement, the research objectives will be outlined and categorized into general and specific objectives. The general objectives will provide an overarching framework for the research, while the specific objectives will break down the research into more manageable and focused components. This section will establish the purpose of the study and provide a roadmap for achieving the research goals. Subsequently, the hypotheses and research questions will be declared. This section will outline the specific assertions and predictions that the study seeks to test and explore. The hypotheses will provide a clear and testable framework for the research, while the research questions will guide the study's exploration and investigation. Finally, the study's significance will be discussed, examining the potential impacts and contributions. The study's implications for theory, practice, and policy will be emphasized in this portion, along with the study's broader significance and importance.

1.1 Research Background

The evolution of information and communication technology has transformed various industries, specifically the financial sector. This fast-paced improvement of technology is not only giving an advancement in financial technology but also fundamentally reshaping the nature of banking services, and consequently changing the customers' preferences and expectations towards technological advancements (Shankar & Jebarajakirthy, 2019). With the advancement of the technological process, most of the financial initiatives process have shifted from manual methods to automated processes, and from offline to online transactions (Nohumba et al., 2020). Consequently, digital banking comprises electronic, mobile, and online banking (Sardana & Singhania, 2018). According to Kusumawati and Rinaldi (2020), all online banking operations, including Internet and mobile banking, are also included in the digital banking category.

Furthermore, the fourth industrial revolution has served as a catalyst for traditional businesses across sectors to transition into the digital realm, fundamentally altering business operations and improving customer acquisition strategies (Nath, 2020). For example, in the banking industry, the proportion of technologically adept clients has been steadily rising. These trends will ultimately result in higher customer demand for digital services such as digital banking (Hassan, 2023). A movement in consumer and business behavior towards a greater reliance on electronic products and services has been sparked by the COVID-19 pandemic. Thus, the adoption of Internet banking has significantly increased, with mobile banking transactions recorded at approximately RM800 billion in the year 2021 (Looi, 2024).

Even though the growth of digital banking in Asia has long been expected, several circumstances have recently combined to accelerate this trend. One of the most

significant shifts is the existence of a much more solid ecosystem to support digital banking (Li, 2020). According to Nguyễn et al. (2020) research, almost everyone uses Internet banking, and the number of people using banking apps on their smartphones has more than tripled since 2011 in developed Asian countries. With a well-organized and user-friendly platform for digital initiatives, more and more consumers are actively adopting the use of mobile devices and the Internet, eventually expanding the user base (Agarwal et al., 2024).

Digital banking is a modern financial concept focused on digitizing all banking procedures and activities (Tiong, 2020). This technology-driven approach encompasses various improvements in the banking and financial sector catering to both company and individual, including mobile devices, the internet, artificial intelligence (AI), electronic payments, information analysis, blockchain, the application programming interface (API), channels of delivery, and information technology (Nguyen, 2020). Besides, digital banking, also referred to as remote banking, enables customers to perform typical banking tasks anytime and anywhere without the need to visit physical bank branches (Windasari et al., 2022). However, after the global financial crisis, many traditional banks started offering online banking services to their customers. A consultancy company predicted in 2018 that by 2030, digitalization would render many traditional financial institutions obsolete (Stulz, 2022). Digital banking suggests that paper-based payment slips and checks are no longer necessary for financial transactions. Instead, individuals can perform all banking tasks using applications installed on their smartphones, computers, or tablets (Nurahmasari et al., 2023).

On the 31st December of 2020, the first digital bank licenses were issued in Malaysia. Bank Negara Malaysia introduced the Policy Document on Licensing Framework for Digital Banks, which outlines a set of digital license banking regulations for the issuance of digital banking licenses. Among the 29 applicants, there are only five

financial institutions that have been granted new licenses for digital banking, which are Boost Holdings Sdn. Bhd. and RHB Bank Berhad, GXS Bank Pte. Ltd., and Kuok Brothers Sdn. Bhd, Sea Limited and YTL Digital Capital Sdn Bhd, KAF Investment Bank, MoneyMatch, & Jirnexu, and AEON Financial Service Co., Ltd., AEON Credit Service (M) rapidBerhad and MoneyLion Inc. Bank Negara Malaysia carefully selected these five organizations to engage in either traditional or Islamic banking operations within Malaysia, thereby indicating a significant endorsement of their capabilities and trustworthiness in contributing to the country financial sector (Looi, 2024).

Studying adults is crucial because they are using digital resources frequently and becoming more technologically proficient quickly (Elhajjar & Ouaida, 2019). According to Lan and Lee's (2023) research, the number of individuals adopting digital banking is expected to grow from 2.4 billion in 2020 to 3.6 billion in 2024. As adults increasingly rely on digital banking services like ATMs, debit and credit cards, mobile banking, and Internet banking, there is a growing need to evaluate their awareness and comprehension of digital banking products and services.

Nowadays, consumers believe in the usefulness of digital banking, expecting banks and other financial organizations to help them organize their financial resources and provide information and recommendations on the best ways to handle their financial affairs (Stulz, 2022). According to Visa Consumer Payment Attitudes (2021), 65% of Malaysians are passionate about digital banking services and believe that they are more effective, easy, accessible, and safe. However, the opinions of consumers on digital banking services may differ because of the launch of new technology, which implies that other aspects will undergo modifications as well (Utama & Trisnawati, 2024).

The implementation of digital banking has given financial services an advantage in competitiveness and increased efficiency (Riza, 2019). Digital banks are well-positioned to enhance convenience by contributing to the financial literacy of underprivileged and underserved communities. By leveraging digital technology, banks save time, reduce operating costs, and improve risk management, supervision, and safety procedures, enabling them to offer better products and services to their clients (Boufounou et al., 2022). Facilitating conditions allow these banks to provide support, education, and guidance through various channels, enhancing customers' understanding of responsible financial practices. Ultimately, such initiatives are expected to positively impact the financial well-being of these individuals in the long term (Looi, 2024).

Another factor that motivates people to adopt digital banking is its ease of use, which makes life more convenient. Users are more inclined to adopt a digital banking service that is easier to use and less complicated (Chen & Aklikokou, 2020). This includes the ability to quickly open and close accounts online, and the capability to conduct transactions for investments, loans, time deposits, savings, credit, and insurance (Hidayat, 2023). Individuals are more likely to utilize digital banking services when they anticipate it will provide them with benefits such as reduced costs and time efficiency (Jiwasiddi et al., 2019).

Furthermore, people are more likely to use digital banking when they trust the platform and websites, with perceived trust significantly shaping their attitudes (Almaiah et al., 2023). Mohamad et al. (2023) emphasize that website trust influences people's adoption of digital banking. Also, peer pressure has a major impact on people's decisions to use digital banking since peers have the potential to change people's thoughts, perceptions, and Practices regarding finances. Peers can also influence people's exposure to digital platforms, monetary behavior, as well as expertise (Yanto et al., 2021).

Despite these benefits, significant obstacles are preventing the widespread acceptance of digital banking. One major issue is that many Malaysian consumers are not fully aware or accepting of fintech products (Chua et al., 2019). This lack of awareness is compounded by perceived risks associated with digital banking. According to Siyal et al. (2019), the main obstacles include perceived risk by customers, lack of awareness, trust, and compatibility with existing consumer habits and preferences. Furthermore, financial institutions often struggle to adapt to consumer attitudes toward new technologies, affecting their ability to seize market opportunities (Chong et al., 2019). Customers have expressed concerns about identity theft and the unauthorized sharing of private information in online or e-banking environments (Mogos & Jamil, 2021). There is also a fear that banks might use personal data for marketing purposes without explicit consent, leading to annoyance from unsolicited offers for credit cards or insurance (Kumar & Mehrotra, 2022).

Another critical concern is the digital divide, where certain segments of the population, particularly the elderly or those in rural areas, may lack access to the necessary technology or internet connectivity to use digital banking services effectively (Sanders & Scanlon, 2021). This exacerbates inequality in access to financial services and limits the inclusiveness of digital banking (Namiiro et al., 2024). Moreover, large banks need to assure customers about the quality and security of the technology they use, particularly in protecting personal and sensitive data as well as securing transactions (Halim et al., 2023). The challenge of cybersecurity remains a significant barrier, as frequent reports of data breaches and cyber-attacks can undermine trust in digital banking systems (Kumar et al., 2024).

1.2 Problem Statement

Within the realm of finance, classic physical banks have always been the beacon of stability and reliability. Yet, this antiquated model needs to be called into question by the quickening pace of technological innovation and the rising use of digital banking solutions (Zaki, 2023). With more clients choosing the rapidity and ease of digital banking, the days of the physical bank branch are numbered (Zaki, 2023). Broadly speaking, digital banking is the utilization of technology to facilitate seamless banking transactions (Sardana & Singhania, 2018). Furthermore, it is an information-sharing and transaction-processing model that operates on a technological platform between banks and their clients. Clients can conduct transactions without physically visiting bank offices; while banks can conduct activities such as document signing and record tracking without physically meeting with clients (Nguyen, 2020). A consumer's desire to embrace and adopt an emerging technology depends on how they react to their surroundings and social norms (Azmi et al., 2021). Therefore, a customer's inclination to embrace or disregard a new product is based entirely on their desire, which constitutes an aspect of consumer behavior (Azmi et al., 2021).

The extended Technology Acceptance Model (TAM) by Yoon and Kim (2007), shows that behavioral intention to use is impacted by the perceived usefulness, which is positively influenced by perceived convenience. There were mixed results found regarding the influences of convenience, perceived ease of use, and perceived usefulness on the intention to use digital banking. Furthermore, the Unified Theory of Acceptance and Use of Technology model shows that behavior to use is directly and significantly impacted by facilitating conditions (Venkatesh et al., 2003). Research on the influence on facilitating conditions and intention to use digital banking can also be seen to have mixed results.

Additionally, consumer demand for better technology is rising as banking becomes more readily available. It is becoming more difficult for banks to deal with the changing consumer behavior in numerous aspects of digital banking compliance as a result of the increasing demand and pressure that comes from digital banking (Bank of Baroda, 2022). People today demand uninterrupted service from banks they do business with, which means that the smallest delay in service could drive them away, particularly if personal money is involved. In 2023, numerous reports indicated that numerous clients of TSB Bank, Halifax, Bank of Scotland, and Lloyds Bank have seen outages or difficulty logging into their online banking applications (Lucas, 2023). This problem is especially noticeable around payday when systems are overloaded and unable to process the volume of transactions in a short amount of time, which invariably causes disruptions. Clients may lose trust in their bank or find it inconvenient because of constant outages. In addition, there will also be negative impacts on clients' intention to fully adopt digital banking in their daily lives. A bank's credibility and reputation can be harmed by even momentary outages, particularly when considering the possible financial repercussions for customers, for instance not being able to make payments and transactions (Lucas, 2023). In light of website outages, 57% of astute millennials who grew up in the digital age said they have an instant poor impression of a brand (Lucas, 2023). On the 9th of April 2024, the Malaysian central bank requested Malayan Banking Bhd (Maybank) and CIMB Malaysia to furnish a comprehensive explanation about the recent disruptions to their banking services (Santani, 2024). Consumers Association of Penang (CAP) president Mohideen Abdul Kader mentioned that customers are upset due to the latest disruptions amidst scheduled maintenance and connectivity problems. It obstructs and complicates transactions for customers, which includes placing a food order online or making a digital purchase, especially in modern times where customers prefer to use online banking over cash (Santani, 2024). According to EY's analysis of the occurrence and effects of service outages in Southeast Asia, Malaysia is comparable to its regional counterparts, such as Singapore and Japan, having experienced 5 significant digital banking disruptions on average over the previous year (Oi, 2024). The range of impacted services is comparable between the aforementioned countries as outages usually impact ATM services, digital banking

platforms, payment transfer systems, as well as investment and foreign exchange trading platforms (Oi, 2024).

We have discovered from previous research that numerous studies on the "factors affecting the adoption of digital banking" have been conducted in various countries. These countries include Indonesia (Anggraeni et al., 2021) and Vietnam (Nguyen, 2020). However, in Malaysia, there were only a few similar studies regarding "factors affecting the adoption of digital banking" (Azmi et al., 2021; Tiong, 2024). Moving on, a previous study conducted in Vietnam only included the independent variables: perceived usefulness and convenience (Nguyen, 2020). On the other hand, another study that was conducted in Indonesia only included the following independent variables: convenience, perceived ease of use, and facilitating conditions (Anggraeni et al., 2021). As such, it is evident that the study made in Vietnam did not include the variable "facilitating conditions"; while the study made in Indonesia did not include the variable "perceived usefulness". Moreover, in the context of Malaysia, the studies only included the independent variables: perceived ease of use and perceived usefulness (Azmi et al., 2021; Tiong, 2024). This indicates that the studies conducted in Malaysia did not incorporate the variables "convenience" and "facilitating conditions".

Therefore, this study seeks to address the identified literature gap and research gap by studying the relationship between convenience, perceived ease of use, perceived usefulness, and facilitating conditions on the adoption of digital banking from the perspective of Malaysians.

1.3 Research Objectives

1.3.1 General Objective

The general objective of this study is to examine the factors affecting the behavioral intention to adopt digital banking among Malaysians.

1.3.2 Specific Objectives

To fulfill the general objective, four specific objectives are constructed.

1) To examine there is a significant relationship between convenience and behavioral intention to adopt digital banking among Malaysians.

2) To examine there is a significant relationship between perceived ease of use and behavioral intention to adopt digital banking among Malaysians.

3) To examine there is a significant relationship between perceived usefulness and behavioral intention to adopt digital banking among Malaysians.

4) To examine there is a significant relationship between facilitating conditions and behavioral intention to adopt digital banking among Malaysians.

1.4 Operational Definitions: Measurement of Independent Variables and Dependent Variable

There are 5 factors chosen in this research that will shape Malaysians' adoption of digital banking, specifically convenience, perceived ease of use, perceived usefulness, and facilitating conditions. Each variable is evaluated based on a five-point Likert scale, where "Strongly Disagree" is represented by one and "Strongly Agree" is represented by five. A 5-point Likert scale is a bipolar scaling approach that gauges a response (positive or negative) to a particular phase. This scale is highly favored by scholars

working in fields that include surveys, such as psychology, sociology, pedagogy, marketing, and business. Typically, Likert scale data is processed as ordinal or interval data (Mazurek et al., 2021).

1.4.1 Behavioral Intention to Adopt Digital Banking

Behavioral intention can be defined as an individual's desire to embrace and implement innovations. However, their intentions will mainly depend on how they adapt to their surroundings and social norms (Azmi et al., 2021).

The current research uses 5 measures to gauge the behavioral intention to adopt digital banking. These measures are taken and adapted to research conducted by Al-Somali et al. (2008) and Venkatesh et al. (2012). Some examples are "I plan to conduct transactions on digital banking," "I want to know more about digital banking," and "I will recommend digital banking to everyone around me.".

1.4.2 Convenience

The definition of convenience pertains to users' perception of a website as being easily comprehensible, straightforward, and intuitive (Shin, 2022). In this instance, a digital banking service's ability to make its operations simple will draw more customers to it.

In this study, convenience is measured by using 5 items, adapted from Chang and Polonsky (2012). Some examples of these items are "I find digital banking system can be accessed anytime as long as there is an internet connection", "I find digital banking system can be accessed anywhere as long as there is an internet connection" and "Digital banking helps me be proactive in arranging my time".

1.4.3 Perceived Ease of Use

Perceived ease of use was characterized as an individual being convinced that technology is straightforward to utilize (Hidayat, 2023). It addresses how simple it is for people to pick up and utilize new technologies. It shows people's confidence in using the technology knowing they are free from certain issues, which may significantly impact their intention to utilize it (Ramli & Rahmawati, 2020). In this case, it is how easily a digital banking service can be utilized by an individual.

The current research measures perceived ease of use using 5 items, which are adapted from Fortes and Rita (2016) and Martínez et al. (2023). Some examples of the items are "I can assess digital banking services easily", "I can quickly master the use of digital banking" and "I think interaction with digital banking does not require a lot of mental effort".

1.4.4 Perceived Usefulness

Perceived usefulness was described in the context of the Technology Acceptance Model (TAM) (Davis, 1989). It measures how much a person perceives utilizing a specific technology will enhance their productivity at work. Thus, individuals are more inclined to use digital banking services when they perceive them as beneficial (Nguyen, 2020).

This study uses 5 items to measure perceived usefulness by using research adapted from Fortes and Rita (2016) and Wu and Chen (2005). Some of the examples are "The use of digital banking helps me save money", "The use of digital banking helps me

save time" and "I think that using digital banking would make it easier for me to carry out my tasks".

1.4.5 Facilitating Conditions

Facilitating conditions as an individual's perception of the system's organizational and technological infrastructure's ability to support its use (Venkatesh et al., 2003). Therefore, facilitating conditions will increase the behavioral intention of adopting digital banking services.

The 5 items used in this study to measure facilitating conditions are adapted from Venkatesh et al. (2012) and Jermsittiparsert et al. (2022). Some examples would include "I have the knowledge needed to use digital banking", "I can get help from others when having difficulties in using digital banking", and "A specific person is available for assistance with digital banking difficulties".

1.5 Research Questions

To clarify the direction of our study, the following research questions are formulated.

1) Is there a significant relationship between convenience and behavioral intention to adopt digital banking among Malaysians?

2) Is there a significant relationship between perceived ease of use and behavioral intention to adopt digital banking among Malaysians?

3) Is there a significant relationship between perceived usefulness and behavioral intention to adopt digital banking among Malaysians?

4) Is there a significant relationship between facilitating conditions and behavioral intention to adopt digital banking among Malaysians?

1.6 Hypotheses of the Study

H_1: There is a significant relationship between convenience and behavioral intention to adopt digital banking among Malaysians.

H_2: There is a significant relationship between perceived ease of use and behavioral intention to adopt digital banking among Malaysians.

H_3: There is a significant relationship between perceived usefulness and behavioral intention to adopt digital banking among Malaysians.

H_4: There is a significant relationship between facilitating conditions and behavioral intention to adopt digital banking among Malaysians.

1.7 Significance of the Study

Firstly, this study is being conducted to examine the behavioral intention to adopt digital banking among Malaysians. By this study, we would be able to determine the influential elements that are influencing the behavioral intention to adopt digital banking. Hence, by incorporating convenience, perceived ease of use, perceived usefulness, and facilitating conditions, we can identify the reasons for the adoption of digital banking services among Malaysians. After we have identified the reasons, it may help academic literature and future studies in the field as conducting the research is crucial as it can enhance the public understanding of factors that affect the adoption of digital banking. With academic discourse, researching this purpose provides insights into the elements driving the adoption of digital banking services by a digitally native generation. Additionally, researchers can contribute to the body of literature on technology adoption theories and consumer behavior models by researching Malaysians' attitudes and perceptions toward the intention of using digital banking.

Therefore, this study allows scholars to improve current frameworks such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) by integrating factors for digital banking adoption among Malaysians. With an analysis that is useful and accessible, the researchers can enrich the literature on the adoption of digital banking. As a result, the adoption of digital banking can be comprehensible with the framework. Thus, future researchers may have more innovative ideas and options when conducting their theoretical framework.

Secondly, examining the behavioral intention to adopt digital banking among Malaysians is significant for this population. This is because this study helps to understand Malaysians' behavior, views, and actions toward digital banking. This consists of their opinions about the convenience, safety, and usefulness of digital banking compared to traditional banking. Furthermore, given the digitalization of banking, this study may help prepare Malaysians to get prepared for this trend by making sure they have the abilities and information needed to successfully navigate digital financial services. Additionally, Malaysians are also a significant consumer demographic as they may influence the course of business. Therefore, this research offers valuable insights into changing Malaysians' preferences and enabling banks and financial institutions to customize their services to match the demands of this population.

Thirdly, examining the behavioral intention to adopt digital banking can help governments such as policymakers develop strategies to promote financial literacy, improve digital banking infrastructure, promote technology advancement, and prepare services to the needs and preferences of Malaysians. For example, the study can help shape targeted policies aiming at creating a favorable environment for the broader use of digital banking among Malaysians, thereby promoting economic growth and improving financial literacy. Therefore, this study provides a foundation for

policymakers to make educated decisions that are consistent with the changing environment of financial services.

Lastly, the findings of this study can be used by Bank Negara Malaysia (BNM) to improve and regulate the financial market. This is because when every transaction is processed through digital banking, it is easy for the BNM and consumers to track the history record for business. Consequently, it brings an advantage to BNM to monitor and prevent illegal activities such as money laundering since personal details are not anonymous. As the records and details of every business are transparent, BNM can introduce and monitor the financial market with better policy and framework.

1.8 Chapter Layout

Chapter One, the background of the study is presented along with the problem statement, which outlines the rationale behind the chosen research area. The chapter also highlights the research objectives and research questions that were formulated, followed by an explanation of the significance of the study.

Chapter Two, an in-depth summary of the results from the earlier research is given. This includes a detailed theoretical overview and hypotheses related to the research topic.

Chapter Three is dedicated to the research methodology that was used to conduct the study. This chapter sheds light on the process of data collection and analysis, including the methods used for data processing and analysis.

Chapter Four is to present the research results. It is significant to convey the findings to achieve the research goals. The main components of this chapter are descriptive analysis, preliminary data screening, and inferential analysis.

Chapter Five, where the work is concluded provides a detailed discussion of the research findings derived from the data analysis. Then, some recommendations, study limitations, and suggestions for overcoming them are discussed.

1.9 Conclusion

This study delves into the complex relationship between Malaysians and their behavioral intention to adopt digital banking. The study is designed to provide an in-depth understanding of the factors that affect this intention. The research has been divided into several segments, each of which focuses on a different aspect of the study. By presenting each part of the research, the study aims to provide a comprehensive overview of the research as a whole. Specific details and factors that influence Malaysians' digital banking behavior will be discussed in greater detail in the upcoming chapters.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Chapter 2 of the literature review delves into the details of the research study and presents the arrangement of the study's components. The chapter focuses on the behavioral intention to adopt digital banking, which is the dependent variable under examination. To comprehend its impact on the study, the chapter investigates how the four independent variables, namely convenience, perceived ease of use, perceived usefulness, and facilitating conditions, relate to the dependent variable. After examining these variables, the chapter develops the theoretical frameworks to explain the relationship between the dependent and independent variables. These frameworks provide a comprehensive understanding of the underlying concepts and principles that guide the study. The chapter also presents the conceptual framework, which outlines the study's key concepts, variables, and hypotheses. This framework serves as a blueprint for the research study and helps to guide the research process. Lastly, the chapter develops the hypotheses for the research study, which are based on the theoretical and conceptual frameworks. By testing these hypotheses, which are the proposed explanations for the relationship between the dependent variable and the independent variables, we can determine their viability.

2.1 Review of Literature

2.1.1 Behavioral Intention to Adopt Digital Banking

The conversion of all conventional banking operations and services into a digital setting is known as digital banking. Generally speaking, digital banking is an information-sharing and transactional paradigm built on a technological platform connecting banks and clients (Nguyen, 2020). Clients no longer require a trip to the bank's branch in person to utilize banking services and products thanks to the bank's online and electronic platforms, which have replaced its physical presence (Haralayya, 2021). According to Azmi et al. (2021), the drive of an individual to embrace and incorporate fresh concepts is known as behavioral intention. However, an individual's intention is primarily determined by how they adjust to their environmental and social conventions.

Several researchers stated that while mobile banking is not considered a brand-new technology, it is nevertheless useful for regular banking transactions for consumers. They also revealed that with the use of mobile devices, consumers of digital banking may perform banking activities at a distance using an e-business platform provided by banks or other financial institutions (Baabdullah et al., 2019). According to Kusumawati and Rinaldi (2020), all online banking transactions including Internet and mobile banking are included within and covered by digital banking. However, what sets online banking services apart from digital banking services is merely the most basic online account management functions, bill payment, fund transfers, and remote deposits. Online banking simply digitizes the essential functions of conventional banking, whereas digital banking includes all of the conventional bank's programs and activities (Kusumawati & Rinaldi, 2020). Moreover, Pavithra and Gheeta (2021) mentioned in their studies that there are other names for digital banking which include "web banking" and "internet banking."

In the modern day, consumer preferences for interaction have evolved as a result of technology, as the human touch constitutes one of the key components that enhances the consumer's experience in the adoption of digital banking, alongside other elements like convenience, consistency, rapidity, and its user-friendliness (Mufarih et al., 2020). Moreover, Shaikh et al. (2020) claimed that although digital banking channels provide a range of cutting-edge financial services that aid in bridging the gap between the underprivileged population with the mainstream banking system as well as allowing clients access to non-financial services using contemporary mobile banking apps developed, clients have not completely taken advantage of these services due to the lack of understanding and awareness regarding digital banking services. Banks have heavily invested in technology to save costs and enhance client satisfaction by providing consumers with the highest standard of service possible using digital banking channels like ATMs, Internet banking, mobile banking, and digital banking kiosks (Kaur et al., 2021).

Due to clients' unfamiliarity with digital banking, it makes it difficult for them to embrace it as an emerging product, particularly in the banking sector (Kusumawati & Rinaldi, 2020). The actual prerequisite for users to utilize digital banking services is their acceptance of digital banking such as providing services that help clients with their banking needs or granting access to services and providing markets that are pertinent, accessible, and beneficial to clients (Djalil et al., 2020). It is impossible to build new digital banking channels and technology without the approval of customers and factors related to the environment and culture may influence the behavioral intention of clients regarding their acceptance to adopt digital banking (Hassan & Wood, 2020).

2.1.2 Convenience

Convenience allows for easier access to services while maintaining or exceeding the efficiency of other services. Convenience is proven by lowering transaction time and eliminating technological faults (Chen et al., 2016). Hence, the greater the convenience of the services, the higher the probability of customers using them in situations where traditional services are not available (Nguyen et al., 2020). Other than that, convenient services attract customers who want to experience benefits with less effort (Shankar & Rishi, 2020). For the definition, convenience refers to how users view a website to be easy to understand, simple, and user-friendly (Shin, 2022). To explain this scenario, customers who find a website which is confusing or inconvenient, are more likely to become dissatisfied and will not further explore the website (Shin, 2022). Thus, convenience is linked to increased user loyalty in a social network service (Davidavičienė & Davidavičius, 2022).

Furthermore, users of the services may conduct their transactions whenever and wherever they prefer, so the convenience of the services has a significant relationship impact on their intention to use it (Chen et al., 2010). According to Nguyen et al. (2020) research, the convenience element positively impacts the intention to use and it has a result that the intention to utilize a service is positively impacted by convenience. Therefore, to increase the behavioral intention of digital banking adoption, banks should create more convenient services. Not only that, convenience has a significant impact on consumer satisfaction with digital banking (Shin, 2022). Lastly, to support the result above based on Susanto et al. (2023) research, the result also shows that convenience is significant to the adoption of digital banking services.

However, according to Nguyen (2020) research, convenience was shown to have an insignificant influence on intentions to use digital banking services. As a result, we can conclude that consumers are unlikely to apply convenience as a deciding element when

choosing to utilize the service. Additionally, based on Mufarih et al. (2020), the result shows that convenience is insignificant in their behavior toward digital banking.

2.1.3 Perceived Ease of Use

Perceived ease of use is a crucial concept that emphasizes that perceived ease of use is determined by factors such as the effort needed to employ a system, and the user's belief in the system's simplicity (Gunawan et al., 2020). It reflects individuals' trust that they won't encounter difficulties when using the technology, which significantly influences their intention to adopt it (Ramli & Rahmawati, 2020). Nurahmasari (2023) has the idea of perceived ease of use referring to the technology adoption and encompasses individuals' assessments of how effortless it is to comprehend, apply, and make use of a specific technology. This viewpoint is vital since it impacts users' behavioral intentions to adapt to new technologies (Martínez et al., 2023). However, Hidayat (2023) describes perceived ease of use as one is persuaded that using the technology is simple. It is about how easy it is for people to learn and use a new technology.

Davis (1989) emphasizes the importance of perceived ease of use in fostering users' confidence in technology adoption, asserting that users tend to use systems they perceive as easy to understand and operate (Muchran, 2019). By making the website easier to navigate, it increases the users' willingness to engage and connect to the website (Nangin et al., 2020). According to Prastiawan (2021), the easier people perceive a technology to be to use, the more likely they are to use it. As an example, when people log in to a website, they can easily search for information and use it quickly. Thus, Akbari et al. (2020) and Kurniawan et al. (2022) claimed that the intention to adopt new technology is greatly affected by perceived ease of use. Furthermore, perceived ease of use has been consistently highlighted as a determinant of users' intention to adopt digital banking services (Baabdullah et al., 2019; Purwanto & Mutahar, 2020). Therefore, understanding and addressing perceived ease of use is

crucial for enhancing users' acceptance and utilization of technology in various domains, including digital banking.

Numerous studies have explored the relationship between perceived ease of use and the behavioral intention to adopt digital banking. A study conducted in Indonesia has revealed that there is a positive significant relationship between the perceived ease of use and the behavioral intention to adopt digital banking among Indonesian consumers (Ramli, 2020). Indonesian users perceive digital banking applications as user-friendly for their banking activities, leading to increased confidence in conducting online transactions through various digital platforms. A study conducted in Vietnam has yielded similar results, revealing a significant relationship between perceived ease of use and the behavioral intention to adopt digital banking (Tran, 2021). This shows that Vietnam banks structured their digital banking and websites with ease of use in perspective, thus their customers will have no trouble using digital banking services easily and comfortably with the easily accessible guidance. Similarly, research in the Kingdom of Saudi Arabia has shown that perceived ease of use positively influences the behavioral intention to adopt digital banking (Alnemer, 2022). This is because Saudi customers are more inclined to use online banking as they perceive it as simpler and more efficient than traditional banking, which has also offered time-saving features and secure transaction processes. These results have correlated with Keni (2020) who emphasized how perceived ease of use influences customer behavior and also demonstrates the importance of user-friendly interfaces in shaping customers' decisions to use digital banking services.

On the other hand, there is some research revealing there is an insignificant relationship between the perceived ease of use and the intention to adopt digital banking. According to Thaker et al. (2019), there is no correlation between ease of use and the adoption of mobile banking in Malaysia. It may be supported by the reason that some customers might prefer face-to-face interactions with bank staff over digital transactions,

regardless of ease of use. They might appreciate the personalized care and assurance that come with in-person banking transactions. Another study conducted by Nugroho (2023) in Indonesia found an insignificant relationship between perceived ease of use and the behavioral intention to adopt digital banking. This was attributed to customers finding it challenging to understand and use the application services, due to interfaces and features that diverge significantly from those of traditional banks.

2.1.4 Perceived Usefulness

Perceived usefulness in the Technology Acceptance Model (TAM), refers to the extent to which an individual believes that using a particular technology will improve their work performance (Davis, 1989). Davis further added that attitudes towards technology use only partially influence the perceived usefulness of intentions, as people may still use technology in the workplace even if they have negative attitudes towards it. This is because the technology could be beneficial and increase productivity (Davis & Venkatesh, 1996).

Nguyen (2020) conducted a study in Vietnam that revealed that people are more likely to use digital banking services when they find them useful. The author mentioned that to encourage more customers to adopt digital banking, banks should prioritize enhancing the usefulness of their digital offerings, and digital services are gaining popularity due to their convenience and time-saving advantages over traditional in-person transactions. Alnemer (2022) in the Kingdom of Saudi Arabia supported this conclusion. The study found a positive and significant correlation between the adoption of digital banking and perceived usefulness thus, this suggests that in Saudi Arabia, consumers are more likely to use digital banking services if they find them beneficial.

However, a Chinese study's findings regarding this relationship are not statistically significant (Liu & Li, 2011). This outcome is in line with research conducted in Indonesia's emerging nation of Yogyakarta. It turns out that for users of digital banking applications in Yogyakarta, the perception of an application's ease of use does not give them the desire or attention to use the application, proving that perceived usefulness has no significant effect on the intention to use (Mufarih et al., 2020). Subsequent evidence will demonstrate that Yogyakarta's focus on digital banking applications is influenced by additional factors.

2.1.5 Facilitating Conditions

Facilitating conditions are defined as the extent to which a person believes that the system's technical and organizational infrastructure is in place to enable its use (Venkatesh et al., 2003). Years later, the author proposed in the Unified Theory of Acceptance and Use of Technology (UTAUT) that many aspects of facilitating conditions, like training and support provided, will be freely available within an organization and invariant across users, thereby directly influencing technology use (Venkatesh et al., 2012). It is related to technology usage constraints and environment, as well as knowledge (Chen & Lin, 2019). Researchers have discovered that the presence of favorable facilitating conditions, including tutorials, live chat help, or demos, increases the intention of consumers to use Internet banking (Sharma et al., 2020). Such conditions are the driving force behind Internet banking usage.

A study on mobile banking by Rachmawati et al. (2020) found a substantial correlation between the intention to use mobile banking and the facilitating conditions. This result is in line with the research conducted by Iskandar et al. (2020), who found that facilitating conditions play a major role in influencing bank customers' willingness to use mobile banking in Indonesia. It has been demonstrated that facilitating conditions significantly influence Indonesians' intentions to use mobile banking services.

According to Purwanto & Loisa (2020), the majority of respondents found that having access to mobile banking significantly increased their efficiency when doing different financial activities and shopping at online marketplaces.

However, Kwateng et al. (2019) found no evidence that facilitating conditions have an impact on the behavioral intention of young people in Ghana to use m-banking. This finding aligns with the research conducted by Hariyanti et al. (2020), which concludes that external factors such as unreliable internet connections and smartphones that do not support mobile banking applications do not increase customer interest in using the technical and organizational infrastructure that supports mobile banking. Furthermore, Anggraeni et al. (2021) conducted research that suggests that users only need a device with basic specifications and internet connectivity to benefit from digital banking, rather than a complex and extensive infrastructure.

2.2 Theoretical Framework

2.2.1 Technology Acceptance Model (TAM)

Figure 2.1
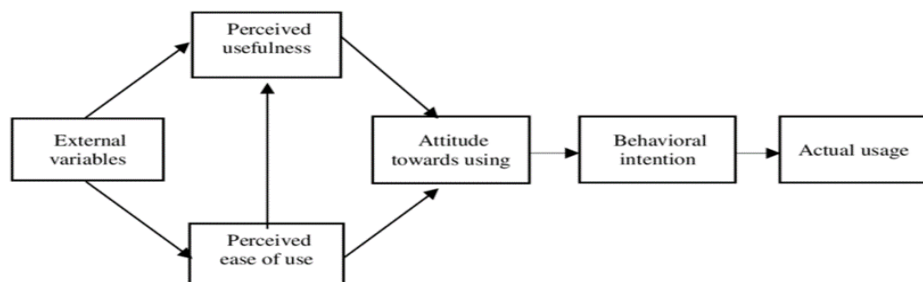
Source: Davis (1989)

Davis (1989) developed the Technology Acceptance Model (TAM), a theory that describes the factors influencing customers' willingness to adopt or reject a technology. The TAM originates from psychological theory, which posits that an individual's behavior is influenced by beliefs, attitudes, intentions, and the relationship between these factors (Muchran, 2019). It could be explained by the model that was developed to identify why some people are willing to adopt, use, or integrate specific technologies into their daily lives, while others are not. In this context, Davis (1989) identified perceived usefulness (PU) and perceived ease of use (PEU) as significant factors that could influence an individual's attitude toward adopting a specific technology. An individual's attitude towards using will influence their behavioral intentions, thus impacting the actual usage of new technology (Nurahmasari, 2023).

The TAM has been used and expanded to cover various factors in numerous aspects within the realm of the mobile web and associated technologies, such as digital payment, retail transactions, and business transactions conducted through mobile devices (Prayudi, 2022). According to Ramli (2020), as digital banking becomes an increasingly popular banking trend, and eliminates the need for physical interactions between banks and their customers, traditional bank branches are diminishing in importance. With the banking service sector shifting towards new technology, the Technology Acceptance Model (TAM) approach is suitable to be adopted in our research. This model was employed by Kaur et al. (2021), Nguyen & Ngoc (2021), and Nayanajith (2021) to investigate the factors influencing the adoption of digital banking.

2.2.1.1 Extended Technology Acceptance Model (TAM)

Figure 2.2
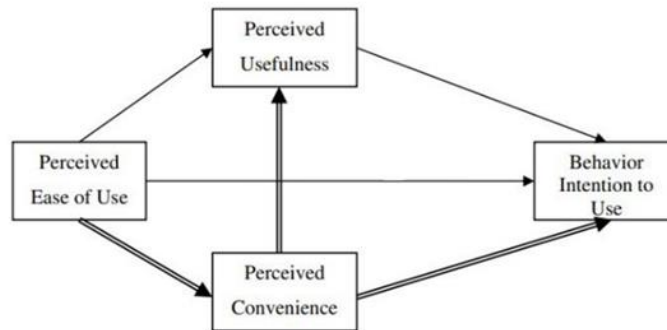
Source: Yoon and Kim (2007)

Besides, Yoon and Kim (2007) extended the Technology Acceptance Model (TAM) by demonstrating that perceived convenience positively influences perceived usefulness, consequently impacting behavioral intention to use. They identified convenience as comprising three dimensions which are time, place, and execution, which significantly influence individuals' acceptance of technology. This extended model has also been adopted by (Chang et al., 2012) and (Aurelia & Luki, 2024).

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

Figure 2.3
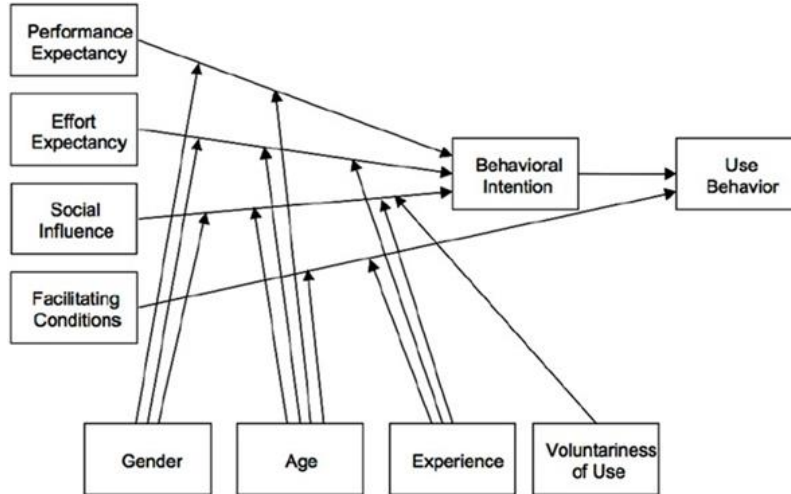
Source: Venkatesh et al. (2003, p. 447)

According to the UTAUT theoretical model, behavioral intention determines the actual use of technology (Marikyan & Papagiannidis, 2023). UTAUT was created to enhance our understanding of what factors influence customer acceptance and application of technology advancement (Nepal & Nepal, 2023). Additionally, predictors are influenced by age, gender, experience, and voluntary usage (Venkatesh et al., 2003). UTAUT identifies four essential factors that include performance expectancy, effort expectancy, social influence, and facilitating conditions that impact technology intention and usage (Venkatesh et al., 2012).

Facilitating conditions increase intention to use, however it does not provide significant impact after initial use. As a result, the model suggests that facilitating conditions have a direct significant influence on use behavior (Venkatesh et al., 2003). Additionally, all

elements had a significant impact on intention, except for facilitating conditions, which solely affected actual technology use (Chang et al., 2007). UTAUT emphasizes the need for facilitating conditions while developing technology implementation and promotion methods (Venkatesh et al., 2012). The facilitating conditions construct combines compatibility, perceived behavioral control, and construct from combined TAM and theory of planned behavior (CTAMTPB), model of PC utilization (MPCU), and Innovation Diffusion Theory (IDT) (Mohammad, 2014).

2.3 Conceptual Framework

Figure 2.4

Proposed Conceptual Framework

Independent Variables   Dependent Variable
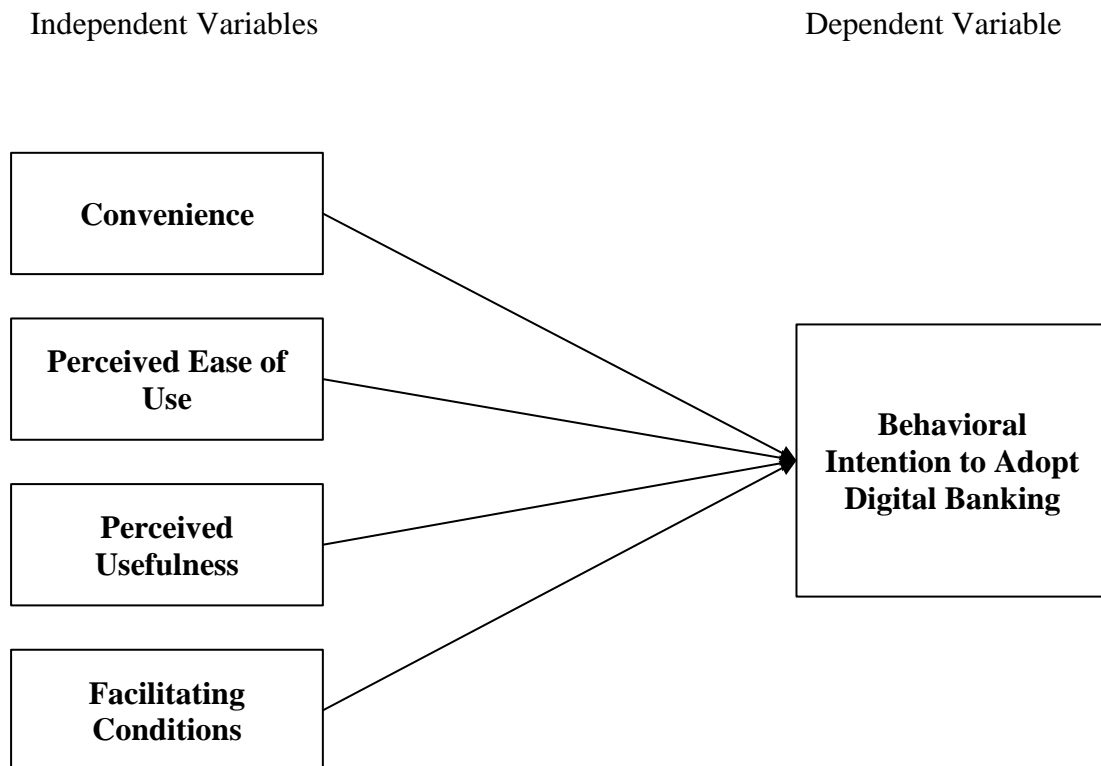
Based on the prior theoretical models discussed in the previous section, Figure 2.2 conceptual framework evaluates the behavioral intention to adopt digital banking using the previous theoretical model. The four independent variables in this conceptual framework are convenience, perceived ease of use, perceived usefulness, and facilitating conditions. Based on prior research, these independent variables are expected to significantly affect the behavioral intention to adopt digital banking. This framework will be used to evaluate the accuracy of the inference. Consequently, this framework will be used to build the hypotheses in the section that follows.

2.4 Hypotheses Development

2.4.1 Convenience and Behavioral Intention to Adopt Digital Banking

The study by Nguyen et al. (2020) indicates that there is a significant relationship between convenience and the intention to use digital banking services. The authors added that convenience increases the likelihood that customers will use a service when traditional banking is unavailable in a variety of situations. A study by Shankar and Rishi (2020) found that a product or service's degree of convenience has a big impact on how easily people embrace it and how they perceive it overall. Stated differently, users who find a service to be highly convenient are more likely to use it and give it a favorable review. Convenience has become a critical factor in digital banking, as it has been shown to have a significant impact on customer satisfaction and loyalty (Susanto et al., 2023). Consequently, the following is the first hypothesis that has been developed for this research:

H1: There is a significant relationship between convenience and behavioral intention to adopt digital banking among Malaysians.

2.4.2 Perceived Ease of Use and Behavioral Intention to Adopt Digital Banking

According to Riza (2019), the Technology Acceptance Model (TAM) in Indonesia was used to examine how the millennial generation's attitude and behavioral intention toward the adoption of Islamic digital banking are positively influenced by perceived ease of use. This can be attributed to the fact that comfort or ease of use was shown to be the primary independent variable among urban consumers, who lack the time to complete their financial activities at bank branches (Omar et al., 2020). Furthermore, Tiong (2020) demonstrated that behavioral intention to embrace digital banking services is most significantly predicted by perceived ease of use. This is because technology becomes more desirable when people see others using it successfully, which raises adoption rates. Thus, the second hypothesis for this research is as follows:

H2: There is a significant relationship between perceived ease of use and behavioral intention to adopt digital banking among Malaysians.

2.4.3 Perceived Usefulness and Behavioral Intention to Adopt Digital Banking

Nguyen et al. (2020) discovered that the perceived usefulness of digital banking services has a positive impact on the intention to use such services in Vietnam. The findings align with Nguyen (2020), as factors related to perceived usefulness can enhance customers' positive perception of services, ultimately increasing their intention to use said services (Fortes & Rita, 2016). Similarly, Rahi et al. (2021) revealed that the perceived usefulness of Internet banking services plays a crucial role in determining the behavior of its users. This insight can help financial managers and advisors in enhancing Internet banking services by focusing on factors like website usefulness, user satisfaction, and external motivational factors.

According to Alnemer (2022), Saudi customers are more inclined to adopt online banking technology if it is more convenient, user-friendly, and easy to use than traditional banking methods. They expect online banking to provide more useful and relevant services and be secure in terms of transactional processes. Thus, the third hypothesis proposed for this study is as follows:

H3: There is a significant relationship between perceived usefulness and behavioral intention to adopt digital banking among Malaysians.

2.4.4 Facilitating Conditions and Behavioral Intention to Adopt Digital Banking

According to Mahardika et al. (2019), enabling conditions include a technical environment that is supportive and made up of rules, laws, control procedures, established programs, and other frameworks that guarantee data transfer security and protect private information. The primary factor influencing the acceptance of digital banking is these requirements. Sharma et al. (2020) mentioned that providing customers with resources and support services like laptops and tablets makes them more likely to adopt Internet banking (IB). This is because customers are more likely to adopt IB when these resources are available to them. Customers with higher degrees of facilitating conditions will have higher intention to use mobile internet, according to Rachmawati et al. (2020) research, which suggests that there is a relationship between facilitating conditions and behavioral intention that may be accepted or statistically explored.

Moreover, a study conducted by Almaiah and AlRahmi (2022) showed that the behavioral intention to use Internet banking is significantly influenced by favorable conditions. The authors added that customers are more likely to use Internet banking as a result of having access to beneficial services from their peers, and this also holds for the interaction between stakeholders and clients, as online banking enables precise

instructions in addition to high-quality information and services. Therefore, the following is the fourth hypothesis for this study:

H4: There is a significant relationship between facilitating conditions and behavioral intention to adopt digital banking among Malaysians.

2.5 Conclusion

The literature review for the independent variables, convenience, perceived usefulness, perceived ease of use, and facilitating conditions factors is covered in this chapter along with the dependent variable, behavioral intention to adopt digital banking. Along with the theoretical frameworks applied in previous research, the development of the conceptual framework and hypotheses for the current study are also examined.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

Chapter 3 is a critical section of this research project, as it delves into the research methodology employed to investigate the behavioral intention of Malaysians towards the adoption of digital banking. The research aims to identify and analyze the variables that influence such intentions, and the methodology used is crucial in achieving this goal. This chapter covers in detail the research design and various aspects related to data collection, processing, and analysis. The first section provides a comprehensive explanation of the research design, including the study's type, nature, and scope. This is followed by a detailed discussion of the data collection process and the methodology employed to gather data from the target audience. The research instrument used in this study is also discussed in detail, along with the sampling design used to select the sample population. The convenience sampling technique was employed to ensure that the sample population was representative of the target audience, which is adults in Malaysia. Finally, this chapter delves deeper into data processing and analysis, covering various techniques used to analyze the collected data. The quantitative study design was chosen for this research, and primary data was collected using online questionnaires. The data analysis is covered in detail, explaining the various statistical tests used to analyze the data and draw conclusions from it. Overall, Chapter 3 is an essential part of this research project, providing a detailed overview of the research methodology employed and the techniques used to collect, process, and analyze data. By providing such a detailed account of the research methodology, this chapter helps to ensure the validity and reliability of the research findings.

3.1 Research Design

Research design is an investigation that offers precise guidance for methods in a study, that is, the comprehensive strategy for linking the theoretical research problems to relevant and doable empirical research (Creswell, 2014). The kind of analyses that must be performed to obtain the desired results are always determined by the study design, which also specifies the data that must be gathered, the techniques to be employed for gathering and analyzing the data, and how the data will be used to address the research questions (Asenahabi, 2019). This study involved the use of quantitative research.

Natural science techniques produce numerical data and reliable facts, which are the foundation of quantitative research (Ahmad et al., 2019). The researcher might rank, classify, or measure the collected data using different units of measurement (Ahmad et al., 2019). Both the natural and social sciences, according to researchers who employ quantitative approaches, aim to explain events through verifiable theories that are based on testable hypotheses (Ahmad et al., 2019).

3.2 Data Collection

A survey or a study may be used to gather data, which is the plural version of the word datum and means "a piece of information" (Mazhar et al., 2021). Primary data is the original, whereas secondary data has already gone through the statistical process (Mazhar et al., 2021). These are the two categories of data collecting. Primary data collection was used in this investigation to gather data.

3.2.1 Primary Data

Primary data came directly from the original information source, were more trustworthy, and increased decision-making confidence when paired with a trusted analysis that maintained a direct line of communication with the events' occurrence (Sileyew, 2019). The use of primary data in research projects generally requires less strict inclusion criteria, allowing for a wider range of participants to be involved in the study (Schuurman, 2018).

One method of gathering primary data that is utilized in data collection is the questionnaire. A preset set of questions is distributed to several respondents via questionnaires, and this method is suitable for gathering information from people who are dispersed over a large area and who are difficult to speak with in person (Mazhar et al., 2021). Filling out a questionnaire provides an easy way for individuals to express their thoughts and feelings, while also encouraging independent thinking (Parajuli, 2018). In this study, the questionnaire asks some questions on the variables and the behavioral intention to use digital banking.

3.3 Sampling Design

3.3.1 Target Population

A target population is any individual or group that fulfills the requirements for a study (Willie, 2022). To collect and assess the appropriate data, the researchers must ensure that the respondents are associated with the target population. Alternatively, it is essential to make sure that the participants of the survey meet the eligibility requirements.

The objective of this research is to examine the factors affecting the adoption of digital banking among Malaysians. The target population for this study includes all adults in Malaysia. According to the Age of Majority Act 1971 in Malaysia, the age of majority is 18 years old and above (Rosenthal, 1971). However, due to the limited availability of data on the total number of adults in each state, the study will use the commonly available demographic data that defines the working-age population as those aged 15 to 64 (Ibrahim & Datuk, 1977). Consequently, for this study, individuals aged 15 and above will be considered as part of the target population. The data for adults in Malaysia will be collected by compiling a list of the states in Malaysia and using sampling techniques to ensure representation across different states and demographics.

3.3.2 Sampling Frame and Sampling Location

The sampling location is the location used for data collection. Malaysia was chosen as the sampling location since the target population in this research are all adults in Malaysia, which the adults are chosen from 13 states and 3 federal territories (Johor, Kedah, Kelantan, Melaka, Negeri Sembilan, Pahang, Perak, Perlis, Pulau Pinang, Selangor, Terengganu, Sabah, Sarawak, Wilayah Persekutuan Kuala Lumpur, and Wilayah Persekutuan Putrajaya, Wilayah Persekutuan Labuan).

3.3.3 Sampling Elements

An element indicates any individual unit or occurrence from a target population. Through the application of a specific sampling method, certain individuals from the population will be selected for analysis in this study. In addition to representing various states, the selected participants in this study also exhibit diversity in terms of gender, age, ethnicity, location, occupation, and income level.

3.3.4 Sampling Techniques

According to Pace (2021), there are two methods for conducting sampling, which are probability sampling and non-probability sampling. Probability sampling is a method to ensure that each member of the population has an equal opportunity to be included in the study. It is widely regarded as a robust approach for achieving representativeness among sampling units (Rahman, 2022). In contrast, non-probability sampling does not guarantee equal representation for all population members. Researchers usually adopt this method when random probability sampling is impractical due to constraints such as time or cost (Lamm, 2019). However, a non-probability sampling technique which is convenience sampling has been chosen to select respondents in Malaysia in this research.

Convenience sampling is a method of selecting study subjects primarily based on their ease of accessibility to the researcher, as opposed to employing random or systematic sampling techniques (Stratton, 2023). This approach entails including individuals who are readily available and accessible to the researcher, thereby facilitating a straightforward and cost-effective means of collecting initial data (Mweshi & Sakyi, 2020).

Several empirical studies have employed convenience sampling in their research. For instance, Singh et al. (2020) conducted a study on digital banking adoption in India, where they collected data from 500 respondents across metro, urban, and rural populations. Similarly, Nustini (2020) investigated factors influencing e-banking usage among Moslem students at the Faculty of Economics, Universitas Islam Indonesia (FE UII), using convenience sampling. Additionally, Matli and Mark (2022) examined Digital Commercial Banking introduction in Ghana, selecting a sample of 40 staff members from the entire Nkoranman Rural Bank Limited staff for their study.

In this study, the method of convenience sampling will be adopted. To implement this method, the potential participants have been chosen based on the researcher's ease of access and availability. While acknowledging potential biases and limitations associated with this method, the researcher will attempt to minimize these issues by being transparent in the criteria for selecting participants. All members of the research team will actively participate in updating and monitoring the information regarding the sample size. This will involve regularly checking the responses received through the Google Form and ensuring that there is no repetition in the sample. Each team member will be assigned specific regions or demographics to focus on, such as different states or age groups, to ensure comprehensive coverage and avoid duplication.

3.3.5 Sampling Size

According to Krejcie and Morgan (1970), the National Education Association's research division had created a method for figuring out sample size. They offered a table to aid in making decisions about sample size, thereby ensuring a robust decision-making model. In this study, the sampling size is determined by the "Table for Determining Sample Size from a Given Population" (Refer to Appendix 1.3). According to the Ministry of Economy Department of Statistics Malaysia, there are 23 million adults in Malaysia. Therefore, this study requires 384 minimum respondents. In this study, 400 sample sizes are adopted.

Table 3.1:

Population of adults in Malaysia

States	Adults	% of overall adults	Number of respondents
Johor	2,903,437	12.44%	31
Kedah	1,461,250	6.26%	11
Kelantan	1,196,294	5.13%	5
Melaka	724,388	3.10%	20
Negeri Sembilan	837,421	3.59%	25
Pahang	1,114,544	4.78%	14
Perak	1,740,174	7.46%	80
Perlis	211,622	0.91%	12
Pulau Pinang	1,298,583	5.56%	79
Selangor	5,122,968	21.95%	64
Terengganu	798,204	3.42%	5
Sabah	2,500,589	10.71%	6
Sarawak	1,789,274	7.67%	4
W.P Kuala Lumpur	1,498,950	6.42%	34
W.P Putrajaya	74,142	0.32%	9

| W.P Labuan | 68,158 | 0.29% | 1 |
| Total | 23,339,998 | 100% | 400 |

*Source: Ministry of Economy Department of Statistics Malaysia

3.4 Research Instruments

3.4.1 Questionnaire

The questionnaire emerges as the primary research instrument for gathering data from adults in Malaysia. questionnaires are commonly preferred in large-scale surveys across different fields. They involve giving people a set of questions to answer and then returning the completed form. These questions are organized on forms in a specific order, making it easier to collect data from many people efficiently. (Mazhar, 2021). Moreover, the questionnaire method offers distinct advantages such as ease of use, validity, and reliability, making it a valuable complement to other assessment techniques (Kushendriawan et al., 2021).

In this study, questionnaires were distributed online through Google Forms. The online survey was also employed by researchers like Jünger and Mietzner (2020), Sharma et al. (2020), and Shankar et al. (2020) in their respective studies on topics such as digital banking adoption and Internet banking barriers.

In this study, the survey questionnaire is structured into three sections along with a cover layout. Section A is designed to gather personal background information from the target respondents. It includes three demographic questions focusing on gender, age,

ethnicity, location, occupation, and income level. Section B consists of 5 questions aimed at addressing the dependent variable, which is the behavioral intention to adopt digital banking. In Section C, there are 20 questions exploring the factors affecting the adoption of digital banking. These questions are categorized into four themes: Convenience, Perceived Ease of Use, Perceived Usefulness, and Facilitating Conditions.

In Sections B and C of the questionnaire, all constructs are assessed using a five-point Likert scale. Five-point Likert scale is a widely utilized method in survey research. This scale is chosen for its simplicity and effectiveness in capturing respondent attitudes and perceptions. Taherdoost (2019) suggests that the use of a five-point Likert scale reduces confusion among respondents and leads to higher response rates, making it a preferred choice for researchers. Moreover, this scale allows for the quantification of items related to each construct in the measurement model, ensuring consistency and reliability in data collection (Inder et al., 2022). Furthermore, researchers such as Bati et al. (2021), Alhakimi and Esmail (2020), and Singh (2021) have also employed the five-point Likert scale to collect data on the adoption of digital banking.

3.4.2 Pre-Test

Before distributing the questionnaire to adults in Malaysia, the questionnaire was reviewed by one of Universiti Tunku Abdul Rahman's lecturers.

3.4.3 Pilot Test

According to Schommer (1995), the concept of "pilot studies" is a small-scale version of large-scale research initiatives that include the initial assessment of a particular research tool, like a questionnaire or interview guide. Every study project starts with a

pilot test to make sure validity is achieved. It is described as a pre-test version of a research tool used before the actual research is carried out (Gani et al., 2020). Through the tests, researchers can identify and address any issues related to constructing items or confusion among respondents. This provides an opportunity for questionnaire developers to gather feedback and suggestions for potential improvements (Aithal & Aithal, 2020).

According to Lackey and Wingate (1998), when determining the sample size for a pilot test, it is recommended to use 10% of the total final study sample size. Since this study requires a minimum of 384 respondents, a sample size of 38 is required for the pilot test. In this study, a pilot study was conducted over five days, from 24 June 2024 to 28 June 2024. 39 sets of questionnaires were distributed to adults from various states in Malaysia. The primary data collection involved distributing Google Form questionnaires through Microsoft Teams and WhatsApp. All collected data were processed using SPSS 29.0 software to assess and measure the reliability of the questionnaires.

3.5 Construct Measurement

The definition of measurement in a statistical study is the process of allocating numerals, letters, or signs to variables under conditional rules. These measurement instruments can provide accurate findings because they adhere to norms (Allanson & Notar, 2020). Understanding the various kinds of data, processing them correctly for statistical analysis, and obtaining reliable and precise findings are critical in dealing with data during research, management, or marketing (Shukla, 2023).

3.5.1 Scale of Measurement

According to Shukla (2023), A scale is required in every dataset to measure or collect variables and to define them appropriately. These scales are referred to as measuring scales or levels of measurement. The survey questionnaires used in this research utilize nominal, ordinal, and interval scales.

3.5.2 Origin of Construct

Table 3.2

Origin of Construct

Variables	Adapted from	Items	Cronbach's alpha from previous studies	Scale
Dependent Variable: Behavioral Intention to Adopt Digital Banking	(Venkatesh et al., 2012)	2	0.85	Strongly disagree (1) to Strongly agree (5)
	(Al-Somali et al., 2008)	3	0.802	
Independent Variable 1: Convenience	(Chang & Polonsky, 2012)	5	0.773	Strongly disagree (1) to Strongly agree (5)

Independent Variable 2: Perceived Ease of Use	(Fortes & Rita, 2016)	4	0.820	Strongly disagree (1) to Strongly agree (5)
	(Martínez-Navalón et al., 2023)	1	0.915	
Independent Variable 3: Perceived Usefulness	(Fortes & Rita, 2016)	4	0.738	Strongly disagree (1) to Strongly agree (5)
	(Nissi et al., 2023)	1	0.858	
Independent Variable 4: Facilitating Conditions	(Venkatesh et al., 2012)	4	0.808	Strongly disagree (1) to Strongly agree (5)
	(Jermsittiparsert et al., 2022)	1	0.913	

3.6 Data Processing

The process of data processing involves taking raw data and converting it into a format that is cleaned and rectified, allowing for analysis to be conducted (Kveder & Galico, 2008). This process consists of four steps: checking, editing, coding, and transcription, which are performed once the respondent replies have been collected (Kveder & Galico, 2008). Essentially, data processing is the act of extracting valuable information from data by organizing, indexing, and modifying it to identify important patterns and relationships that can help solve problems of interest (Huang, 2019, pp. 1-4). Careful attention and focus are required during data processing to avoid errors, as the ultimate goal is to transform raw data into meaningful information. Specialized computer

software, such as SPSS 29.0, which is used in this study, is commonly used for data processing purposes.

3.6.1 Data Checking

Prioritizing data checking is essential to ensure the accuracy of every questionnaire. The presence of data omissions, missing data, and inconsistent responses could potentially invalidate the questionnaires. By conducting a pilot test and reviewing the data, the likelihood of such errors is greatly reduced. Any identified issues can then be addressed by modifying and adjusting the questionnaires to enhance their reliability.

3.6.2 Data Editing

Data editing is the process by which a researcher adds, subtracts, or changes variables, values, or cases. A few examples of data editing include selecting between different measurements, altering a value that seems unreasonable, and deleting a few outlier cases (Leahey et al., 2003). Inconsistent or absent responses from the target respondents are reviewed, corrected, or amended during this phase. Data editing helps to decrease the amounts of incomplete answers. When incomplete responses were found, the researchers mimicked the answering manner of the respondents to fill in the missing information. This enhances the consistency of the data.

3.6.3 Data Coding

After that, data coding is finished. Data coding for computer analysis is the process of allocating numbers or symbols to variable groups.

The responses to all questions in Section A are coded as follows:

Table 3.3

Data Coding

Q1	Gender	"Male" = 1
		"Female" = 2
Q2	Age	"18-21" = 1
		"22-25" = 2
		"26-29" = 3
Q3	Ethnicity	"Malay" = 1
		"Chinese" = 2
		"Indian" = 3
		"Others" = 4
Q4	Location	"Perak" = 1
		"Selangor" = 2
		"Penang" = 3
		"Johor" = 4
		"Perlis" = 5
		"Malacca" = 6
		"Negeri Sembilan" = 7
		"Terengganu" = 8
		"Kelantan" = 9
		"Kedah" = 10
		"Pahang" = 11
		"Sabah" = 12
		"Sarawak" = 13
		"Kuala Lumpur" = 14
		"Labuan" = 15
		"Putrajaya" = 16

Q5	Occupation	"Student" = 1
		"Unemployed" = 2
		"Employed" = 3
Q6	Income Level	"Not applicable" = 1
		"RM 1000 and below" = 2
		"RM 1001 - RM 2000" = 3
		"RM 2001 - RM 3000" = 4
		"RM 3001- RM 4000" = 5
		"RM 4001 - RM5000" = 6
		"RM 5001 and above" = 7

The responses to every question in Sections B and C are coded using the 5-point Likert scale as follows:

- "Strongly Disagree (SD)" is coded as 1
- "Disagree (D)" is coded as 2
- "Neutral (N)" is coded as 3
- "Agree (A)" is coded as 4
- "Strongly Agree (SA) is coded as 5

3.6.4 Data Transcribing

Data transcription is completed last. Data transcription transforms unprocessed data into useful information. SPSS 29.0 is used throughout the data processing procedure.

3.7 Data Analysis

Data analysis refers to a systematic procedure including data cleansing, transformation, and modeling. After the data processing, the data collected will be analyzed. After analyzing the data, the research hypotheses are evaluated to determine acceptance or rejection (Sekaran & Bougie, 2016). This process aids in answering the proposed research questions (Sekaran & Bougie, 2016). With that, our study's research issues may be answered. The application SPSS 29.0 is utilized to analyze the data collected for this research. Descriptive analysis, reliability testing, multicollinearity testing, and normality testing, are inferential analyses all performed using this program.

3.7.1 Descriptive Analysis

Descriptive analysis is a sort of data analysis that helps in accurately describing, displaying, or summarizing data points, revealing patterns that may appear that satisfy all of the data's requirements (Rawat, A.S., 2021). It is also a method for establishing patterns and connections among the data collected. Descriptive analysis uses historical data that has been manipulated to reach logical conclusions, rather than make a future forecast (Bush, 2020). In this sort of analysis, the significant characteristics of a dataset including the mean, median, mode, standard deviation, and range are summarised and explained. As a result, descriptive analysis is essential to research because it helps researchers understand, comprehend, and express the data collected in the study (Hassan, 2023).

3.7.2 Scale Measurement

3.7.2.1 Reliability Test

Furthermore, a reliability test is then performed to assess the reliability of the scale used. Scales are considered error-free when they are reliable (Pallant, 2020). Internal

consistency is a major indication of reliability which refers to the extent to which the items that compose a scale are evaluated for the same underlying traits (Pallant, 2020). Cronbach's alpha coefficient is the determinant of internal consistency (Pallant, 2020). It evaluates the correlation of the mean between items within the scale (Pallant, 2020). The value is never greater than one or lower than zero. Thus, the higher value indicates more reliability for the scale (Pallant, 2020).

Table 3.4

Rule of Thumb of Pilot Test

The range for Cronbach's Alpha	Strength of Internal Consistency
<0.6	Poor
0.6 to <0.7	Moderate
0.7 to <0.8	Good
0.8 to <0.95	Excellent

Cronbach's alpha values less than 0.6 indicate the level of reliability is poor. Moreover, when the value is between 0.6 and less than 0.7, the scales are moderate. Furthermore, the scales are good when Cronbach's alpha is greater than or equal to 0.7 but less than 0.8. Additionally, when the value is between 0.8 and less than 0.95, the scales are indicated as Excellent. As a result, to ensure scale reliability, Cronbach's alpha should be more than 0.6.

Table 3.5

Result of Reliability Test for Pilot Test

Variables	Cronbach's alpha	Reliability
Dependent Variable: Behavioral Intention to Adopt Digital Banking	0.767	Good
Independent variable 1: Convenience	0.795	Good
Independent variable 2: Perceived Ease of Use	0.809	Very Good
Independent variable 3: Perceived Usefulness	0.808	Very Good
Independent variable 4: Facilitating Conditions	0.721	Good

The pilot test results are shown in the table above. In terms of Cronbach's alpha, perceived ease of use has the greatest value. Conversely, facilitating conditions have the lowest. All of the scales are reliable since all the Cronbach's alpha values for each variable are more than 0.6.

3.7.3 Preliminary Data Screening

3.7.3.1 Multicollinearity

The multicollinearity test is the first preliminary data screening. According to Shrestha (2020), multicollinearity refers to a scenario in which there is a high correlation between the independent variables. The independent variables are correlated, and the error term will increase, hence the regression analysis results are biased and unreliable (Schreiber, 2018). Additionally, to identify multicollinearity, two measurement

approaches were used which are the Variance Inflation Factor (VIF) and Tolerance Value (Shrestha, 2020).

For the VIF, a VIF score of 1 indicates no correlation, a VIF of 1 to 5 indicates moderate correlation, and a VIF of 5 to 10 indicates a high correlation between variables. Conversely, a high level of multicollinearity is indicated by a tolerance value of less than 0.1 (Kyriazos & Poga, 2023). Subsequently, VIF and tolerance values can be performed by the Statistical Package for the Sciences (SPSS) software.

3.7.3.2 Normality

Normality is the second preliminary data screening. Normality testing evaluates if a data set follows a normal distribution (Hair et al, 2010). According to Wulandari et al. (2021), it found that misinterpretation of normality assumptions might lead to incorrect and misleading results. Thus, a normality test is conducted to determine if the distribution is normal.

Firstly, skewness and kurtosis are carried out to test the normality assumption. The skewness value must be between -2 and +2, while the kurtosis value should be between -7 and +7 to show the data is normal (Hatam et al., 2022). Secondly, we examine that normality test using a normal Q-Q plot. If the data distribution is normal, a straight line in a normal Q-Q plot should be observed (Zubir et al., 2018).

3.7.4 Inferential Analysis

Inferential analysis is an analysis to build an inference on data and it is the most crucial data analysis. According to Amrhein et al. (2019), the collected sample data is used to

conclude the broader population. This means that statistical information derived from the sample in a study is leveraged to approximate the undisclosed parameters of the whole population. As a result, by using the sample data of 400 respondents from different adults in Malaysia, it is possible to acknowledge the behavioral intention to adopt digital banking among adults in Malaysia. In this study, the multiple linear regression analysis is employed to examine the relationship between the dependent variable, which is behavioral intention to adopt digital banking, and the independent variables, which are convenience, perceived ease of use, perceived usefulness, and facilitating conditions.

3.7.4.1 Multiple Linear Regression Analysis

Multiple linear regression is used to analyze data with only one dependent variable and more than one independent variable (Etemadi & Khashei, 2021). Hence, this method can be employed in this study because four independent variables are chosen in this study.

After conducting a regression analysis, to analyze the correlation between the dependent variable and a single independent variable and create a linear equation between them, a single regression analysis is used (Uyanik, 2013). While for the multiple regression approach was used for the multiple variables model to analyze the overlapping accuracy model and determine whether or not it is possible to solve the variables of nonlinear overlaid equations using linear methods. Therefore, using the predicted parameter values, this method might adjust the sample size to determine the smallest sample size required to solve the issues successfully.

Based on the discussion of hypothesis testing in chapter two, the dependent variable which is behavioral intention to adopt digital banking is located on the left-hand side

of the equation. While for the independent variable, it is located on the right-hand side of the equation.

$$\text{BIDB}i = \beta 0 + \beta 1\text{CON}i + \beta 2\text{PEU}i + \beta 3\text{PU}i + \beta 4\text{FC}i + \mu i$$

Where:

BIDBi = Behavioral intention to adopt digital baking

CONi = Convenience

PEUi = Perceived ease of use

PUi = Perceived usefulness

FCi = Facilitating conditions

μi = Error term

3.8 Conclusion

In summary, the research design, data collecting, sampling, questionnaire design, scale measurement, data processing, and data analysis were covered in Chapter 3. Using a quantitative research methodology, this study collects primary data from 400 adults in Malaysia. There was a pre-test and a pilot test. Next, the data is subjected to both descriptive and inferential analysis using SPSS software.

CHAPTER 4: RESEARCH RESULTS

4.0 Introduction

In this chapter, the focus is on data analysis. The process begins with a thorough descriptive analysis, delving into the details of the data. To ensure the accuracy and consistency of the measurements, the scales used are rigorously tested for reliability. Early in the data screening procedure, attention is given to investigating potential issues related to multicollinearity and nonnormality. Finally, the chapter delves into the analysis of numerous linear regressions, employing SPSS 29.0 to carry out these comprehensive analyses.

4.1 Descriptive Analysis

An initial step involves conducting a descriptive analysis to ensure the data is easily understandable. The demographic data collected in Section A of the survey questionnaire is analyzed descriptively first. Subsequently, the data from Sections B and C is also subjected to descriptive analysis. Tables and pie charts are created to offer a summary of the data in the subsequent study.

4.1.1 Respondents' Demographic Profile

4.1.1.1 Gender

Table 4.1

Gender's Descriptive Analysis

Gender	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Male	210	210	52.50	52.50
Female	190	400	47.50	100.00

Figure 4.1

Gender's Descriptive Analysis
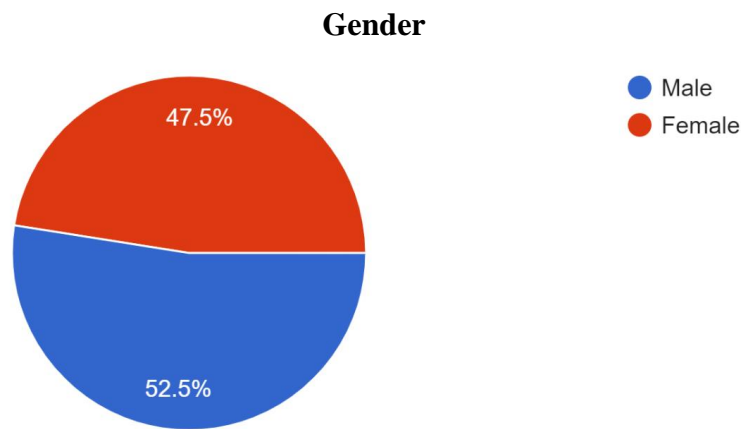
Gender

Initially, groups are created from the responses according to their gender. The survey has 400 adult Malaysian respondents, as shown in Table 4.1. Then, 210 research participants are male and 190 research participants are female, symbolizing a 52.5% to 47.5% ratio, which is the information shown in Figure 4.1 and Table 4.1. As a result, this survey has more male respondents than female respondents.

4.1.1.2 Age

Table 4.2

Age's Descriptive Analysis

Age	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
15 - 19	13	13	3.25	3.25
20 - 24	197	210	49.25	52.50
25 - 29	68	278	17.00	69.50
30 and above	122	400	30.50	100.00

Figure 4.2

Age's Descriptive Analysis
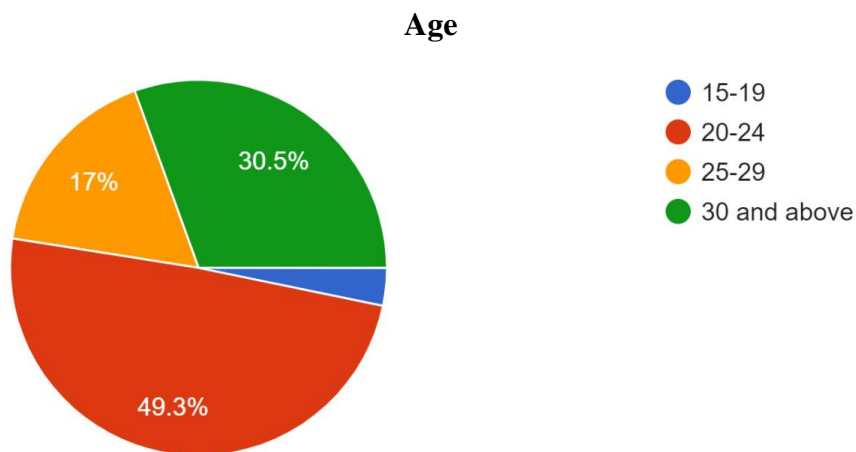
Respondents are separated not just into gender-based categories but also into age groupings. Table 4.2 and Figure 4.2 show that 13 individuals, or 3.25% of the total, are in the 15–19 age range. Then, 197 respondents, or about half of the total, are in the 20–24 age range. The age range of 25 to 29 is represented by 68 participants or 17% of the total. Finally, with 122 individuals, or 30.5% of the total, those aged 30 and over make up the second-largest group of participants.

4.1.1.3 Ethnicity

Table 4.3

Ethnicity's Descriptive Analysis

Ethnicity	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Malay	40	40	10.00	10.00
Chinese	307	347	76.75	86.75
Indian	50	397	12.50	99.25
Others	3	400	0.75	100.00

Figure 4.3

Ethnicity's Descriptive Analysis
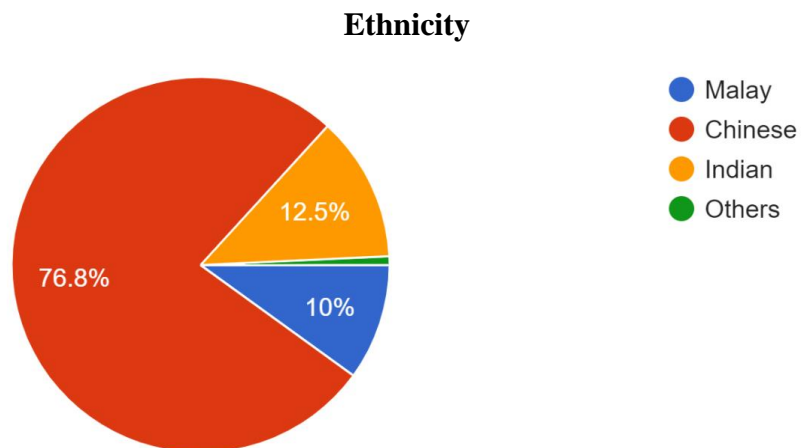
The 3rd classification is ethnicity. Table 4.3 and Figure 4.3 show that the survey respondents have been divided into three ethnic groups. Chinese respondents make up 76.8% of the total, or 307 respondents, meaning they make up more than half of all respondents. Afterwards, 10% (40 respondents) and 12.5% (50 respondents) of the

respondents are Malay and Indian, respectively. Out of all respondents, only 3 do not belong to these three ethnic categories, making up 0.75% of the total.

4.1.1.4 Location

Table 4.4

Location's Descriptive Analysis

Location	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Perak	80	80	20.00	20.00
Selangor	64	144	16.00	36.00
Penang	79	223	19.75	55.75
Johor	31	254	7.75	63.50
Perlis	12	266	3.00	66.50
Malacca	20	286	5.00	71.50
Negeri Sembilan	25	311	6.25	77.75
Terengganu	5	316	1.25	79.00
Kelantan	5	321	1.25	80.25
Kedah	11	332	2.75	83.00
Pahang	14	346	3.50	86.50
Sabah	6	352	1.50	88.00
Sarawak	4	356	1.00	89.00
Kuala Lumpur	34	390	8.50	97.50
Labuan	1	391	0.25	97.75

Putrajaya	9	400	2.25	100.00

Figure 4.4

Location's Descriptive Analysis

Location
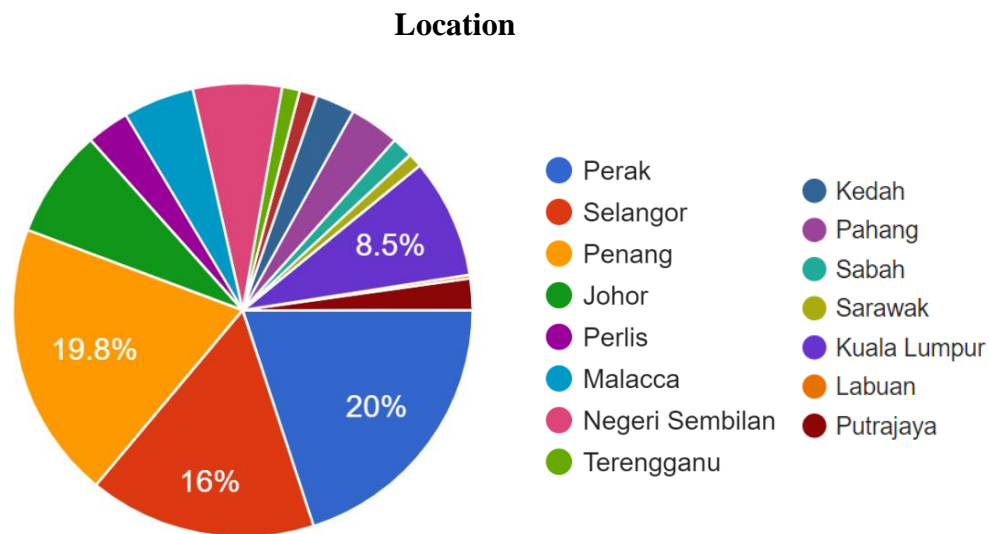
Additionally, groups of responders are formed based on their places of residence. Table 4.4 and Figure 4.4 shows that the number of respondents in Perak and Penang is nearly equal, at 80 and 79, respectively, representing 20% and 19.8% of the total. Sixty-four participants, or sixteen percent of the total, are from Selangor. Then, roughly 31 individuals, or 7.75% of the population, come from Johor. There are 20 and 25 participants in Malacca and Negeri Sembilan, respectively. Furthermore, Terengganu and Kelantan account for approximately 5 participants or 1.25 percent of the total. Together, the three states of Perlis, Kedah, and Pahang had almost 40 participants or 10% of all respondents. Moreover, only ten participants overall are from Sarawak and Sabah. Kuala Lumpur has the highest number of respondents out of the three federal territories, with 34 participants, or 8.5% of the total respondents. Among the

respondents, Putrajaya has the highest number with nine, while Labuan has the lowest number with just one.

4.1.1.5 Occupation

Table 4.5

Occupation's Descriptive Analysis

Occupation	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Student	205	205	51.25	51.25
Unemployed	14	219	3.50	54.75
Employed	181	400	45.25	100.00

Figure 4.5

Occupation's Descriptive Analysis
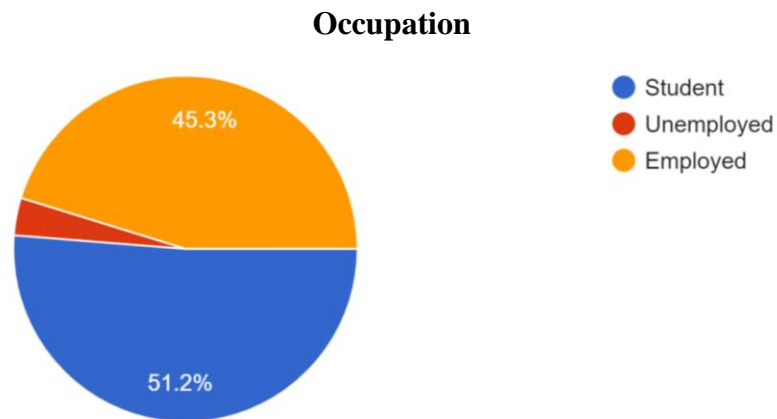
Additionally, groupings based on occupation are created from the responses. Half of the responses, or about 205 participants, or 51.2% of the total, are students, as shown in Table 4.5 and Figure 4.5. Also, 181 participants, or 45.3% of the total, or another

half of the responses, are employed adults. In total, only 14 respondents are included in this survey as unemployed.

4.1.1.6 Income Level

Table 4.6

Income Level's Descriptive Analysis

Income level	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Not applicable	159	159	39.75	39.75
RM 1000 and below	18	177	4.50	44.25
RM 1001 - RM 2000	52	229	13.00	57.25
RM 2001 - RM 3000	71	300	17.75	75.00
RM 3001- RM 4000	39	339	9.75	84.75
RM 4001 - RM 5000	14	353	3.50	88.25
RM 5001 and above	47	400	11.75	100.00

Figure 4.6

Income Level's Descriptive Analysis
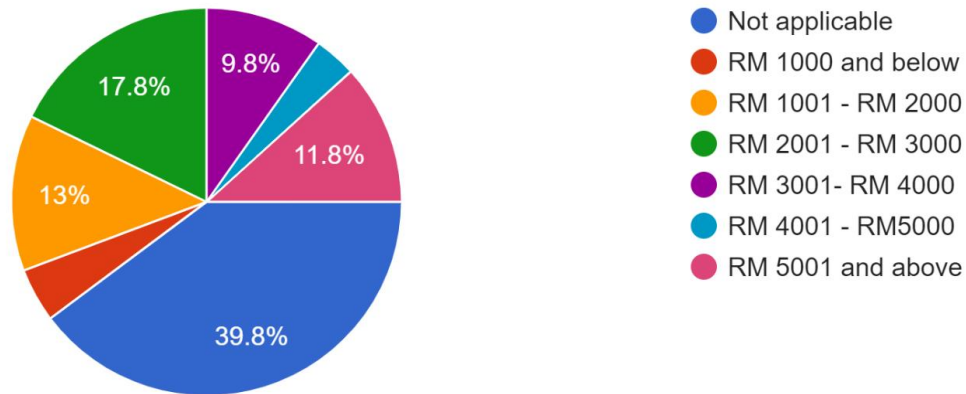
Income Level

After their occupation, the respondents are further categorized based on their income level. Given that half of the respondents are students, 39.8% of the total, or 159 participants, do not have a source of income, as shown in Table 4.6 and Figure 4.6. Subsequently, 17.8%, or about 71 respondents, reported having an income that falls between RM 2001 and RM 3000. 47 participants, or 11.8% of the total responses, reported having an income of more than RM 5000. Conversely, 52 participants, or 13% of the total, fall into the RM 1001–RM 2000 income bracket. Furthermore, 9.8% of all respondents have an income ranging from RM 3001 to RM 4000, as well as 3.5% of the total research participants are in the RM 4001 to RM 5000 category. In this study, only eighteen respondents have an income below RM 1000.

4.1.2 Central Tendencies and Dispersion Measurement of Constructs

In the following segment, Sections B and C examine the preferences of survey participants towards the questionnaire on our dependent variable and independent variables. The analyses conducted encompassed the calculation of the mean, a measure of central tendency, and the standard deviation, a measure of dispersion. Each variable was analyzed independently.

4.1.2.1 Behavioral Intention to Adopt Digital Banking

Table 4.7

Central Tendencies Measurement of Behavioral Intention to Adopt Digital Banking

Question	Statement	Sample Size, N	Mean	Mean Ranking	Standard Deviation	Standard Deviation Ranking
BIDB1	I want to know more about digital banking.	400	4.44	1	0.760	5
BIDB2	I plan to conduct transactions on digital banking.	400	4.37	3	0.794	3
BIDB3	If necessary, I will use digital banking services.	400	4.40	2	0.785	4
BIDB4	In the near future, I plan to make greater use of digital banking services.	400	4.36	4	0.838	2
BIDB5	I will recommend digital banking to everyone around me.	400	4.25	5	0.876	1

First, a review of the survey items on the behavioral intention to adopt digital banking is conducted. BIDB1 exhibits an exceptional mean of 4.44, which is apparent in Table 4.7, but the lowest variation with a standard deviation of 0.76. With a standard deviation of 0.785, BIDB3 has the second-highest mean of 4.40. Moreover, in terms of mean and standard deviation, BIDB2 ranks third with a value of 4.37 as well as 0.794 among its sample data. BIDB4 has a mean of 4.36, making it the fourth largest with the

second greatest standard deviation at 0.838. BIDB5 attains the lowest mean of 4.25 but has the largest standard deviation of 0.876.

4.1.2.2 Convenience

Table 4.8

Central Tendencies Measurement of Convenience

Question	Statement	Sample Size, N	Mean	Mean Ranking	Standard Deviation	Standard Deviation Ranking
CON1	I find digital banking system can be accessed anytime as long as there is an internet connection.	400	4.49	2	0.701	4
CON2	I find digital banking system can be accessed anywhere as long as there is an internet connection.	400	4.53	1	0.679	5
CON3	Digital banking helps me be proactive in arranging my time.	400	4.02	5	1.078	2
CON4	Access to the current digital banking system is easy.	400	4.26	3	0.856	3

CON5	Digital banking system helps me easily compare the service prices among different suppliers.	400	4.05	4	1.158	1

Second, the convenience-related questions are analyzed. Concerning Table 4.8, CON2 exhibits the largest mean, 4.53, but at 0.679, it also has the lowest standard deviation. CON1 ranks second in terms of the highest mean value (4.49), with a standard deviation of 0.701. Next, CON4 ranks third in terms of the highest mean value (4.26), with a standard deviation of 0.856. Then, CON5 ranks fourth with the highest mean value (4.05) while possessing the largest standard deviation (1.158). Finally, CON3 ranks second in the largest standard deviation value (1.078) which ranks last in terms of mean value (4.02).

4.1.2.3 Perceived Ease of Use

Table 4.9

Central Tendencies Measurement of Perceived Ease of Use

Question	Statement	Sample Size, N	Mean	Mean Ranking	Standard Deviation	Standard Deviation Ranking
PEU1	I can assess digital banking services easily.	400	4.45	2	0.793	3
PEU2	The process of using digital banking services is clear and easy to understand.	400	4.40	3	0.798	2
PEU3	I can quickly master the use of digital banking.	400	4.37	5	0.869	1

| PEU4 | Generally, I find it easy to use digital banking. | 400 | 4.48 | 1 | 0.697 | 5 |
| PEU5 | I think interaction with digital banking does not require a lot of mental effort. | 400 | 4.38 | 4 | 0.783 | 4 |

Perceived ease of use is the third variable under examination. PEU4 has the greatest mean, 4.48, as Table 4.9 demonstrates. It also has the least variance, with a standard deviation of 0.697. Then, with a standard deviation of 0.793, PEU1 has the second-largest mean, 4.45. PEU2 has the third-largest mean, 4.40, with a standard deviation of 0.798. Subsequently, PEU5 ranks fourth in the highest mean value (4.38), along with a standard deviation of 0.783. Last but not least, PEU3 features a relatively lowest mean value (4.37) and greatest standard deviation value (0.869).

4.1.2.4 Perceived Usefulness

Table 4.10

Central Tendencies Measurement of Perceived Usefulness

Question	Statement	Sample Size, N	Mean	Mean Ranking	Standard Deviation	Standard Deviation Ranking
PU1	The use of digital banking helps me save money.	400	4.05	5	1.119	1
PU2	The use of digital banking helps me save time.	400	4.41	3	0.784	3

PU3	The use of digital banking allows me to access the service diversely.	400	4.26	4	0.875	2
PU4	Generally, I find it useful to use digital banking.	400	4.45	1	0.724	5
PU5	I think that using digital banking would make it easier for me to carry out my tasks.	400	4.43	2	0.766	4

Fourth, an analysis is conducted on the perceived usefulness questions. PU4 has the greatest mean value (4.45) which can be illustrated in Table 4.10. Nevertheless, with 0.724, it has the smallest standard deviation. Next, PU5 ranks second in the highest mean (4.43), with the standard deviation value (0.766). Moreover, PU2 has the third-largest mean of 4.41 with a standard deviation of 0.784. Consequently, PU3 has the second-largest standard deviation of 0.875 and the fourth-largest mean of 4.26. Last but not least, PU1 has the biggest standard deviation, 1.119, even though its mean is the smallest, 4.05.

4.1.2.5 Facilitating Conditions

Table 4.11

Central Tendencies Measurement of Facilitating Conditions

Question	Statement	Sample Size, N	Mean	Mean Ranking	Standard Deviation	Standard Deviation Ranking

FC1	I have the knowledge needed to use digital banking.	400	4.16	3	0.943	2
FC2	Digital banking is compatible with other technologies used.	400	4.34	1	0.763	4
FC3	I can get help from others when having difficulties in using digital banking.	400	4.06	5	0.989	1
FC4	I have the necessary resources to utilize digital banking.	400	4.33	2	0.720	5
FC5	A specific person is available for assistance of digital banking difficulties.	400	4.15	4	0.903	3

The last variable to be looked at is facilitating conditions. As indicated in Table 4.11, FC2 possesses the greatest mean, 4.34, with a standard deviation of 0.763. FC4 constitutes the second-highest mean, 4.33, along with the smallest standard deviation value, 0.720. Next, in terms of standard deviation and mean, FC1 ranks the second highest at 0.943 and the third highest at 4.16, respectively. Consequently, FC5 ranks fourth for the highest mean value at 4.15 and possesses a standard deviation value of 0.903. Finally, FC3 has the greatest standard deviation of 0.989 even though it has the smallest mean of 4.06.

4.2 Scale Measurement

4.2.1 Reliability Test

Table 4.12

Analysis of Cronbach's Alpha Reliability

Number	Group of Variable	Title of the Variable	Number of Items	Cronbach's Alpha	Reliability Test
1)	Dependent Variable	Behavioral Intention to Adopt Digital Banking	5	0.854	Excellent
2)	Independent Variable	Convenience	5	0.731	Good
3)	Independent Variable	Perceived Ease of Use	5	0.856	Excellent
4)	Independent Variable	Perceived Usefulness	5	0.774	Good
5)	Independent Variable	Facilitating Conditions	5	0.749	Good

Table 4.12 displays both the dependent and independent variables' Cronbach's alpha values. Based on Table 4.12, behavioral intention to adopt digital banking, which is the dependent variable (0.854) indicates that it has excellent reliability because its Cronbach's alpha value exceeds 0.80. A Cronbach's alpha exceeding 0.70 and below 0.80 indicates good reliability for the independent variables, which include perceived

usefulness (0.774), convenience (0.731), and facilitating conditions (0.749). For perceived ease of use, it has a Cronbach's Alpha of (0.856) so this indicates that it has excellent reliability. To summarize, Cronbach's alpha for each variable exceeds 0.70, indicating strong reliability for all the scales. As a result, every variable continues to be included in the research.

4.3 Preliminary Data Screening

A preliminary examination of the data is conducted to ensure the reliability of the outcomes of the research. Hence, a multicollinearity test and a normality test were performed as the first two data analyses.

4.3.1 Multicollinearity Test

Multicollinearity happens when multiple linear regression analysis involves various variables that are significantly correlated (Shrestha, 2020). If a model has a multicollinearity problem, it will have a high error term, misleading result, and will be unreliable. The variance inflation factor (VIF) and tolerance value are used to detect the multicollinearity problem. Thus, if the values of VIF exceed 10 while having a tolerance value lower than 0.1, a high multicollinearity problem exists (Kim, 2019).

Table 4.13

Variance Inflation Factor (VIF) and Tolerance Value

Independent variables	Collinearity statistics	
	VIF	Tolerance
Convenience	2.559	0.391
Perceived Ease of Use	1.573	0.636
Perceived Usefulness	2.670	0.374
Facilitating Conditions	2.183	0.458

Table 4.13 reveals that the values of VIF for each independent variable are below 10 while having tolerance values exceeding 0.1. Hence, this shows that among the independent variables, the multicollinearity problem does not exist.

4.3.2 Normality Testing

Due to the importance of normality in a dataset, normality testing was performed. Skewness and kurtosis values, in addition to a normal Q-Q plot, are both approaches employed during the present research to determine the normality of the dataset.

Table 4.14

Results of the Normality Testing

Title of the Variables	Skewness	Kurtosis

Dependent Variable: Behavioral Intention to Adopt Digital Banking	(0.871)	0.186
Independent Variable 1: Convenience	(0.522)	(0.685)
Independent Variable 2: Perceived Ease of Use	(0.988)	0.413
Independent Variable 3: Perceived Usefulness	(0.752)	(0.142)
Independent Variable 4: Facilitating Conditions	(0.306)	(0.693)

The initial phase in determining the dataset's normality is by looking at its skewness and kurtosis. Regardless of sample size, the significance of skewness and kurtosis testing for a valid normality test (Kim, 2013). When the sample size exceeds 300, if the skewness value falls between -2 and +2, and the kurtosis value falls between -7 and +7, the data indicates a normal distribution (Kim, 2013). Table 4.14 reveals that each skewness value falls within -2 and +2. When it pertains to the value of skewness, perceived ease of use constitutes the smallest value (-0.988), whereas facilitating conditions possess the greatest value (-0.306). Additionally, each of the values of kurtosis has been shown to lie within -7 and +7. The highest value of kurtosis (0.413) can be seen in the variable, perceived ease of use; while the smallest value (-0.693), can be found in the variable, facilitating conditions. Datasets across each variable in question are normally distributed since all skewness values fall within -2 and +2, while each of the kurtosis values falls within -7 and +7.

4.4 Inferential Analysis

4.4.1 Multiple Regression Analysis

Table 4.15

Multiple Regression Analysis

	Unstandardized Coefficient Beta	Coefficient Std. Error	Standardized Coefficient Beta	t-statistics	P-value
(Constant)	0.650	0.186		3.495	0.000***
CON	0.318	0.056	0.313	5.646	0.000***
PEU	0.120	0.045	0.117	2.695	0.007***
PU	0.144	0.058	0.140	2.472	0.014**
FC	0.286	0.054	0.272	5.311	0.000***
R-squared					0.525
Adjusted R-squared					0.521
F-test					109.320
P-value					0.000
Durbin Watson					1.847

* P<0.1	**P<0.05	***P<0.01

BIDB = Behavioral intention to adopt digital baking

CON = Convenience

PEU = Perceived ease of use

PU = Perceived usefulness

FC = Facilitating conditions

This study looks at the connection involving the dependent variable, the behavioural intention to adopt digital banking (BIDB), along with the four independent variables, convenience (CON), perceived ease of use (PEU), perceived usefulness (PU), and facilitating conditions (FC). Based on the result in Table 4.15, convenience, perceived ease of use, perceived usefulness, and facilitating conditions are significant at the t-statistics values of 5.646, 2.695, 2.472, and 5.311 because the p-values of 0.000, 0.007, 0.014, and 0.000 are less than the significance level of 0.05.

Convenience is significant at a 99% confidence level, as it has a p-value of 0.000 which is less than the level of significance of 0.000. This outcome supports the conclusions made by Susanto et al., (2023). Likewise, the result agrees with this study's convenience and is significantly related to the behavioral intention to adopt digital banking among Malaysians. On top of that, at 0.318, the unstandardized regression coefficient represents a positive. This implies the fact that Malaysians' behavioral intention to use digital banking will rise by 0.318 for every unit rise in convenience, ceteris paribus.

Perceived ease of use is significant at the 99% confidence level, as it has a p-value of 0.007, which is lower than the level of significance of 0.01. The outcome is consistent with the research made by Tran (2021). Thus, it shows that perceived ease

of use is significantly related to behavioral intention to adopt digital banking among Malaysians. Because of the positive unstandardized regression coefficient of 0.120, a unit increase in perceived ease of use, on average, will increase Malaysians' behavioral intention to adopt digital banking by 0.120 units, ceteris paribus.

Moreover, perceived usefulness is significant at a 95% confidence level because it has a p-value of 0.014, which is lower than the level of significance at 0.05. The outcome agrees with Nguyen (2020). The results demonstrate a significant relationship between perceived usefulness and the behavioral intention to use digital banking among Malaysians. As a result, at 0.144, the unstandardized regression coefficient is positive. On that account, a unit increase in perceived usefulness, on average, will increase the behavioral intention to adopt digital banking among Malaysians by 0.144, holding all other things constant.

Besides, at a 99% confidence level, facilitating conditions are significant as they constitute a p-value of 0.000 which is lower than the level of significance at 0.01. The findings of this research align with the findings of Purwanto and Loisa (2020), as they concluded that facilitating conditions significantly led to the behavioral intention to adopt digital banking among Malaysians. Moreover, at 0.286, the unstandardized regression coefficient is positive. This shows that if facilitating conditions rise by one unit, on average, the behavioral intention to adopt digital banking among Malaysians will increase by 0.286 units, ceteris paribus.

The coefficient of R-squared (R^2) examines how the model can be explained by the independent variables. The R^2 specifies that 52.5% of the variation in Malaysians' behavioral intention to adopt digital banking can be affected or explained by the independent variables. Other relevant factors will account for 47.5% of the variation in Malaysians' intention to adopt digital banking.

Apart from that, the adjusted R^2 is 0.52, indicating that after accounting for the degrees of freedom, the combined variation of convenience, perceived ease of use, perceived usefulness, and facilitating conditions explains 52.1% of the variation in the intention to use digital banking among Malaysians.

Consequently, the multiple regression model's significance can be tested via F-test. We find that the multiple regression model as a whole is significant at a level of confidence of 95% and lower, through the application of the P value approach in the F-test. As a result, the F-statistic (109.320) proves to be significant. For this reason, the model provides an important explanation of the relationship between our dependent variable and independent variables.

The Durbin-Watson Test measures autocorrelation in regression analysis residuals. Results become misleading and the standard error is ultimately underestimated due to autocorrelation. The Durbin-Watson Test has a value between zero and four. Positive autocorrelation is indicated by a number less than two, and negative autocorrelation is indicated by a value greater than two. When the Durbin-Watson statistic is two, it indicates that the model does not have an autocorrelation problem. The Durbin-Watson statistic, as indicated by the results in our table, is 1.847. Considering the figure is close to two, our model does not have an autocorrelation issue.

4.5 Conclusion

The data analysis is done by using SPSS 29.0 which is efficient at analyzing and summarizing the information gathered from the participants. Besides, the survey questions were discovered to be reliable. Other than that, neither non-normality nor multicollinearity problems were found throughout the research. The multiple regression analysis concludes that, in general, each of the independent variables—

convenience, perceived ease of use, perceived usefulness, and facilitating conditions are significantly related to the behavioral intention to adopt digital banking among Malaysians.

CHAPTER 5: DISCUSSIONS AND CONCLUSIONS

5.0 Introduction

The final chapter delves deeply into the conclusions that are derived from the data offered in Chapter 4. The chapter begins with a comprehensive summary of the results obtained from the inferential analysis. Subsequently, an in-depth analysis is undertaken to delve into the factors and underlying causes contributing to these results. Furthermore, practical recommendations for implementing the findings are provided. Finally, the chapter addresses the limitations of the study and proposes avenues for further research.

5.1 Summary of Statistical Analysis

Table 5.1 An Overview of the Statistical Results

Independent Variables	T-statistics	P-value	Findings
Behavioral intention to adopt digital banking	3.495	<0.001	Significant
Convenience	5.646	<0.001	Significant
Perceived ease of use	2.695	0.007	Significant
Perceived usefulness	2.472	0.014	Significant
Facilitating conditions	5.311	<0.001	Significant

According to Table 5.1, behavioral intention to adopt digital banking, convenience, perceived ease of use, perceived usefulness, and facilitating conditions have significant relationships with the behavioral intention to adopt digital banking. Therefore, all the independent variables are significant drivers of Malaysian adults' behavioral intention to use digital banking.

5.2 Discussion on Major Findings

This part offers a detailed examination of the primary findings presented in Section 5.1. These findings are explored individually and relate to the initiatives undertaken by the financial organizations and banking sectors.

5.2.1 Key Determinants of Behavioral Intention to Adopt Digital Banking Among Malaysians

5.2.1.1 Convenience and Behavioral Intention to Adopt Digital Banking

Following the outcomes of the inferential analysis, there is a substantial correlation between convenience and the behavioral intention to adopt digital banking among adults in Malaysia. This is correlated with the findings of Chen et al. (2010), and Shin (2022). Convenience has made a lot of contributions to shaping customer satisfaction in digital bank services. Consumers in Indonesia, especially those in Makassar, believe that ease of use is a key component of their digital banking interaction (Susanto et al., 2023).

Many efforts have been made by the Malaysian banking sector to enhance the convenience of adopting digital banking. For example, almost all digital banking platforms and applications are served 24/7. With only a few clicks, users can access

their account balances at anytime, anywhere. Furthermore, the login procedure has been simpler using biometric identification techniques like fingerprint and facial recognition. Also, the transition to cashless transactions has provided improved cleanliness by avoiding the direct handling of cash, increased security by doing away with the need to carry real money, and the ability to follow financial activity electronically, thus increasing the convenience of users.

5.2.1.2 Perceived Ease of Use and Behavioral Intention to Adopt Digital Banking

Secondly, the results also reveal a significant relationship between perceived ease of use and the behavioral intention to adopt digital banking among adults in Malaysia. It is supported by the findings of Ramli (2020), Tran (2021), and Alnemer (2022). Perceived ease of use has been shown to impact people's attitudes, making them more likely to adopt technological changes if digital banking practices simplify their lives (Omar Ali et al., 2020).

The government and the digital banking industry have made significant efforts to enhance the perceived ease of use of digital banking. Banks have created user-friendly interfaces with straightforward, uncluttered designs for their digital banking applications, ensuring that use is simple and intuitive. Nowadays, a lot of banking apps come with step-by-step video tutorials and guidance to assist users in learning how to use new or complicated functions, like applying for loans or establishing direct deposits. Also, the digital banks have included live chat, as well as chatbots and application assistants, into their apps to further improve usability, further adding to the simplicity of using digital banking services such as bill payments, cheque deposits, and money transfers.

5.2.1.3 Perceived Usefulness and Behavioral Intention to Adopt Digital Banking

The results also reveal a significant relationship between perceived usefulness and the behavioral intention to adopt digital banking among adults in Malaysia. This result is similar to the research conducted by Nguyen (2020) and Alnemer (2022). Perceived usefulness refers to the degree to which a person believes that using a technology will benefit them (Prastiawan et al., 2021).

To enhance the perceived usefulness of digital banking, banking institutions have incorporated multiple essential elements. Users can now effectively track their spending, create budgets, and classify their expenses with the introduction of comprehensive financial management tools that include budgeting and expense monitoring features. Furthermore, a lot of banking apps currently have investment management tools that let users monitor the performance of their portfolios and get tailored financial recommendations. To keep users aware and in charge of their money, these applications also offer real-time notifications and alerts for account actions including deposits, withdrawals, and bill due dates.

5.2.1.4 Facilitating Conditions and Behavioral Intention to Adopt Digital Banking

Next, facilitating conditions and Malaysian adults' behavioral intention to adopt digital banking can be seen to have a strong correlation. The finding shows similarity to some other research conducted by Rachmawati et al. (2020), Iskandar et al. (2020), and Purwanto and Loisa (2020). Facilitating conditions are characterized as one's perception of how much organization as well as technology infrastructure can support system adoption (Almaiah et al., 2022).

To improve facilitating conditions for digital banking, the banking institution has implemented personalized dashboards that enable users to personalize and easily navigate by allowing them to customize the way their app interfaces present items they use frequently. Also, a lot of digital banks have implemented mechanisms to collect customer feedback within the app. This allows them to adjust based on feedback and issues raised by users to improve the app experience over time. Strong technical support is also offered across several channels, so consumers can obtain assistance whenever they need it. These channels include phone, email, live chat, and social media.

5.3 Implications of the Study

The managerial implications are given in the following part. This part emphasizes the operations known to institutions, including government agencies, universities, and digital banking institutions, to encourage the behavioral intention to adopt digital banking by the data analysis findings.

5.3.1 Managerial Implications

The outcomes of the multiple regression analysis indicate that convenience has a major impact on Malaysian adults' behavioral intention to adopt digital banking. To make the adoption of digital banking more convenient, digital banks could establish offline functionality, which enables users to carry out tasks offline, such as examining transaction history or scheduling transfers to be carried out when the user is back online. Thus, the users can handle their banking requirements even in the absence of a steady internet connection. Furthermore, banks need to simplify the account opening process for new clients. Over 5 billion euros are lost each year because 68% of people drop out of bank applications each year (Digital Identity, 2022). Consequently, banks need to accelerate the account opening procedure by streamlining application forms, reducing

the quantity of information needed, and offering clear guidance during the onboarding process.

Besides, the second independent variable, perceived ease of use, has a major impact on behavioral intention to adopt digital banking among adults in Malaysia. To enhance the perceived ease of use for digital banking platforms, banking institutions could adopt chatbots and voice assistants driven by AI. By allowing voice commands to be used for transactions and question-answering, these technologies enhance usability. Banking institutions could also include features like Single Sign-On (SSO), which enables customers to use a single set of login information to access each of their banking services and reduces the difficulties and complexity of having to remember several passwords.

The third independent variable, perceived usefulness, has a significant influence on behavioral intention to adopt digital banking among adults in Malaysia. To improve the perceived usefulness of digital banking platforms, digital banks could examine customer spending trends and offer tailored financial advice within the applications. This entails supplying personalized lending possibilities, making relevant investment suggestions, and giving customized saving advice. Also, the digital bank could analyze and report expenditure trends, classify expenses, and monitor budgetary performance to the customers by the end of the month, which helps users better understand their financial habits. To encourage regular saving, banks can use automated savings programs that round up transactions and deposit the difference into investment or savings accounts.

The last independent variable, facilitating conditions, has a significant impact on Malaysian adults' behavioral intention to adopt digital banking. For the improvement of facilitating conditions for digital banking, banks might strengthen server security

and dependability to create more favorable conditions for digital banking. To reduce downtime and safeguard user data, the banking app's technical infrastructure needs to be strong, dependable, and secure. To protect data and privacy, this involves putting advanced safety precautions into operation and keeping them updated, such as encryption, multi-factor authentication, and frequent security audits. Increasing the accessibility of resources is also crucial. To encourage wider adoption of digital banking services, the government should take steps to expand access to devices and internet connectivity in underserved and rural areas. Finally, it is important to promote digital literacy. To increase people's proficiency with digital banking, the government and financial institutions should provide workshops and educational initiatives regularly.

5.4 Limitations of the Study

There are certain limitations to be aware of with this research.

Firstly, this research primarily covers the digital banking adoption of adults. Thus, it does not cover the digital banking adoption of other age groups. In addition, states like Perak, Penang, and Selangor dominated the participation of the survey, which resulted in an underrepresentation of the factors affecting digital banking adoption in the whole of Malaysia. States like Perlis (8.5%), Johor (7.8%), and Malacca (5%) had a particularly low engagement throughout the survey of this study. Therefore, extrapolating the results of this research to all of Malaysia may prove to be challenging.

Following that, this study is quantitative and uses survey questionnaires to gather data to better comprehend the relationship between the dependent variable, behavioral intention to adopt digital banking, and the independent variables, convenience, perceived ease of use, perceived usefulness, and facilitating conditions. This makes it challenging to fully comprehend the perspectives of the respondents when using the

method of survey questionnaires as they may have misinterpreted the meaning of our survey questions or have an alternative understanding of our study. As a result, this could produce data that is less credible and precise.

Lastly, this study solely examined 4 factors that will affect digital banking adoption, which are convenience, perceived ease of use, perceived usefulness, and facilitating conditions. On the other hand, other factors that were overlooked could potentially influence the decision to use digital banking. Consequently, it may be possible that there is a lack of other factors to look into in this study to conclude a more accurate result of the intentions to adopt digital banking.

5.5 Future Research Recommendations

During research, certain limitations were identified, and these limitations should be taken into account for future enhancements.

Firstly, future researchers may carry out more targeted studies on various age groups, such as the inclusion of students or undergraduates, who are also users of digital banking. As this study is limited to only adults in Malaysia, future researchers may widen and broaden their scope to achieve a more reliable and accurate study. This is due to the possibility that individuals from various other age groups may provide an alternative viewpoint that could help improve the studies within the scope of the factors that will affect the intention to adopt digital banking in Malaysia.

Next, future scholars or researchers may opt to incorporate quantitative research methods alongside qualitative research methods such as conducting focus groups or in-

person interviews to collect the data regarding the factors affecting digital banking adoption. By allowing the respondents to voice any questions that they may have throughout the interview, this method helps ensure that they fully understand the questions posed by researchers. This could help future researchers gain a deeper understanding of the respondents' perspectives and opinions.

Lastly, future researchers may broaden their study's reach by incorporating additional variables that are essential. Besides using the variables: convenience, perceived ease of use, perceived usefulness, and facilitating conditions; researchers may also consider the use of trust, social influence, security concern, and perceived risk, as these variables may contribute considerably to their study., resulting in a data that is more precise and credible. Apart from that, future researchers may also consider the use of moderating and mediating variables in their study to obtain more detailed information on the intention to adopt digital banking.

5.6 Conclusion

This study aims to examine the factors affecting the adoption of digital banking among Malaysians. Data gathered throughout the whole research was through the distribution of survey questionnaires, and SPSS 29.0 was utilized for data analysis. The study's result shows that the independent variables, convenience, perceived ease of use, perceived usefulness, and facilitating conditions have a significant relationship with the intention to use digital banking. Subsequently, the study's limitations in this research have been assessed and recommendations for further research were made under them. Therefore, this study may offer certain guidance to researchers in the future on selecting variables, data collecting, and respondent identification.

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Appendix

APPENDIX 1.1: ETHICAL APPROVAL FOR RESEARCH PROJECT

UNIVERSITI TUNKU ABDUL RAHMAN *DU012(A)*
Wholly owned by UTAR Education Foundation   *Co. No. 578227-M*

Re: U/SERC/78-300/2024

1 July 2024

Dr Wei Chooi Yi
Head, Department of Finance
Faculty of Business and Finance
Universiti Tunku
Abdul Rahman Jalan
Universiti, Bandar
Baru Barat   31900
Kampar, Perak.

Dear Dr Wei,

Ethical Approval For Research Project/Protocol

We refer to your application for ethical approval for your students' research project from Bachelor of Finance (Honours) programme enrolled in course UBFZ3026. We are pleased to inform you that the application has been approved under <u>Expedited Review</u>.

The details of the research projects are as follows:

No.	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Factors Affecting the Adoption of Digital Banking Among Malaysian	1. Sean Lee Qing Yang 2. Goh Kai Hen 3. Loh Meng Hao		

		4. Jocelyn Beh Jia Xin	Pn Siti Nur Amira Binti Othman	1 July 2024 – 30 June 2025
2.	Factors Affecting the Adoption of Islamic Banking Products and Services in West Malaysia	1. Chew Kang Yi 2. Eleen Wong 3. Lew Yu Suen 4. Ng Yong Yi		

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.

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

APPENDIX 1.2: SURVEY QUESTIONNAIRE

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF BUSINESS AND FINANCE

BACHELOR OF FINANCE (HONOURS)

RESEARCH PROJECT

FACTORS AFFECTING THE ADOPTION OF DIGITAL BANKING AMONG MALAYSIANS

Dear Respondents,

Good day, we are Year 3 students of Bachelor of Finance (Honours) from Universiti Tunku Abdul Rahman (UTAR) Kampar. Our research focuses on examining the factors affecting the adoption of digital banking among Malaysians.

Instructions:

This questionnaire consists of THREE (3) sections which are Section A, Section B, and Section C. Please answer all the questions and it will take approximately 10-15 minutes to complete. The data and information gathered from this questionnaire will be kept strictly confidential. All responses and results will be utilized solely for academic purposes only. Thank you for your participation.

Acknowledgment of Notice

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

If you have any enquiries, please do not hesitate to contact:

Sean Lee Qing Yang	ksean12345@1utar.my

Loh Meng Hao	menghao0208@1utar.my
Goh Kai Hen	kaihen@1utar.my
Jocelyn Beh Jia Xin	jocelyn1213@1utar.my

Section A: Demographic information

1. Gender:

(   ) Male   (   ) Female

2. Age:

(   ) 15-19   (   ) 20-24 (   ) 25-29   (   ) 30 and above

3. Ethnicity:

(   ) Malay

(   ) Chinese

(   ) Indian

(   ) Others, please state: _____

4. Location:

(   ) Perak

(   ) Selangor

(   ) Penang

(   ) Johor

(   ) Perlis

(   ) Malacca

(   ) Negeri Sembilan

(   ) Terengganu

(   ) Kelantan

(   ) Kedah

(   ) Pahang

(   ) Sabah

(   ) Sarawak

(   ) Kuala Lumpur

(   ) Labuan

(   ) Putrajaya

5.   Occupation:

(   ) Student

(   ) Unemployed

(   ) Employed

6. Income level:

(   ) Not applicable

(   ) RM 1000 and below

(   ) RM 1001 - RM 2000

(   ) RM 2001 - RM 3000

(   ) RM 3001- RM 4000

(   ) RM 4001 - RM5000

(   ) RM 5001 and above

Section B: Dependent variable

Behavioral Intention to Adopt Digital Banking

Individual's desire to embrace and implement new innovations

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I want to know more about digital banking.	1	2	3	4	5
2. I plan to conduct transactions on digital banking.	1	2	3	4	5
3. If necessary, I will use digital banking services.	1	2	3	4	5
4. In the near future, I plan to make greater use of digital banking services.	1	2	3	4	5
5. I will recommend digital banking to everyone around me.	1	2	3	4	5

Section C: Independent variables

Convenience

Users' perception of a website as being easily comprehensible, straightforward, and intuitive

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. I find digital banking system can be accessed anytime as long as there is an internet connection.	1	2	3	4	5
2. I find digital banking system can be accessed anywhere as long as there is an internet connection.	1	2	3	4	5
3. Digital banking helps me be proactive in arranging my time.	1	2	3	4	5
4. Access to the current digital banking system is easy.	1	2	3	4	5
5. Digital banking system helps me easily compare the service prices among different suppliers.	1	2	3	4	5

Perceived Ease of Use

How much a person believes utilizing a specific technology will be effortless

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. I can assess digital banking services easily.	1	2	3	4	5
2. The process of using digital banking services is clear and easy to understand.	1	2	3	4	5
3. I can quickly master the use of digital banking.	1	2	3	4	5

4. Generally, I find it easy to use digital banking.	1	2	3	4	5
5. I think interaction with digital banking does not require a lot of mental effort.	1	2	3	4	5

Perceived Usefulness

How technology can enhance productivity

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. 1. The use of digital banking helps me save money.	1	2	3	4	5
2. The use of digital banking helps me save time.	1	2	3	4	5
3. The use of digital banking allows me to access the service diversely.	1	2	3	4	5
4. Generally, I find it useful to use digital banking.	1	2	3	4	5
5. I think that using digital banking would make it easier for me to carry out my tasks.	1	2	3	4	5

Facilitating Conditions

Individual's perception towards a system's technological and organizational ability to facilitate usage

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. I have the knowledge needed to use digital banking.	1	2	3	4	5
2. Digital banking is compatible with other technologies used.	1	2	3	4	5
3. I can get help from others when having difficulties in using digital banking.	1	2	3	4	5
4. I have the necessary resources to utilize digital banking.	1	2	3	4	5
5. A specific person is available for assistance of digital banking difficulties.	1	2	3	4	5

PERSONAL DATA PROTECTION STATEMENT

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

<u>Notice:</u>

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 ksean12345@1utar.my.

Thank you for your time, opinion and comments.

APPENDIX 1.3: TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION

TABLE 1
Table for Determining Sample Size from a Given Population

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

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

APPENDIX 1.4: RELIABILITY TEST ANALYSIS RESULTS FOR PILOT TEST

Behavioral Intention to Adopt Digital Banking

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	40	100.0
	Excluded^a	0	.0
	Total	40	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.767	5

Convenience

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	40	100.0
	Excluded^a	0	.0
	Total	40	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.795	5

Perceived Ease of Use

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	40	100.0
	Excluded[a]	0	.0
	Total	40	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.809	5

Perceived Usefulness

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	40	100.0
	Excluded[a]	0	.0
	Total	40	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.808	5

Facilitating Conditions

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	40	100.0
	Excluded[a]	0	.0
	Total	40	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.721	5

APPENDIX 1.5: RELIABILITY TEST ANALYSIS RESULTS

Behavioral Intention to Adopt Digital Banking
Scale: Dependent variable

Case Processing Summary

		N	%
Cases	Valid	400	100.0
	Excluded a	0	.0
	Total	400	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.854	5

Convenience
Scale: Reliability Analysis (Convenience)

Case Processing Summary

		N	%
Cases	Valid	400	100.0
	Excluded a	0	.0
	Total	400	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.731	5

Perceived Ease of Use
Scale: Reliability Analysis (Perceived Ease of Use)

Case Processing Summary

		N	%
Cases	Valid	400	100.0
	Excluded a	0	.0
	Total	400	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.856	5

Perceived Usefulness
Scale: Reliability Analysis (Perceived Usefulness)

Case Processing Summary

		N	%
Cases	Valid	400	100.0
	Excluded a	0	.0
	Total	400	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.774	5

Facilitating Conditions
Scale: Reliability Analysis (Facilitating Conditions)

Case Processing Summary

		N	%
Cases	Valid	400	100.0
	Excluded a	0	.0
	Total	400	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.749	5

APPENDIX 1.6: MULTIPLE LINEAR REGRESSION ANALYSIS

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725[a]	.525	.521	.44673

a. Predictors: (Constant), IV4, IV2, IV1, IV3

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87.265	4	21.816	109.320	.000[b]
	Residual	78.827	395	.200		
	Total	166.092	399			

a. Dependent Variable: DV

b. Predictors: (Constant), IV4, IV2, IV1, IV3

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	95.0% Confidence Interval for B Upper Bound	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	.650	.186		3.495	.001	.284	1.015		
	IV1	.318	.056	.313	5.646	.000	.207	.429	.391	2.559
	IV2	.120	.045	.117	2.695	.007	.032	.208	.636	1.573
	IV3	.144	.058	.140	2.472	.014	.030	.259	.374	2.670
	IV4	.286	.054	.272	5.311	.000	.180	.391	.458	2.183

a. Dependent Variable: DV