DETERMINANTS OF INTENTION TO USE ISLAMIC DIGITAL BANKING AMONG GENERATION Z IN MALAYSIA

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SEPTEMBER 2025

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

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Date: 8 September 2025

ACKNOWLEDGEMENT

We would like to use this opportunity to offer our heartfelt gratitude and appreciation to individuals who contributed to our research project, since without the aid of various authorities, we would not have been able to complete it effectively.

First of all, we would like to thank Universiti Tunku Abdul Rahman (UTAR) for allowing us the chance to undertake this research study. Throughout this research, we were able to gain specialised information, skills, and collaboration that would be valuable in the future.

Besides, we would want to convey our heartfelt gratitude to our supervisor, Nik Nuraisyah Binti Nik Azmi, who has patiently advised and mentored us when we faced problems during this research endeavour. We value her involvement, and it is a pleasure to work under her supervision since she has shared many of her opinions and helpful recommendations with us, allowing us to fulfil our study objectives.

In addition, we would like to thank all respondents for their involvement and cooperation in our research project questionnaire surveys. We really thank all the responders who took the time to complete every portion of our research project questionnaire.

Apart from that, we acknowledge the efforts of academics, practitioners, and researchers in digital banking, Islamic, and behavioural attitudes. Their innovative work laid the groundwork for our inquiry and inspired us to learn more.

We extend our heartfelt gratitude to our friends and family for their unwavering support, tolerance, and encouragement during this academic experience. Their unwavering support has been a constant source of motivation and encouragement.

Lastly, we are grateful to our team members for their cooperation, understanding, tolerance, and contributions during the study endeavor.

We want to thank everyone who contributed to the completion of this effort, both directly and indirectly. We are grateful for your amazing support and the opportunity to conduct this study project.

DEDICATION

This research is dedicated to everyone who helped make it a success. Whether direct or indirect, the contributions are invaluable.

We would want to dedicate our studies first and primarily to UTAR. The university provides access to resources such as e-databases and computer laboratories. Our access to technologies and resources allows us to conduct an efficient inquiry.

Second, we dedicate our effort to our FYP supervisor, Nik Nuraisyah Binti Nik Azmi. She facilitated the study by dedicating important time and resources. Her guidance and wisdom helped us overcome problems during our research.

Third, we would like to thank the FYP examiner for assisting us with this study. She provided valuable ideas for improving our study. This allows us to produce a more comprehensive report.

We thank educators, mentors, guardians, and mentors for their support and effort to training future investors. This study could not have been performed successfully without the collaboration of these parties.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
ATM	Automated Teller Machines
BNM	Bank Negara Malaysia
DW	Durbin-Watson
FAQ	Frequently Asked Questions
FBF	Faculty of Business and Finance
Gen Z	Generation Z
GIFT	Global Islamic Fintech
IDT	Innovation Diffusion Theory
IFSA	Islamic Financial Services Act
IMB	Islamic Mobile Banking
P2P	Peer-to-Peer
SPSS	Statistical Product and Service Solutions
TAM	Technology Acceptance Model
UTAR	Universiti Tunku Abdul Rahman
UTAUT	Unified Theory of Acceptance and Use of Technology
VIF	Variance Inflation Factor

LIST OF APPENDICES

PERFACE

The completion of this study is crucial to our undergraduate program at University Tunku Abdul Rahman, under the Bachelor of Business Administration (Hons) Banking and Finance. The subject of this study is "Determinants of Intention to Use Islamic Digital Banking among Generation Z in Malaysia." The purpose of this study is to identify the key factors that significantly influence the adoption of Islamic digital banking services.

With the rapid advancement of financial technology, digital banking has become an essential part of modern financial systems. In Malaysia, Islamic banking plays an important role in promoting financial inclusion, while ensuring compliance with Shariah principles. As Generation Z represents the next major segment of banking consumers, their acceptance and adoption of Islamic digital banking will strongly shape the future of the industry. However, understanding their intentions and motivations requires a careful examination of the factors that drive or hinder their use of such services.

This study explores several independent variables that may determine the intention to use Islamic digital banking, including performance expectancy, effort expectancy, social influence, facilitating condition, and awareness. By analysing the interplay of these dimensions, this research aims to provide a deeper understanding of the behavioural intentions of Malaysian Generation Z towards Islamic digital banking.

The findings of this study are expected to benefit government bodies, financial institutions, policymakers, and educators by offering valuable insights into strategies for enhancing the acceptance of Islamic digital banking among youth. Furthermore, the study contributes to the academic body of knowledge on financial

technology adoption in the context of Islamic banking. Ultimately, the study seeks to support efforts to strengthen financial literacy, promote ethical financial practices, and secure the long-term sustainability of Islamic digital banking in Malaysia.

ABSTRACT

The rapid growth of financial technology has transformed the banking industry, with Islamic digital banking emerging as an important innovation that aligns with Shariah principles. However, the intention of Generation Z to adopt Islamic digital banking in Malaysia remains a critical area of study, as this generation represents the future of financial service consumers. This study investigates the determinants influencing Generation Z's intention to use Islamic digital banking, with emphasis on five major independent variables: performance expectancy, effort expectancy, social influence, facilitating condition, and awareness. A quantitative research design was employed, and data were collected from at least 384 respondents using a convenience sampling method. Questionnaires were distributed to obtain primary data, which were then analysed using the Statistical Package for the Social Sciences (SPSS) version 30.0 through Multiple Linear Regression Model Analysis. The findings provide evidence that these variables significantly affect the behavioural intention to adopt Islamic digital banking among Generation Z in Malaysia. The study highlights the importance of enhancing innovation, improving internet coverage area, and raising awareness to increase adoption rates. These insights can guide financial institutions, policymakers, and educators in promoting Islamic digital banking, ultimately contributing to a more inclusive and sustainable financial system in Malaysia.

Keywords: Behavioural intention to use Islamic digital banking, performance expectancy, effort expectancy, social influence, facilitating condition, awareness, gen Z

Subject area: HG1501-3550 Banking

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

This study aims to explain the intentions of Malaysian Generation Z towards Islamic digital banking by examining its research background from multiple perspectives. To better understand and address the challenges facing Islamic digital banking in Malaysia, a clear problem statement is presented. Additionally, this section outlines the research questions and objectives that guide the investigation. The study also highlights its potential contributions and discusses the broader implications for future research in the field.

1.1 Research Background

The banking and financial services sector plays a vital role in facilitating economic activities, improving financial accessibility and enhancing the quality of life for individuals and businesses alike. In recent years, the global banking sector has experienced significant changes, fueled by advancements in technology, shifts in customer expectations, evolving regulatory frameworks, and growing competition from fintech and other non-traditional financial players (Indriasari et al., 2022). For instance, banking has evolved from traditional physical branches to the use of Automated Teller Machines (ATMs), followed by the introduction of online banking, mobile applications, and most recently, AI-driven financial platforms (Indriasari et al., 2022). The evolution of banking reflects broader shifts towards digitalization and customer-centric service delivery models (Kitsios et al., 2021).

One of the most significant developments in the 21st century financial landscape is the emergence of digital banking, a model that enables the execution of banking activities and services through electronic platforms, often without the need for physical branches (Alam et al., 2021). Digital banking refers to a broad spectrum of financial services delivered through digital channels, such as internet and mobile banking, e-wallets, and online tools for managing finances (Alkhowaiter, 2020). These attributes have made digital banking a core strategy for many financial institutions seeking to remain competitive and responsive to evolving consumer needs (Alkhowaiter, 2020).

The COVID-19 pandemic further accelerated digital banking adoption globally, as lockdowns and movement restrictions forced individuals and businesses to shift to remote and online alternatives. Governments, businesses and consumers rapidly adapted to digital channels for daily transactions, spurring the rise of e-wallets, peer-to-peer (P2P) payments, and contactless banking solutions (Sugandi, 2022). The World Bank (2022), reported a significant increase in global account ownership and digital financial service usage during the pandemic, highlighting the irreversible shift toward digital financial ecosystems. As of 2021, 76% of adults globally held an account with a bank, financial institution, or mobile money service which shows an increase from 68% in 2017 (Demirgüç-Kunt et al., 2022; see Figure 1.1).

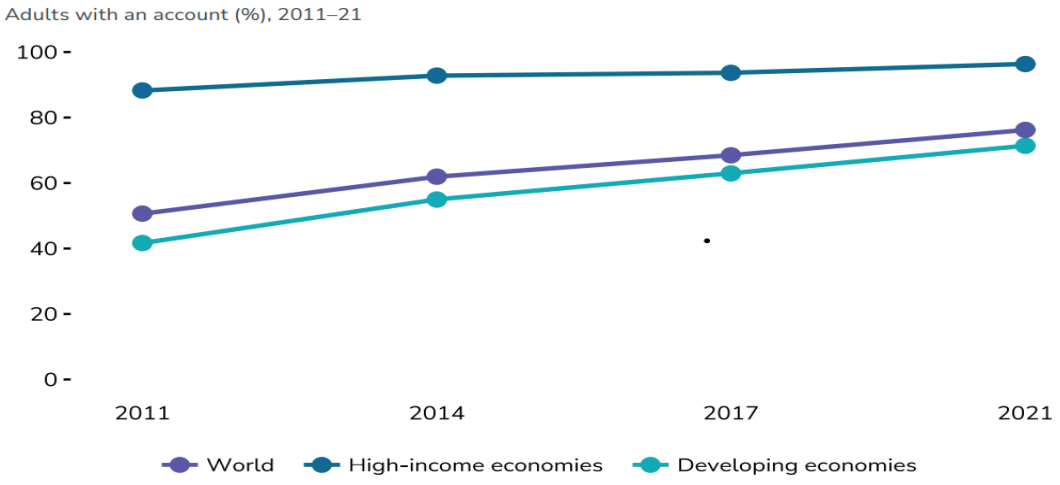

Figure 1.1. Global account ownership. Adapted from Demirgüç-Kunt, A., Klapper,

L., Singer, D., & Ansar, S. (2022). *The Global Findex Database 2021: Financial Inclusion, Digital Payments, and Resilience in the Age of COVID-19.* World Bank Group. https://www.worldbank.org/en/publication/globalfindex/Report

Moreover, Figure 1.2 illustrates a significant decline in the use of cash for purchases, with many consumers opting for peer-to-peer (P2P) payments through digital means rather than relying on cash or checks. During the COVID-19 pandemic, mobile banking usage increased from 59% to 64%, while the use of online banking grew from 75% to 79%. Furthermore, the percentage of individuals who made at least one mobile payment in the 12 months leading up to October 2020 rose to 46.1%, compared to 37.5% in October 2019. Digital payment platforms such as PayPal, Venmo, and Zelle also saw substantial growth in adoption during this period (Greene et al., 2022; see Figure 1.3).

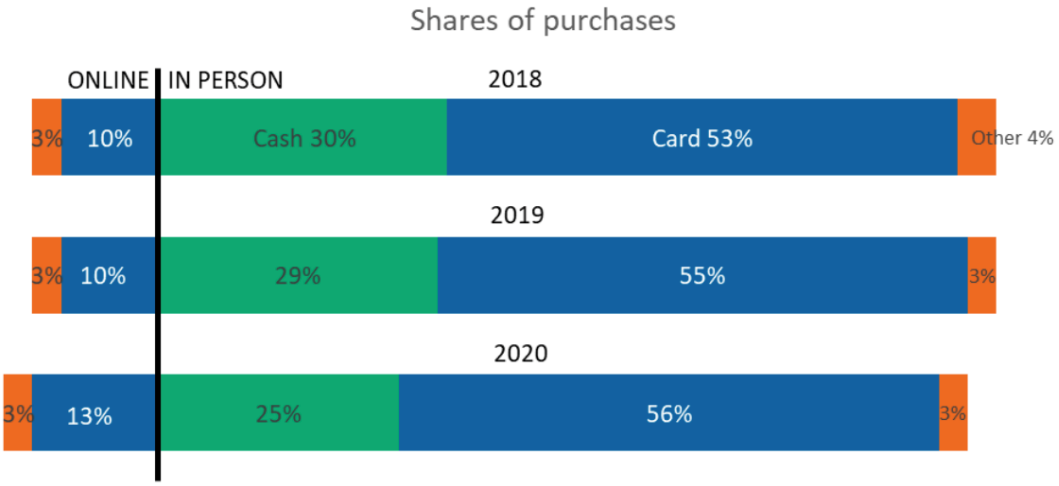

Figure 1.2. Shares of purchases. Adapted from Greene, C., Merry, E., & Stavins, J. (2022). *Has COVID Changed Consumer Payment Behavior?* Federal Reserve Bank of Boston Research Department Working Papers No. 21-12. https://doi.org/10.29412/res.wp.2021.12

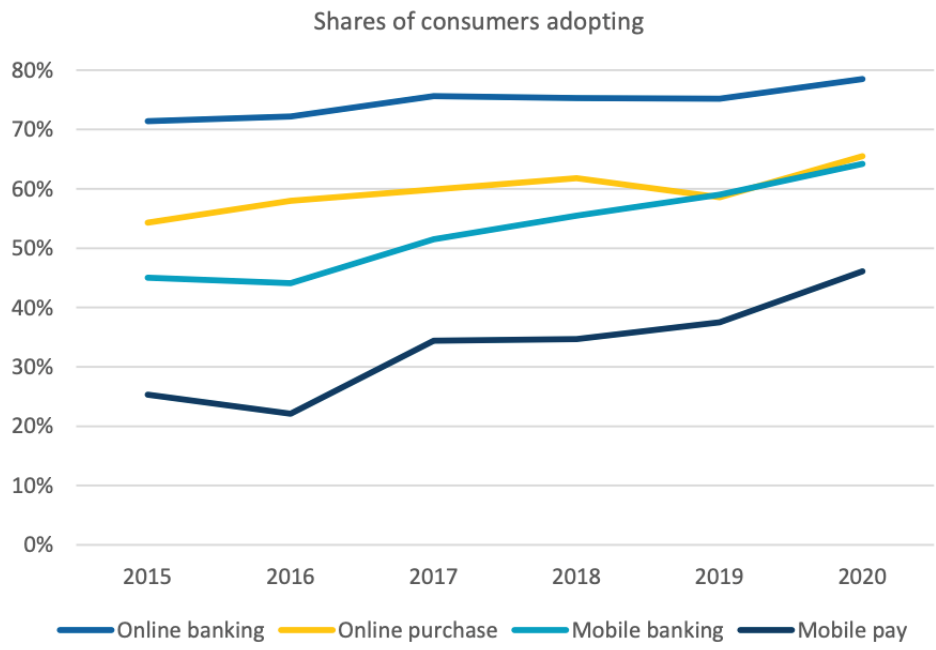

Figure 1.3. Share of consumers adopting online or mobile banking or payments, by year. Adapted from Greene, C., Merry, E., & Stavins, J. (2022). *Has COVID Changed Consumer Payment Behavior?* Federal Reserve Bank of Boston Research Department Working Papers No. 21-12. https://doi.org/10.29412/res.wp.2021.12

In Malaysia, which operates a dual banking systems comprising both conventional and Islamic banking, has made a significant stride in digital banking adoption. In parallel, Islamic banking is a system grounded in Shariah (Islamic law) has experienced substantial growth among both Muslim and non-Muslim reflecting Malaysia's multicultural and inclusive society. Islamic banking is guided by core principles that include the prohibition of *riba* (interest), *gharar* (uncertainty), and *maysir* (gambling/speculation), while promoting ethical financial practices, social equity, and the concept of risk-sharing (Kholid & Adam, 2025).

As a member of the early adopters of Islamic elements in banking field, Malaysia enacted the Islamic Banking Act 1983, laying the foundation for what has since become a cornerstone of the national economy. The sector has been supported by a constant product innovation, the presence of international Islamic financial institutions, a wide range of *Shariah*-compliant investment products, a

comprehensive financial infrastructure, and the adoption of global regulatory and legal best practices. With a robust regulatory framework, a strong network of Islamic financial institutional, and continued government support, Malaysia has positioned Islamic finance as a key pillar of its national financial system (Bank Negara Malaysia, 2023).

With the rise of Islamic banking as a transformative force, Malaysia's financial landscape has undergone a dramatic transformation. Islamic banks have been at the forefront of leveraging digital technologies to enhance their offerings and expand their customer base (Fernandes, 2024). This digital transformation is commonly referred to as Islamic digital banking which marks a crucial evolution, enabling financial institutions to deliver *Shariah*-compliant products through digital platforms. The issuance of digital banking licenses by Bank Negara Malaysia (BNM) in 2020 underscores the nation's commitment to fostering an inclusive, technology-driven, and ethical financial ecosystem (see Figure 1.4). However, despite these advancements, challenges persist particularly in balancing Shariah values with digital convenience, without compromising on religious authenticity or user trust.

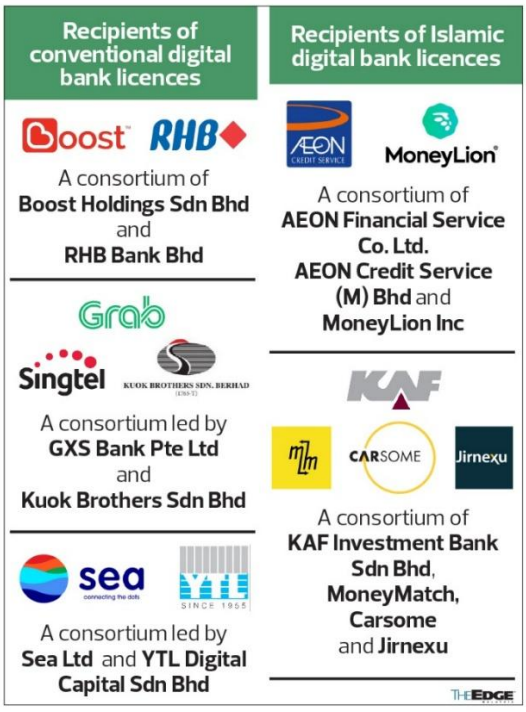

Figure 1.4. Recipients of Islamic & conventional digital bank licenses. Adapted from Raj, A. P. (2022, May 18). *Special Report: Will digital banks be a game changer?* The Edge Malaysia. https://theedgemalaysia.com/article/special-report-will-digital-banks-be-game-changer

An increasingly important demographic in the future of Islamic digital banking is Generation Z (Gen Z), referring to individuals born between 1997 and 2012. Representing nearly 30% of Malaysia's population, Gen Z is now entering adulthood and assuming roles related to financial independence, employment, and entrepreneurship (Tjiptono et al., 2020). As digital natives, Gen Z grew up surrounded by smartphones, mobile applications, and real-time digital services, which have shaped their expectations around speed, transparency, convenience, and ethical alignment. According to Faridi et al. (2024), 62% of Gen Z in Malaysia use mobile wallets, and 68% prefer fintech platforms as their primary financial services providers. Given that Gen Z's adoption patterns are expected to drive the sustainability and innovation of the financial industry in the coming decades, understanding and addressing their preferences is crucial for Islamic digital banks seeking to remain competitive and relevant in the long term.

Despite Malaysia's significant advancements in Islamic finance and digital infrastructure, the adoption of Islamic digital banking by Generation Z remains limited. According to Mambu (2024), a substantial portion of Gen Z either lacks awareness of Islamic digital banking services or remains sceptical about their usability and *Shariah* compliance. In addition, strong market competition from non-Islamic fintech platforms such as Touch 'n Go, GrabPay, and BigPay has attracted a large Gen Z user base by offering a superior user experience, enhanced digital rewards, and broader service offerings (TraceData, 2024). As a result, Islamic financial institutions face a dual challenge of the need to enhance their digital capabilities while remaining faithful to Islamic principles.

Furthermore, in an era of increasing digital disruption, customer satisfaction, personalisation, and trust have become critical success factors. Islamic banks must reimagine their digital strategies to appeal to value-driven Generation Z consumers, who prioritize ethical alignment, social consciousness, and ease of use (Zahari et al., 2024). Incorporating emerging technologies such as artificial intelligence (AI), blockchain, and smart contracts into *Shariah*-compliant services could help bridge the gap between modern expectations and religious authenticity. However, this integration must be executed in a manner that preserves credibility and maintains consumer confidence (Fintech News Malaysia, 2025).

Therefore, to secure the future of Malaysia's Islamic finance ecosystem, it is essential to comprehend the factors that influence Generation Z's intention to adopt Islamic digital banking. As digital natives and ethically driven consumers, Gen Z represents both a challenge and an opportunity for Islamic banks aiming to balance *Shariah* compliance with technological innovation. In an increasingly competitive digital economy, Gen Z's preferences which driven by expectations of convenience, personalisation, and value alignment such as sustainability and transparency will play a crucial role in determining the relevance and growth of the Islamic digital banking sector.

1.2 Problem Statement

The growing importance of digital banking in today's financial landscape is undeniable. In Malaysia, where Islamic finance has long been a core component of the national economy, the evolution of Islamic digital banking presents both opportunities and challenges. These digital banks are envisioned to transform financial services particularly for underserved groups such as B40 income segment, through tailored and innovative solutions (PWC, 2020). In fact, Malaysia remains as a global leader in Islamic finance ranking among the top three globally with over USD 275 billion in Islamic banking assets (ICD-LSEG, 2025; see Figure 1.6).

Moreover, Malaysia has topped the Islamic Finance Development Indicator (IFDI) for 12 consecutives years, achieving a score of 144 in 2024 (see Figure 1.7). Further reinforcing its leadership, Malaysia also ranked first among 64 OIC and non-OIC countries in the Global Islamic Fintech (GIFT) Index, with a score of 84 (Salaam Gateway, 2023).

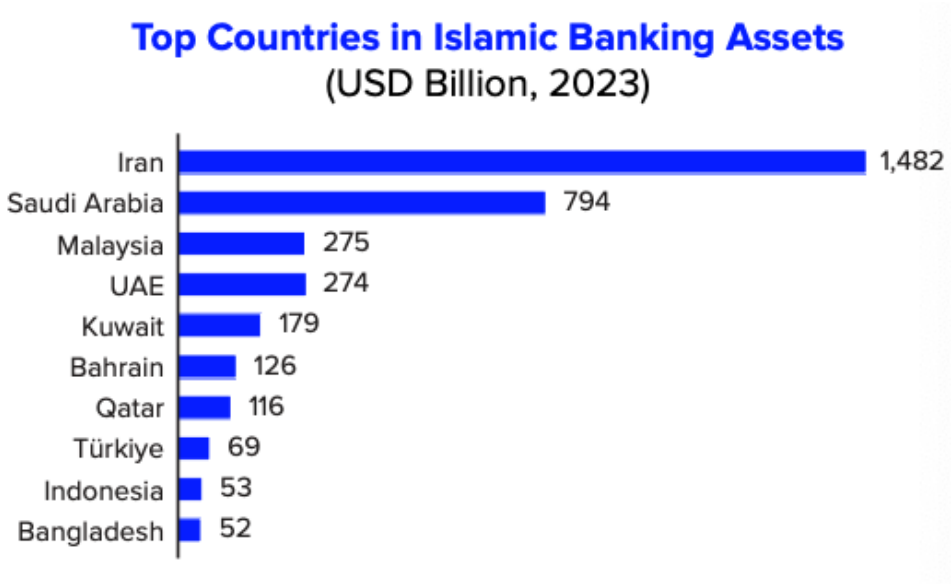

Figure 1.5. Top Countries in Islamic Banking Assets. Adapted from Islamic Corporation for the Development of the Private Sector (ICD) – London Stock Exchange Group (LSEG). (2025). *Islamic Finance Development Report 2024: From Niche to Norm.* https://www.lseg.com/en/data-analytics/islamic-finance/islamic-market-intelligence/islamic-finance-development-report-2024

Ranking	Country	IFDI Score	Financial Performance	Governance	Sustainability	Knowledge	Awareness
1	Malaysia	144	157	101	128	147	200
2	Saudi Arabia	119	146	72	96	90	177
3	UAE	88	77	85	39	68	200
4	Indonesia	85	63	79	33	200	107
5	Pakistan	75	40	78	24	119	200
6	Kuwait	70	55	80	28	24	191
7	Bahrain	68	45	85	28	37	185
8	Iran	65	123	55	-	10	5
9	Qatar	45	30	65	27	15	101
10	Türkiye	45	41	63	22	58	28
11	Bangladesh	41	33	85	23	20	17
12	Oman	35	14	75	24	23	46
13	Brunei Darussalam	29	11	71	14	23	24
14	Jordan	29	15	50	46	37	6
15	Nigeria	28	7	68	22	18	27
Global Average		**12**	**8**	**21**	**8**	**9**	**13**

*The scores are rounded up, except for 200 which is the maximum attainable score

Figure 1.6. Top IFDI Countries and Global Average Score for 2024. Adapted from Islamic Corporation for the Development of the Private Sector (ICD) – London Stock Exchange Group (LSEG). (2025). *Islamic Finance Development Report 2024: From Niche to Norm.* https://www.lseg.com/en/data-analytics/islamic-finance/islamic-market-intelligence/islamic-finance-development-report-2024

However, despite Malaysia's leadership in Islamic finance and strong digital infrastructure, the adoption of Islamic digital banking among Generation Z remains limited. This raises several concerns, including the potential slowdown in Islamic finance growth, weakened financial inclusion efforts, and the risk of Malaysia losing its competitive edge in global Islamic finance. According to AlHuda Centre of Islamic Banking and Economics (2025), one of the key future drivers of Islamic finance growth is the rapid advancement of Islamic fintech. In order to maintain leadership in Islamic finance, Malaysia must embrace digital innovation while ensuring to *Shariah* principles.

As Malaysia transitions toward a digital economy, Gen Z emerges as a crucial driver of future financial behaviour. This cohort is not only the most connected and tech-savvy generation to date, but also one that increasingly seeks products and services aligned with their ethical, social and religious values. Although Islamic digital banking offers benefits such as convenience, cost savings, and religious compliance (Muharromah et al., 2024), Islamic banking sector still struggled to fully capture Gen Z's interest and engagement.

The low adoption of Islamic digital banking among Gen Z poses several critical problems. First, it may hinder the growth of the Islamic finance by limiting market penetration among one of its most strategically important demographics. A study by Mambu (2024), found that 39% of Gen Z Muslim respondents in Malaysia were unaware of Islamic digital banking services, 28% lack of access, and 18% expressed concerns about their *Shariah* compliance.

Secondly, if Islamic digital services fail to evolve as rapidly as conventional banking platforms, they risk becoming irrelevant to Gen Z users. Mambu (2024) reported that 80% of Gen Z Muslims consider mobile access essential, 85% of non-users shows interest in Islamic banking, and 64% emphasize the need for user-friendly platforms. These findings highlight a significant gap between consumer expectations and institutional offerings, signalling the need for Islamic financial institutions to modernize their platforms without compromising *Shariah* compliance and principles.

Another critical concern is the underperformance of Islamic digital banks relative to conventional banks suggest a competitive disadvantages. According to TraceData Research (2024), 40% of customers express dissatisfaction with Islamic bank's digital platforms compared to their conventional counterparts. This is not only reducing user trust but also may reinforce the perception that Islamic banks are outdated or less user-friendly. Moreover, Fintech News Malaysia (2025) reported that it can be clearly seen from Gen Z users currently engage with platforms such as Touch 'n Go eWallet, Grabpay and ShopeePay applications that offer superior user experience, digital rewards and widespread merchant acceptance, thereby exacerbating the adoption gap between Islamic and conventional digital financial services.

Therefore, while a number of studies have explored digital banking adoption in Malaysia, most existing studies focus on the millennial generation or the general

population (Bakri et al., 2023; Mohd et al., 2021; Tiong, 2020). Furthermore, these studies commonly apply Unified Theory of Acceptance and Use of Technology (UTAUT) without further theoretical expansion. There is a clear research gap addressing the unique behavioural patterns, values and technological expectation of Gen Z in the context of Islamic digital banking.

Nevertheless, this study aims to address these challenges by exploring the behavioural intention of Gen Z to adopt Islamic digital banking in Malaysia. This study extends the existing research framework by incorporating core variables such as performance expectancy, effort expectancy, social influence and facilitating conditions to provide more thorough understanding of adoption behaviour. Additionally, this study introduces awareness as an extended variable, offering more comprehensive understanding of Gen Z's adoption behaviour towards Islamic digital banking. By addressing these gaps, this study aims to support Islamic financial institutions in crafting more effective strategies tailored to the digital and ethical expectations of Gen Z.

1.3 Research Objectives

1. To study the relationship between performance expectancy and the intention to use Islamic digital banking among Generation Z in Malaysia.
2. To study the relationship between effort expectancy and the intention to use Islamic digital banking among Generation Z in Malaysia.
3. To study the relationship between social influence and the intention to use Islamic digital banking among Generation Z in Malaysia.
4. To study the relationship between facilitating conditions and the intention to use Islamic digital banking among Generation Z in Malaysia.
5. To study the relationship between awareness and the intention to use Islamic digital banking among Generation Z in Malaysia.

1.4 Research Questions

1. Does performance expectancy lead to the intention to use Islamic digital banking among Generation Z in Malaysia?
2. Does effort expectancy lead to the intention to use Islamic digital banking among Generation Z in Malaysia?
3. Does social influence lead to the intention to use Islamic digital banking among Generation Z in Malaysia?
4. Does facilitating conditions lead to the intention to use Islamic digital banking among Generation Z in Malaysia?
5. Does awareness lead to the intention to use Islamic digital banking among Generation Z in Malaysia?

1.5 Significance of Research

This study focusing on determining the intention of Generation Z to adopt Islamic digital banking in Malaysia. The study examines how various the factors such as performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness affect the intention of Generation Z to adopt the Islamic digital banking. The reason for focusing on Generation Z is that they are the digital natives, the generation that is most familiar and engaged with digital technology. Understanding the drivers of their adoption of Islamic digital banking can provide insights to the industry and policy makers. The significance of this study can be categorized by several dimensions, which are practical contributions, economic contributions, and policy contributions.

The first significance of the study is to provide valuables insight to industry players.

Through this research, the Islamic banking industry and related fintech companies will gain a clearer understanding of the factors that drive Gen Z's intentions, which will help the Islamic banking industry to design user-centric digital platform that meet Gen Z's expectations. For example, performance expectations will be raised by providing faster and effort expectations will be raised by strengthening security measures. Besides that, by appreciating the roles of social influence and awareness, industry players can develop more effective marketing strategies. For instance, influencer partnerships, peer recommendations, and educational campaigns can grab the attention of Gen Z and build their trust. Finally, understanding the preference of Gen Z can also help industry stakeholders develop customized products and services that resonate with their needs and values.

This study can make a significant contribution to the Islamic financial inclusion in Malaysia. Malysia is a global leader in Islamic finance, with Islamic banking assets accounting for approximately 25% of the total banking assets. By understanding those factors affect the Gen Z, this study can support the provision of more *Shariah*-compliance financial services for underserve teenager. This is in line with the strategies of Malaysia's Financial Sector Blueprint 2022-2026, particularly in terms of 'finance for all' and 'advancing digitalization'. Finance for all implies increasing the availability and accessibility of financial services, while advancing digitalization emphasizes the promotion of the digitalization economy. By examining how social influence and facilitating conditions such as internet accessibility shape the intention of Gen Z, this study provide actionable insights for accelerating the development of *Shariah*-compliance digital services.

Furthermore, this study contributes to policymakers in strengthening the Islamic finance ecosystem and digital economy of Malaysia. This study underscores the needs for regulatory modernization to address emerging challenges in Islamic digital banking. For instance, updating the *Shariah* governance framework to ensure that digital banking operations remain transparent and fully compliant with *Shariah* principles. Second, the study also highlights the needs for digital infrastructure investments, especially in rural and underserved areas, to address internet access

issues. Thirdly, the study also provides insight into awareness of Gen Z's perception of Islamic digital banking. Many young generations are still confused about the operation of Shariah principles and the benefits of ethical finance. This study can help policymakers design targeted education to improve the financial literacy of Gen Z, increase their awareness of Islamic finance and promote digital banking.

1.6 Conclusion

Overall, this chapter outlined the evolution of digital banking, the pivotal role of Islamic finance in Malaysia's economy, and the growing importance of digitalisation in financial services. Gen Z, as a digitally native and value-driven demographic, has potential influence on the sustainability of Islamic digital banking. The urgency of understanding Gen Z's low adoption rates was emphasized, as it may hinder financial inclusion and slow the growth of Malaysia's Islamic finance sector. This study lays the groundwork for an in-depth exploration of the key factors shaping Gen Z's adoption rate and seeks to offer practical insights to strengthen Malaysia's Islamic digital finance ecosystem.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This chapter analysed the connection between Generation Z's intention to adopt Islamic digital banking in Malaysia and the four identified independent variables. The four independent variables are performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness. The study applied the Unified Theory of Acceptance and Use of Technology (UTAUT) and presented a conceptual framework to illustrate these connections. Lastly, the research hypotheses will be formulated based on both theoretical and conceptual framework.

2.1 Theoretical Framework

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

The Unified Theory of Acceptance and Use of Technology (UTAUT), introduced by Venkatesh et al. (2003), was developed to explain user intentions and subsequent behaviours in adopting new technologies. Originally conceptualized for organizational settings, particularly in understanding employee adoption of enterprise technologies, UTAUT integrates elements from three prominent models, including Technology Acceptance Model (TAM), Theory of Planned Behaviour (TPB) and Innovation Diffusion Theory (IDT).

The theory identifies four primary constructs influencing technology acceptance, namely performance expectancy, effort expectancy, social influence, facilitating conditions. Empirical validation found that performance expectancy, effort expectancy, and social influence significantly affect users' behavioral intention to adopt a technology. Facilitating conditions, however, have been shown to have a stronger impact on actual system use rather than on behavioral intention (Venkatesh et al., 2003). Additionally, the effects of these constructs are moderated by key demographic and situational factors, namely age, gender, experience, and voluntariness of use.

To better capture technology acceptance in consumer contexts, UTAUT model was extended to UTAUT2 by Venkatesh et al. (2016). While the original model focused on workplace adoption, where technology use was often mandatory, consumer adoption is voluntary and driven by motivations like enjoyment and cost. Consumer behavior is influenced by personal preferences, habits, and perceptions of cost-benefit trade-offs, which were not fully captured in UTAUT. To bridge this gap, UTAUT2 introduced constructs of hedonic motivation, price value, and habit (Venkatesh et al., 2016). Validated across diverse cultural contexts (e.g., individualistic vs. collectivistic societies) and industries (e.g., mobile banking, e-learning, telemedicine), it offers deeper insights into consumer decision-making process (Schmitz et al., 2022). Further extensions incorporate trust and perceived risk in areas like smart homes and healthcare (Plohl & Nenad, 2024).

The evolution from UTAUT2 to UTAUT3 was driven by the need to understand individual differences in innovative technology adoption, with the addition of a new construct, personal innovativeness. It reflects a personality trait that influences how users perceive and interact with innovative systems. Extensions like UTAUT3 have introduced additional moderating variables (e.g., gender-specific social influence) and mediators (e.g., attitude) to refine the understanding of how external factors influence user behavior (Ngusie et al., 2024). UTAUT3 has been applied across diverse fields such as education (e.g., lecture capture systems), augmented reality applications, and mobile banking (Pinto et al., 2022).

For this study, the UTAUT framework serves as a foundational model for understanding Generation Z's behavioral intention to adopt Islamic digital banking in Malaysia, with relevant extensions integrated to suit the context of religious and digital financial services.

2.2 Relevant Past Studies

2.2.1 Generation Z's Behavioral Intention to Adopt Islamic Digital Banking

The concept of behavioral intention was originally introduced by Fishbein and Ajzen (1967) as a function of behaviour and later refined by Ajzen (1985) as a key predictor of individual actions across various contexts. In digital banking, behavioural intention reflects the likelihood that consumers will adopt digital platforms such as online banking, mobile banking, and other fintech-based services. These platforms allow users to access financial accounts and conduct transactions anytime and anywhere, eliminating the need for physical branch visits and thereby saving time and effort.

Islamic digital banking emerges as a subset of digital banking that aligns all products and transactions with *Shariah* principles. It aims to provide both Muslims and non-Muslims with ethical, interest-free, and *Shariah*-compliant financial solutions (Aziz et al., 2023).

Generation Z (Gen Z), born between 1998 and 2009, represents the first generation of true digital natives. Growing up with mobile devices, social media, and the

Internet, they are highly adaptive to technology and play an important role in shaping digital financial ecosystems. Unlike older generations where they are priotitize and interested in mortgages, loans and insurance, meanwhile Gen Z tends to focus on basic financial services such as saving accounts which were often initiated at a younger age (Kurniawan et al., 2023). Furthermore, Gen Z consumers are highly selective and tend to switch providers quickly if their expectations are not met, making it more crucial for financial institutions to understand their preferences and values (Girimurugan et al., 2024).

Several prior studies have explored behavioural intention towards Islamic digital banking in various contexts. For instance, Khan et al. (2022) examined the determinants of behavioural intention towards Islamic fintech among Middle Eastern consumers. Harahap et al. (2023) investigated how Islamic lifestyle moderates the effects of social influence, habits and spiritual motivation on the adoption of Islamic digital banking. Similarly, Hasib et al. (2023) found that perceived usefulness and religiosity mediated by attitude, significantly influence intention to adopt Islamic digital banks. Meanwhile, Pratiwi (2023) focused on perceived credibility and perceived risk as key predictors of adoption behaviour.

In Malaysia, Islamic banks are being encouraged to embrace digital transformation in line with global trends. Bank Negara Malaysia (BNM) has granted licenses to Islamic financial institutions to operate under the Islamic Financial Services Act (IFSA) 2013. As part of its digitalization agenda, BNM introduced the Financial Sector Blueprint 2022–2026, which outlines key strategies for building a more resilient, efficient, and technology-driven financial ecosystem. A major focus of the blueprint is ensuring regulatory readiness to support responsible digital innovation while maintaining financial stability and protecting consumers.

The rise of Islamic digital banking in Malaysia marks a pivotal step toward modernizing financial services while promoting *Shariah*-compliant solutions. It also serves as a pathway to greater financial inclusion, particularly for unbanked

and underserved communities. In this regard, BNM emphasizes that Islamic digital banking should integrate financial inclusion elements to address social challenges such as poverty alleviation (Aziz et al., 2023).

2.2.2 Performance Expectancy

Performance expectancy refers to the degree to which an individual believes that using a particular technology will help them achieve gains in job performance or personal effectiveness (Venkatesh et al., 2012). This concept was originated from the perceived usefulness in the Technology Acceptance Model (TAM) which emphasizes how users assess whether a system enhances their efficiency, effectiveness or productivity (Or, 2023).

In the context of Islamic digital banking, performance expectancy can also include ethical and religious considerations, where the perceived compliance of services with Islamic principles enhances customer satisfaction and trust (Rahman et al., 2023). Thus, when users perceived Islamic digital banking as both beneficial and *Shariah*-compliant, they are more inclined to adopt it.

Several empirical studies have highlighted the role of performance expectancy in Islamic financial technology. For instance, Thaker et al. (2019) found that tangible benefits such as convenience, time efficiency, and security significantly influences customers' willingness to adopt Islamic Mobile Banking (IMB) services. In a related study, Thaker et al. (2020) recommended that Islamic banks enhance their online platforms by integrating user-friendly features such as efficient mobile applications, intuitive navigation, and comprehensive digital services, which will improve the perceived performance of the system.

Moreover, according to Yaseen and Dajani (2022) found that customers' trust in IMB services specifically their reliability and efficiency to amplify the impact of performance expectancy on behavioral intention. Hence, when users' belief that the system will perform reliably and as promised, their likelihood of adoption increases significantly.

To date, no specific study has identified a negative impact of performance expectancy on behavioral intention in various technologies. However, Hidayah and Mutiara (2022) found that digital based cash waqf system did not strongly motivate their intention to use the platform even though users recognized the potential benefits. Similarly, Zea and Halim (2024) discovered that performance expectancy had a limited effect on Gen Z's utilization of digital banking in the Jabodetabek region of Indonesia. This phenomenon may be attributed to market saturation, user familiarity with digital financial services, or baseline expectations that such systems should already perform efficiently. As a result, performance expectancy, while generally positive, may not always significantly influence behavioural intention in highly digitalized or mature markets.

2.2.3 Effort Expectancy

Effort expectancy is defined as the degree to which an individual believes that using a particular system will be free of effort (Venkatesh et al., 2003). It is one of the four core constructs in the Unified Theory of Acceptance and Use of Technology (UTAUT) and is conceptually similar to the construct of Perceived Ease of Use found in the Technology Acceptance Model (TAM). While both constructs emphasize ease of system use, Effort expectancy in UTAUT provides a broader understanding by incorporating social and organizational influences that affect users' perception of effort in using a technology (Chu et al., 2022).

Empirical studies have consistently shown that effort expectancy plays a critical role in shaping users' behavioral intention toward adopting digital technologies. It serves as a vital antecedent in both TAM and UTAUT models and has been found to significantly predict user behaviour across different technological contexts and geographical regions (Ali et al., 2022). The core idea is that when users perceive a system to be easy to use, they are more likely to develop a positive intention to adopt and utilize that system.

In the context of Islamic digital banking, effort expectancy has been identified as a significant factor influencing behavioral intention. A study by Pratiwi (2023) found that customers' intention to use Islamic banking digital services was positively influenced by their perceptions of ease and comfort in using those services. This reflects the notion that lower perceived effort leads to higher willingness to adopt the technology. When users believe that digital banking platforms are user-friendly and require minimal effort, they are more likely to engage with them. Such findings align with prior research on general digital banking platforms, reinforcing the notion that intuitive design and ease of navigation are central to driving adoption (Bajunaied et al., 2023; Harahap et al., 2023).

Furthermore, several technological features have been shown to enhance Effort Expectancy, especially in the context of mobile and digital banking. According to Mensah and Khan (2024), mobile banking applications that are perceived as easy to use significantly improve customers' experiences, particularly when features such as simplified access and secure authorization mechanisms are in place. The inclusion of intuitive functionalities like enhanced card controls, budgeting tools, instant transfers, and wearable integration (e.g., smartwatches) further contributes to reducing the cognitive and operational effort required by users (Chen et al., 2023). These features collectively enhance the usability and attractiveness of digital banking platforms, making them more accessible to a broader range of users.

In the banking sector, the relevance of effort expectancy extends into other domains such as mobile health services and organizational technology adoption. Mensah et al. (2022) highlighted that effort expectancy significantly influences adoption intentions in mobile health platforms, particularly among users with high mobile self-efficacy. Additionally, Gallant et al. (2022) demonstrated that effort expectancy mediates the relationship between organizational readiness and employees' behavioural intention to adopt new technologies. These insights underline the universality of effort expectancy as a predictor of adoption across multiple digital service environments.

Therefore, in Islamic digital banking it is essential to ensure that platforms are simple, intuitive, and low-effort to use is essential in encouraging adoption, particularly among digital-native segments such as Generation Z. Therefore, financial institutions must invest in designing seamless user experiences that minimize perceived effort, thereby improving the likelihood of widespread technology uptake.

2.2.4 Social Influence

Social influence is one of the key constructs in the Unified Theory of Acceptance and Use of Technology (UTAUT) model, which explores how external social factors affect individuals' behavioural intentions and actual technology usage. According to Venkatesh et al. (2003), who originally proposed the UTAUT model, social influence is defined as 'the extent to which an individual perceives that important others believe they should use a new technology. Venkatesh et al. (2003) also highlighted that social influence is significant in the early stages of technology adoption, especially when users rely on opinions from their social circles to make decisions.

In the context of Islamic digital banking among Generation Z in Malaysia, social influence refers to the degree to which individuals perceive that important others believe they should use Islamic digital banking services (Hasib et al., 2023). According to the research of Lajuni et al. (2017), religious adherence significantly affects the intention to use Islamic banking products, with social influence acting as a mediating factor. This is particularly relevant in Malaysia, where Islamic finance is deeply integrated into the national banking system and supported by regulatory bodies such as Bank Negara Malaysia.

Moreover, in the digital era, social influence increasingly manifests through online platforms. Information about Islamic banking services is rapidly disseminated across social media, financial forums, and digital. Abdurrahman (2024) highlights that platforms like Instagram, YouTube, and TikTok are frequently used by financial institutions to promote Islamic digital banking products. Collaborations with social media influencers who uphold Islamic values serve to enhance credibility and influence potential adopters, particularly younger demographics who are active on these platforms.

Beyond the Islamic banking sector, social influence has been extensively studied in the broader digital banking and technology adoption landscape. For instance, a study by Shareef et al. (2017) investigated the impact of social media marketing on consumer trust and adoption rates in digital banking services, emphasizing the role of different advertisement sources. Their findings suggest that social influence, facilitated through social media platforms, significantly affects consumers' willingness to adopt digital banking solutions. Similarly, research by Alalwan et al. (2017) on mobile banking adoption indicates that peer recommendations and social validation positively impact consumers' intentions to embrace new financial technologies. Collectively, the reviewed studies underscore that social influence, whether manifested through direct interpersonal engagement or mediated via digital channels, constitutes a significant determinant in the adoption of digital banking services (Merhi et al., 2019).

2.2.5 Facilitating Conditions

In the Unified Theory of Acceptance and Use of Technology (UTAUT), facilitating conditions refer to the degree to which an individual believes that adequate organisational and technical infrastructure is available to support effective system use (Zuiderwijk et al., 2015). In the context of Islamic digital banking, facilitating conditions encompass the availability of resources such as compatible devices, reliable internet connections, user-friendly platforms, and customer support that assist users in effectively utilizing digital banking services (Farzin et al., 2021). Raza et al. (2019) emphasize that perceived facilitating conditions significantly influence behavioral intention to adopt mobile banking within Islamic financial institutions, suggesting that users who perceive sufficient support and infrastructure are more inclined to engage with digital financial services.

In Islamic digital banking, facilitating conditions not only involve technological ease but also include religious and cultural considerations. For many Muslim users, confidence in a platform's compliance with *Shariah* principles is crucial. Harahap et al. (2023) argue that when Islamic digital banking platforms clearly guide users on *Shariah*-compliant features and ensure transparent access to Islamic financial resources, the users' perceived competence in engaging with these platforms improves. Similarly, Sudarsono et al. (2024) identified facilitating conditions as a distinct determinant of Islamic mobile financial services adoption. Their study highlighted that features such as accessible digital platforms, proper customer support channels, and availability of Islamic financial knowledge are necessary to reduce user uncertainty and make digital banking platforms more approachable. When users find that they can easily access help and information, particularly content related to Islamic financial compliance such as zakat calculators, halal

transaction guidelines, and *Shariah*-certified service indicators, it strengthens their intention to use the service (Mutmainah et al., 2024).

The importance of facilitating conditions is further supported by empirical evidence in the adoption of Islamic digital banking services. For instance, Yuliana and Aprianingsih (2021) highlighted that well-established infrastructure and technical readiness in Islamic banking platforms positively influence user adoption. The presence of reliable mobile applications, step-by-step usage guidance, and technical support channels designed with Islamic content has been shown to empower users, especially those who may be unfamiliar with digital financial tools but prioritize religious considerations. Similarly, Sudarsono et al. (2022) investigated the adoption of mobile banking among Indonesian Muslim students and found that facilitating conditions positively influence their intention to use such services, highlighting the importance of providing adequate resources and support to enhance user adoption. These studies collectively highlight that users are more likely to adopt digital banking services when they feel supported by adequate infrastructure and resources, as this boosts their confidence in using the platforms.

2.2.6 Awareness

Awareness refers to the perception or knowledge of something, which may associate with or without explicit consciousness (Naz et al., 2019). In the context of technology and service adoption, particularly Islamic digital banking, awareness plays a critical role in influencing customer behavior and decision-making. Customers typically seek to gain adequate knowledge and clarity about a banking service before deciding to adopt it. According to Naz et al. (2019), consumers tend to acquire information actively and evaluate the suitability of a service based on their awareness, especially when it involves financial products with religious significance. Furthermore, awareness facilitates the shift from habitual to optimal

decision-making by integrating both intuitive judgments and deliberate reasoning, positioning it as both a cognitive and emotional process (Bizzarri et al., 2022).

In Islamic banking, awareness not only encompasses knowledge of available digital banking products but also includes understanding the underlying *Shariah* principles that govern their operations. Aziz et al. (2018) emphasize that awareness campaigns focusing on Shariah compliance significantly influence customers' attitudes and positively affect their intention to adopt Islamic banking services. This is especially relevant in markets like Pakistan and Malaysia, where Islamic finance forms a key component of the national financial landscape. Similarly, Shinkafi et al. (2023) observe that increasing public awareness about Islamic banking modalities in Malaysia has led to stronger customer patronage, enhanced banking performance, and a growing interest in Islamic financial solutions.

Awareness also acts as a moderating factor in influencing adoption decisions (Saifuzzaman et al., 2023). As highlighted by Saifuzzaman et al. (2023), awareness acts as an important moderator between perceived complexity and the intention to adopt Islamic banking services. High levels of awareness help mitigate the negative effects of perceived complexity by demystifying financial concepts, thereby making Islamic digital banking appear more accessible and less intimidating to potential users.

However, while the positive impact of awareness is well-documented, its effectiveness can vary depending on contextual and demographic factors. In some cases, high awareness may not translate into actual adoption due to entrenched preferences for conventional banking services. For instance, Heriyati et al. (2025) noted that despite high awareness levels among Indonesian Muslims, many consumers remain loyal to conventional banks due to factors such as familiarity, perceived reliability, and longstanding trust. Moreover, awareness can sometimes have an unintended effect if the information made available to consumers highlights risks, limitations, or the perceived lack of trialability of Islamic banking services, it

could deter adoption. Sudarsono et al. (2022) emphasize that when Islamic banking is perceived as difficult to try or test, especially among first-time users, greater awareness might lead to hesitation rather than encouragement.

2.3 Conceptual Framework

This study's conceptual framework is based on the Unified Theory of Acceptance and Use of Technology (UTAUT) model developed by Venkatesh et al. (2003), which has been extensively utilized to explain user intentions and subsequent technology adoption behavior. This framework has been adapted to suit the context of Islamic digital banking and Generation Z in Malaysia. The UTAUT model posits five core determinants: performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness, which influence behavioral intention and usage behavior. In this study, performance expectancy refers to the degree to which Generation Z believes that using Islamic digital banking will enhance their financial management and efficiency, while effort expectancy concerns the degree to which users perceive these services as convenient and easy to navigate (Idrees & Ullah, 2024). Social influence captures the extent to which individuals perceive that important others believe they should use technology, and facilitating conditions represent the resources and support available to perform the behavior. Moreover, awareness reflects the extent to which Generation Z is informed about the principles, features, and benefits of Islamic digital banking, particularly in the context of *Shariah* compliance and ethical finance. The integration of this variable is crucial, given that Islamic financial products are often misunderstood or unfamiliar to the younger population (Thaker et al., 2021). Thus, this study incorporates performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness as key factors influencing the behavioural intention of Generation Z toward the adoption of Islamic digital banking in Malaysia.

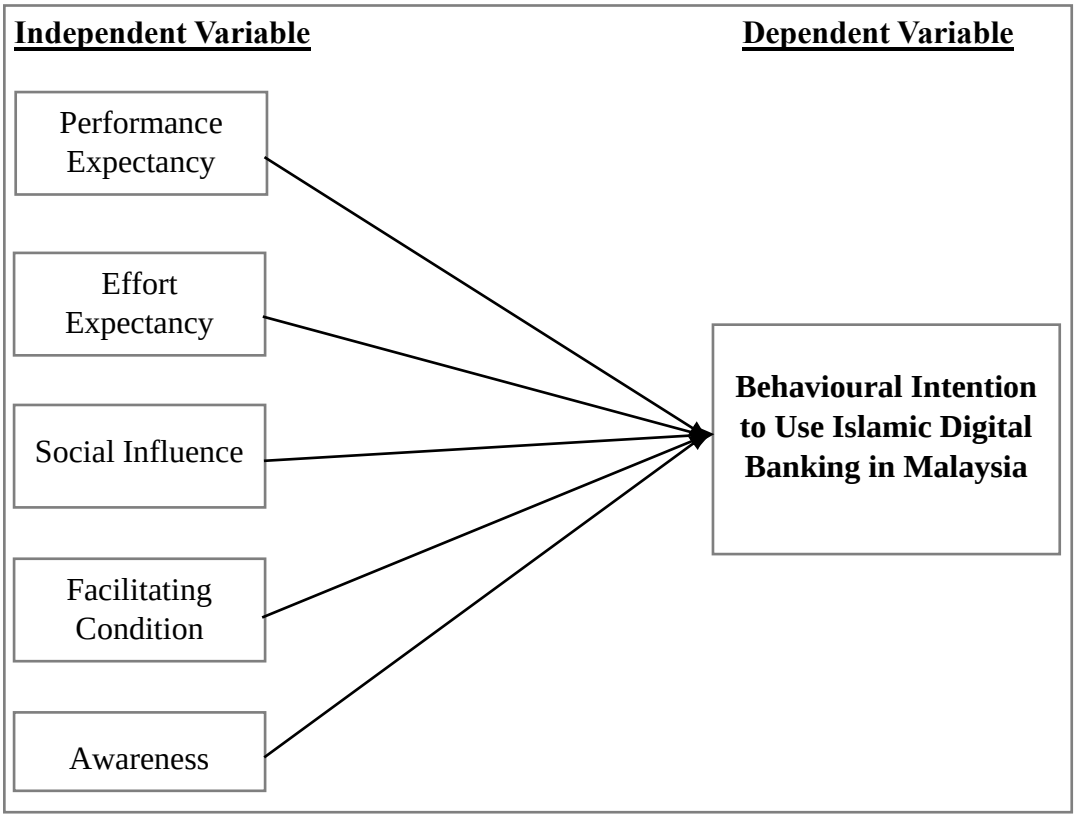

Figure 2.1. Determinants affecting behavioural intention to use Islamic digital banking among generation Z in Malaysia.

2.4 Hypothesis Development

2.4.1 Performance Expectancy

Performance expectancy was the belief that Islamic digital banking offers enhanced utility by providing ease of access, faster transactions, and tools for efficient financial management (Azkiya et al., 2024). According to Muharromah et al. (2024), performance expectancy refers to the perception that Islamic digital banking not only fulfills functional needs, but also aligns with moral and ethical values, such as

Shariah compliance and socially responsible investments. It is more likely that users will adopt Islamic banking system if they trust the Islamic banks to deliver Shariah-compliant services transparently while maintaining high performance in terms of security, reliability, and user experience. Based on this explanation, the following hypothesis is proposed:

H1: There is a significant relationship between performance expectancy and behavioral intention to use Islamic digital banking among generation Z in Malaysia.

2.4.2 Effort Expectancy

Kholid (2019) mentioned that effort expectancy can be seen as the alignment of technology design with user confidence. It encompasses the availability of real-time support features, such as chatbots or FAQs, that provide immediate assistance, reducing the effort required to resolve issues or learn new functionalities. In some contexts, effort expectancy is linked to consumer innovativeness, particularly those who are open to new technologies, will be less likely to see new systems as complex or difficult (Shaikh et al., 2020). Effort expectancy also reflects how Islamic digital banking platforms seamlessly blend *Shariah*-compliant principles with user-friendly interfaces, allow users effortlessly align their financial activities with their religious values (Thaker et al., 2022). Based on the preceding discussion, the second hypothesis is generated at below statement:

H2: There is a significant relationship between effort expectancy and behavioral intention to use Islamic digital banking among generation Z in Malaysian.

2.4.3 Social Influence

Social influence in Islamic banking operates through the dissemination of pre-purchase information via reviews and expert opinions. This helps potential users make informed decisions while reinforcing trust in the system (Naeem, 2020). Mindra et al. (2022) suggests that social influence occurs through observing and imitating others. Users learn about Islamic digital banking by observing peers who have successfully adopted these services, thereby increasing their own likelihood of adoption. Also, it emerges from the collective behavior of communities that prioritize ethical and Shariah-compliant financial practices. This creates a digital ecosystem where individuals are motivated to adopt Islamic banking due to shared cultural and religious norms (Lutfi & Prihatinigrum, 2023). Hence, the following statement is third hypothesis in this study:

H3: There is a significant relationship between social influence and behavioral intention to use Islamic digital banking among generation Z in Malaysia.

2.4.4 Facilitating Conditions

Facilitating conditions are defined as the development of user-friendly mobile wallets, biometric authentication systems, and APIs that enhance operational efficiency while adhering to Islamic values (Riza & Wijatati, 2024). Facilitating conditions also include efforts to enhance digital and financial literacy among unbanked communities, enabling them to participate in Islamic digital banking and alleviating poverty through inclusive financial services. Thus, it was extended to the integration of Islamic social finance mechanisms, such as zakat, waqf, sadaqah, within digital banking platforms (Alsaghir, 2023). Referring to Al Hammadi et al. (2024), transaction security is considered a critical facilitating condition in Islamic digital banking. Advanced security mitigates digital risks while safeguarding

compliance with Islamic laws. Accordingly, the fourth hypothesis for present study is stated below:

H4: There is a significant relationship between facilitating conditions and behavioral intention to use Islamic digital banking among generation Z in Malaysia.

2.4.5 Awareness

Albaity and Rahman (2019) stated that awareness refers to the understanding of how cultural and demographic factors, such as age, religion, and education, affecting perceptions and adoption of Islamic banking products. It includes understanding how Islamic digital banking strengthens market competitiveness by offering innovative financial solutions tailored to ethical users. On the other hand, awareness also involves familiarity with Islamic financial terminology and cultural nuances, which can be a barrier for non-Muslims or those less familiar with Arabic terms (Qudah et al., 2023). It involves knowledge of the regulatory frameworks and Shariah governance structures that ensure compliance and transparency in Islamic digital banking operations, fostering user trust (Riza & Wijayanti, 2024). Consequently, the fifth hypothesis for current study is listed below:

H5: There is a significant relationship between awareness and behavioral intention to use Islamic digital banking among generation Z in Malaysia.

2.5 Conclusion

The explained variables, intention to use, along with the explanatory factors: performance expectancy, effort expectancy, social influence, facilitating condition, and awareness are examined in this chapter. The Unified Theory of Acceptance and Use of Technology (UTAUT) framework underpins the relationships among these variables. The conceptual model developed in this study outlines how these factors influence Generation Z's intention to adopt Islamic digital banking in Malaysia. Several hypotheses have been formulated for further analysis. The research methodology will be detailed in Chapter 3.

CHAPTER 3: METHODOLOGY

3.0 Introduction

This chapter provides a comprehensive analysis of the research methodology used to examine Generation Z's behavioral intention toward using Islamic digital banking services in Malaysia. The methodology used is crucial in the processes and final outcomes of this study. This section provides a comprehensive description about the whole study's design, approach used to obtain data, strategy applied in sampling, study instruments and input assessment tools.

3.1 Research Design

A design of study is a structure or strategy that is especially for connecting conceptual investigation problems to pertinent and achievable empirical research. It includes sequential procedures that are used by a researcher before collecting and assessing data to extract valuable findings and draw informed conclusions (Asenahabi, 2019).

3.1.1 Quantitative Research

A quantitative design methodology has been selected to find out the determinants that affect Generation Z's intention to use Islamic e-banking devices in this study. Quantitative technique is a structured protocol for gathering data in numerical form

from a larger sample size and then analyzing it using mathematical and statistical techniques (Goertzen, 2017). Quantitative research is widely used in social science studies that utilize experiments, surveys, and structured observations as their common method (Uta Libraries, 2023). This type of research design was applied by Riza (2019), Siska (2022), and Harahap et al. (2023) in their research to investigate the factors influencing Islamic digital banking services adoption in Indonesia.

3.1.2 Descriptive Research

Descriptive design is using the outcome of study for describing the characteristics, behaviors, or attitudes of an individual in their natural setting (Asenahabi, 2019). It aligns with this study, which intends to survey to determine the potential customers' behavioral intention towards Islamic digital banking, because descriptive research explores several elements to obtain a more thorough view about the issues being examined to generate actionable insights (Akhtar, 2016).

3.2 Sampling Design

A sampling design is an approach used to choose a specific quantity of samples from the target demographic to gather statistical data. Samples are collected to gain insights into a larger population, especially when it is impractical to observe every individual. The primary objective is to produce estimates that are both accurate and precise, meeting the needs of the study. Given the limitations of time and budget, the sampling process must be carefully planned (Wills et al., 2020). This research will discuss the target population, sampling frame and location, sampling elements, sampling techniques, and sample size.

3.2.1 Target Population

According to Willie (2022), target population is important in collecting and assessing the appropriate data, as they are the people or groups that fulfill the eligibility requirements for a study. The survey's target population encompasses all units from which inferences are drawn. This study targets individuals who utilize e-banking services and are more prone to become potential utilizers of Islamic digital banking services.

In line with this study's objectives, the population targeted in this study is generation Z. Malaysian generation Z who was born from 1997 until 2012, are selected to be the key targeted market for this study because they came of age during the internet explosion causing them to have higher adaptability. Beginning to track this new generation over time will be of significant importance (Dimock, 2019). According to Tjiptono et al. (2020), there is an incredible statista shown almost ninety-eight percent of the present residents has internet connectivity and almost 100% own smartphones. This argument proves that Generation Z is the main user of digital banking, although Islamic digital banking is a new service and may never have been heard of before, but generation Z is a high potential user for it. According to Kohnová et al. (2021), young people rated very well, especially in their ability to accept and learn new things. The high openness and high tolerance of this group of digital natives made them have a positive attitude toward change and innovation (Smith & Johnson, 2023).

3.2.2 Sampling Frame and Sampling Location

The foundation for selecting a sample and ensures that the sample is representative of the population being studied is called the frame of sampling activity. The chosen sampling location is Malaysia because the main demographic in this study is generation Z in Malaysia, therefore the respondents are surveyed across the thirteen states and three federal territories to ensure broader and wider diversification representative of target population. The combination of those surveyed from various geographical areas allows this study to analyze the differences in Islamic digital banking adoption behaviours throughout rural and urban areas. In addition, according to Tjiptono et al. (2020), generation Z now dominates Malaysia's major age category, accounting for approximately twenty-nine percent of the overall community.

3.2.3 Sampling Elements

The elements or items in sampling are a solitary item that consists of a clearly defined, unique, and identifiable element or group of elements in the target population. Qualified individuals who fulfill some criteria will be asked from the target group of generation to ensure the validity of the collection of data. People in Malaysia who are at least eighteen years old but not more than twenty-eight years old were given questionnaires. The age of the target population will be set between ages 18 - 28 among Malaysia's generation Z and Generation Z below 18 years old will be excluded due to Financial Services Act 2013 clearly stated in its Section 27(2)(a) concerning about prohibits banking institutions to create accounts for people below 18 without documented parental or guardian authorization (Bank Negara Malaysia, 2013). Besides, Personal Data Protection Regulation 2013 requires guardian authorization for those below eighteen years old under its Section 3(3) (Attorney General's Chambers, 2013). In addition to a restricted age range, this study also selects participants who vary in elements of their gender, race, and state.

3.2.4 Sampling Techniques

Sampling method refers to the way applied in research to choose people, things and data points within a small portion in order to draw the inference about larger portion (Sharna, 2017). In this study, a form of non-probability in sampling approach, convenience sampling, will be employed in choosing testers within Malaysia. According to Mweshi & Sakyi (2020), convenience sampling is used in choosing study participants, mostly based on how easily the researcher may reach them, making it easier, quicker, and less expensive to gather preliminary data.

However, potential biases and limitations may occur in this type of sampling (Golzar et al., 2022). Therefore, the study team will attempt to reduce as minimum as possible the disadvantages with the way of choosing responders openly and no bias such as researcher sending an online survey link in social media for generation Z. This study also set an ideal condition for the sampling technique which is to collect data from 13 states and 3 federal territories, and each researcher will focus on certain locations or demographics, for example, categories like states, ethnicity, or age to guarantee thorough comprehensive representation as well as minimize redundancy.

3.2.5 Sampling Size

A dimension in sampling refers to the count of respondents or data points to complete the survey in the study to help researchers to predict real target population. When a study is offered, the number of size in sample must be predicted first because a too large sample is unnecessary and unethical, and too small a sample is unscientific and unethical (Andrade, 2020). The National Education Association's research section developed a table in helping with sample size selections, resulting in a more reliable model (Krejcie & Morgan, 1970). This research uses the “Table

for Determining Sample Size from a Given Population" to estimate the sample size and when the population surpasses one million, the sample size will reach 384 (*Refer to Figure 3.1*). This study will collect at least 384 respondents from Malaysia because the total generation Z in Malaysia is 8,919,000 (Department of Statistics, 2025). Besides that, a sample size over 384 is preferable as the rate of response will rise and possible prejudice will be eliminated for every increase in a number of samples taken (Riley et.al, 2020).

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.

Source: Krejcie & Morgan, 1970

Figure 3.1. Table for Determining Sample Size. Adapted from Krejcie, R.V. & Morgan, D.W. (1970). *Determining sample size for research activities*. Educational and Psychological Measurement. https://doi.org/10.1177/001316447003000308. Copyright 1970 by SAGE Publications.

3.3 Data Collection Method

There is a responsibility for data collection that begins once the research problem has been identified and the research design has been established. Data collection is the systematic gathering of information for research and analytical purposes. Ensuring data accuracy is critical for researchers to resolve issues, analyze findings, and forecast variances and probability (Jansen et al., 2023).

3.3.1 Primary Data

The method to gather original source directly from first-hand sources will be used in this study. According to Sileyew (2019), initial data is deemed more reliable and increases confidence in making decisions as a result of being combined with credible evaluation that has an immediate link of contact with the event's incidence.

This study adopted close-ended questionnaires disseminated to as many responders as possible. This strategy ideal in getting data from individuals distributed across a vast region who are difficult to reach in person face-to-face as this research collects samples throughout Malaysia (Mazhar et al., 2021). For the questionnaire, a list of questions concerning the elements impacting the desire to take on Islamic e-banking goods and services has been developed. According to Parajuli (2018), responders can voice opinions and sentiments, thus promoting creative thought when they fill up a questionnaire.

3.4 Research Instrument

3.4.1 Design of Questionnaires

The questionnaires employed is aimed at collecting primary data from generation Z from Malaysia through a Google Form survey. This questionnaire is designed using closed-ended questions and fixed-alternative responses that are easier and faster to answer and encourage in using clear enough words to ensure the respondent understands it in the identical way that the researcher wanted (Yaddanapudi & Yaddanapudi, 2019).

The survey consists of three parts, starting with Section A, followed by Section B, and concluding with Section C. The questionnaire includes an ethical assessment of the Personal Data Protection Statement, allowing respondents to acknowledge it before filling out the relevant information. Furthermore, it seeks to safeguard the participants' privacy by encapsulating respondents' information. Section A consists of demographic questions focusing on gender, age, state, race, and religion to collect individual background details from the intended population. The questions about the explanatory variable are shown in Section B of the survey. Each part of the independent variable, such as performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness, has five questions respectively. Section C comprises 5 inquiries with the goal is to address the predicted factor, Malaysian Gen Z's desire to use the products and services in Islamic digital banking.

3.4.2 Pre-Test

According to DuBay and Watson (2019), pre-testing strengthens the instrument's validity by assessing whether the questions effectively capture the intended concepts. A pre-testing on the survey was held to assess the questionnaire's

appropriateness, evaluate the scale, and examine potential modifications needed for the questions. All the questions are promptly assessed by UTAR's lecturer before disseminating the survey to respondents.

3.4.3 Pilot Test

Pilot test refer as a trial run or experiment before the real large sample data collection to get recommendations and feedback for correcting problems concerning the research tools and protocol in the questionnaire for improvements (Aithal & Aithal, 2020). Gani et al. (2020) highlighted that running a pilot test in any research to detect any potential problems that could come up throughout the extensive study to ensure that validity is achieved before conducting the actual study. The pilot test procedure also includes collecting feedback then analyzed to identify the existing problem to improve the question flow, wording to bring better readiness to respondents. Besides, Lackey and Wingate (1998) pointed out that the appropriate number of participants for a trial run is 10% of the final research size. Cronbach's alpha test will be used for analysis, and a minimum sample size of 38 respondents from Generation Z in Malaysia who are aware of Islamic digitalized banking is required (Bujang et al., 2024).

Table 3.1:

Trial Run Outcome

	Names	Cronbach's Alpha	No. of Item	Reliability Level
Independent Variable	PE	0.862	5	Good
	EE	0.644	5	Moderate
	SI	0.877	5	Good
	FC	0.883	5	Good

	AW	0.898	5	Good
Dependent Variable	BIDB	0.858	5	Good

Based on the results generated by SPSS summary in Table 3.1, the predicted variable and all predictor variables excluding EE are vary between 0.8 and 0.89, which demonstrates strong inner coherence for the explanatory variable and the explained variable, then can generate a good reliability result. However, the variable of EE has the lowest value of 0.644 is classified as under an acceptable level according to the rule of thumb, but it still can proceed to use in analysis when the sample sizes (384) are large, and the instrument still captures valuable information (Taber, 2018). Taherdoost and Group (2017) recommended that the reliability value needs to be at least 0.60 in the pilot study, which means already reached the cut-off points for reliability. Additionally, Taber (2018) noted that a very high Cronbach's Alpha is not always a positive sign because extremely high Cronbach's Alpha values can sometimes signal that the questions are repetitive or redundant.

3.5 Construct Measurement

Construct measurement involves transforming abstract concepts like behavioral intention into measurable survey items. The aim is to ensure reliability and validity of the data collected by using validated scales, so measures are consistent and accurate, easy for comparison and analysis (Bergkvist & Langner 2017).

3.5.1 Scale of Measurement

Measurement metric is utilized to improve the understanding of researchers on the data they collected because it enables the qualitative or discrete variables such as

age and gender can be classified and categorized (Dalati, 2018). Therefore, these unmeasurable items can be measured with a scale of measurement after being characterized. In this study, 3 kinds of measurement metrics to categorize data based on the nature of the information and the level of measurement, including the interval value metrics, scale of nominal and ordinal value metrics.

3.5.1.1 Nominal Scale

In nominal metric, items are labelled with numbers and letters for identification and classification to differentiate the objects. Cooper and Schindler (2014) define nominal data as information collected on a variable that can be classified into more than one distinct and complete category. Nominal data is commonly utilized in surveys when the data needed is based on many population groupings. A nominal scale is employed to evaluate classification factors, like race, gender, and state in this study.

3.5.1.2 Ordinal Scale

A measurement in ordinal metric is a level of parameter used to rank or order items based on a specific attribute, but without assuming equal distances between the ranks and there is no true zero point. Ordinal scales categorize data based on their relative significance in a single direction and to measure the variable in natural order (Dalati, 2018). The age category in Section A of the survey is measured on an ordinal metric.

3.5.1.3 Interval Scale

A five-point Likert scale is utilized to assess Sections B and C in the survey as this is a common method utilized in research methods for its ease and effectiveness in knowing respondents' perceptions and attitudes towards the research's dependent variable (Tanujaya et al., 2023). This research applied a five-point Likert scale from "Strongly Disagree" as 1 to "Strongly Agree" for 5 for every measurement item in the questionnaires to reflect their level of agreement (Joshi et al., 2015). In this research, the 5-point Likert measurement chosen is also due to there has option of "neutral" contributing to odd numbers of answers that are more preferrable by respondents, and they are not forced to select merely agree or disagree (Taherdoost, 2019). According to Mariano et al. (2024), using the unconventional approach of Item Response Theory to link Likert scale item responses found that respondents can select "Neutral" when indecision, indifference, or lack of information.

Table 3.2:

5-Point Likert Scale Listing

Items	5-Point Likert Scale				
	1	2	3	4	5
Item 1	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

Source: Joshi et al. (2015)

3.5.2 Origin of Construct

Table 3.3:

Construct Origins for Questionnaire

Dependent Variable	Items	Source

Behavioral intention to use Islamic digital banking	1	Mbawuni & Nimako (2018)
	1	Nguyen, O. T. (2020)
	1	Venkatesh & Moris (2000)
	1	Aboagye et al. (2016)
	1	Davis (1989)

Independent Variables	Items	Source
Performance Expectancy	5	Camilleri (2024)
Effort Expectancy	2	Windasari, N. A., et al. (2022)
	3	Nguyen, O. T. (2020)
Social Influence	4	Feroz & Siddiqui (2018)
	1	Naeem, M. (2020)
Facilitating Condition	5	Camilleri and Camilleri (2022)
Awareness	3	Bashir (2013)
	2	Aziz & Afaq (2018)

3.6 Data Processing

Input processing plays a vital role in the procedure in transforming unprocessed information into meaningful and insightful information. This process is typically conducted once collecting responses and involves four key stages, including reviewing the data, followed by editing noisy data and dividing the code for data, and finally is transcribing. The main goal is to extract useful patterns and relationships by organizing and refining the data, enabling effective analysis and problem-solving. Careful and accurate data processing helps minimize errors and is essential for generating reliable results. Tools like SPSS 30.0 are often used to streamline this process and ensure consistency in handling various types of data (Li et al., 2023).

3.6.1 Data Checking

The initial procedure is data checking for verifying the trueness and validity of questionnaires. It involves identifying and addressing issues such as missing data, data omissions, and inconsistent responses that could compromise the reliability of the results. Conducting a pilot test before distributing the questionnaires helps detect potential problems and improve question clarity. According to Barchard & Verenikina (2013), careful data checking helps prevent anomalies that may skew results, such as extreme outliers.

3.6.2 Data Editing

Editing the data as following crucial phase within the data processing step, aimed at ensuring consistency, accuracy, and relevance of the collected data. It involves reviewing and correcting errors, identifying and handling outliers, and addressing

incomplete or inconsistent responses. Researchers may adjust or amend data by adding, removing, or modifying variables and values, particularly when responses are unreasonable or missing (Leahey et al., 2003). This process improves the overall quality and usefulness of the data, making it more suitable for analysis and its intended purpose. In some cases, researchers replicate respondents' answering patterns to fill in missing data, thereby enhancing data completeness and reliability.

3.6.3 Data Coding

The phase of offering symbols or numbers for each variable group is called data coding. It plays a vital role in data management by transforming collected information into numerical values for organized storage. This approach enhances the efficiency of data entry for computer analysis and reduces the risk of errors.

Table 3.4:

Data Coding for Questionnaire in Section A

Q1	Gender	"Male" = 1 "Female" = 2
Q2	Age	"18-20" = 1 "21-24" =2 "25-28" = 3
Q3	State	"Johor" = 1 "Kedah" = 2 "Kelantan" = 3 "Melaka" = 4 "Negeri Sembilan" = 5 "Pahang" = 6 "Perak" = 7

		"Perlis" = 8 "Pulau Pinang" = 9 "Selangor" =10 "Terengganu" = 11 "Sabah" = 12 "Sarawak" = 13 "Kuala Lumpur" = 14 "Putrajaya" = 15 "Labuan" = 16
Q4	Race	"Malay" = 1 "Chinese" = 2 "Indian" = 3 "Others" = 4

Respondents' answers collected through Section B and C in the questionnaire were systematically coded utilizing a measurement metric spanning value from 1 to 5, aligning with the Likert scale: "Strongly Disagree (1)," "Disagree (2)," "Neutral (3)," "Agree (4)," and "Strongly Agree (5)." Utilizing this numerical coding framework streamlines the organization and handling of data, facilitating smooth processing and accurate analysis.

3.6.4 Data Transcribing

The final phase in the processing of the data sequence, involving the conversion of base or coded input into a format suitable for analysis is called data transcribing. This phase ensures that all responses are accurately represented, helping to maintain the consistency and integrity of the dataset. SPSS 30.0, a powerful statistical software, is used throughout this stage to streamline transcription tasks, automate data handling, and reduce the likelihood of human error. Ultimately, data

transcribing is aimed at transforming unprocessed inputs become structured and analyzable information, then can yield meaningful insights.

3.7 Data Analysis

Analysis of data is vital in modeling and analyzing the data collected through questionnaires to determine approval or denial for the previous research hypothesis (Sekaran & Bougie, 2016). The proposed data analysis tools will help researchers to have deep insight into the meaning of data and make useful inferences suitable for this research aimed at offering valuable implications for financial institutions and policymakers (Abdul Jabbar & Farhan, 2022). In this study, analysis of data is conducted ultizing the data analysis software Statistical Product and Service Solutions (SPSS) version 30.0.

3.7.1 Descriptive Analysis

Descriptive analysis refers as a technique that enables objective, comprehensive, and informative sensory data to be obtained without high training and is easy to use (Kemp et al., 2018). It is also an effective way to gain insights into data and spot potentially helpful patterns or trends, helping in logical inference and discovering possible outliers, mistakes, or missing data (Bush, 2020). The common descriptive analysis tools used in this study are central tendency, dispersion, and other relevant metrics. In conclusion, descriptive analysis is crucial for understanding and communicating study findings (Hassan et al., 2023). Furthermore, researchers such as Zouari and Abdelhedi (2021) also used descriptive analysis in their research on customer satisfaction in the digital area: evidence from Islamic banking.

3.7.2 Reliability Test

Reliability test is a measurement instrument to measure the dependability and consistency of the result. Cronbach's alpha is an appropriate measure used as it is a measure of the internal consistency or reliability of the responses to a questionnaire, which indicates the stability of the tools (Bujang et al., 2018). According to Pallant (2020), the alpha of Cronbach being used in evaluating correlation of the mean between the scales and acts as an indicator of the degree of internal consistency. Reliability is shown by higher values of Cronbach's alpha coefficient, which consistently lie between 0 and 1.

Table 3.5:

Rule of Thumb in the value of Cronbach's Alpha

Cronbach's Alpha Value	Reliability & Consistency Level
$\alpha < 0.6$	Poor
$0.6 \leq \alpha < 0.7$	Moderate
$0.7 \leq \alpha < 0.8$	Acceptable
$0.8 \leq \alpha \leq 0.90$	Good
$\alpha > 0.90$	Excellent

Note. From Nawi et al. (2020). *A review on the internal consistency of a scale: The empirical example of the influence of human capital investment on Malcolm Baldrige quality principles in TVET institutions*. Asian People Journal.

Table 3.3 demonstrates that there is a poor level of reliability and consistency of data if the coefficient of Cronbach's Alpha value is not more than 0.6. Said (2018) stated that a value of Cronbach's alpha between 0.6 and 0.8 is acceptable, and the scale's dependability ranges from moderate to acceptable. The value of Cronbach's

alpha more than 0.8 but less than 0.9 indicate remarkable dependability for scales. However, it does not mean that the highest alpha represents extremely excellent dependability. Hair et. al (2019) comment that there might be the existence of duplicate variables or indicators may be redundant if the alpha value reaches too high, such as 0.95. Therefore, it is required to maintain the value of Cronbach's Alpha more than 0.6 but less than 0.95 to get optimum dependability of a scale.

3.7.3 Preliminary Data Screening

Preliminary data screening is the process of verifying the data gathered for errors, discrepancies, and value gaps prior to statistical analysis (Pallant, 2020). Preliminary data screening includes testing the model's multicollinearity and normality to ensure it is suitable for analysis.

3.7.3.1 Multicollinearity

Assessment for multicollinearity is a test to detect the assumption of a linear relationship within the explanatory factors. The existence of multicollinearity indicates high and association correlation between the explanatory factors. It will cause the regression analysis results to be biased and inefficient due to the inflate in the error term (Shrestha, 2020). This scenario must be avoided as the explanatory variable not only explains on dependent variable but also connects other independent variables, then causing the coefficient to change from significant to insignificant (Tsagris & Pandis, 2021).

Variance Inflation Factor (VIF) is the first indicator while Tolerance Value is second way to identify a multicollinearity problem. After running the data using

SPSS 30.0, a VIF value of 1 signifies that correlation not exist, values between 1 and 5 reflect a slight correlation, and values from 5 to 10 indicate a strong correlation among variables. In contrast, the tolerance number below 0.1 signals a lot of multicollinearity (Gwelo, 2019). High VIF values may show a volatile model with possible multicollinearity issues that require resolution before going to inferential analysis (Oguntunji & Makram, 2019).

3.7.3.2 Normality

Normality means the statistics were generated from a multivariate normal distribution, which is a key assumption for making valid inferences, and can be tested using various statistical tests or visual inspection (Khatun, 2021). This study will use two methods to confirm that the dataset is normally distributed.

The first way is to use skewness and kurtosis to check the normality. The normality assumption is accepted if both skewness and kurtosis coefficients fall between ±2 and ±7, respectively, and otherwise rejected (Hatem et al., 2022). The second way is testing the normality using a histogram, and the normality assumption can be measured if there is a bell shape and a symmetric histogram.

3.7.4 Inferential Analysis

Predictive statistical evaluation is an approach used to draw conclusions or make predictions to the whole community based on the effort gained from conducting a sample (Gravetter & Wallnau, 2021). It aims to extend findings from the sample to the broader population, such as this study can make inferences regarding Malaysian Generation Z's desire to use Islamic online banking by using a minimum sample

size of 384 collected (Aldrich, 2019). Analysis of developed multiple linear regression model is used to explore the association involving the explained factor, which is generation Z's desire to use Islamic online banking, and the explanatory factors, which are performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness.

3.7.4.1 Multiple Linear Regression Analysis

Multiple linear regression analysis is a statistical strategy used to examine the relationship between one explained factor and two or more explanatory factors (Etemadi & Khashei, 2021). Given that this study involves five factors, this methodology is appropriate. The main objective is to evaluate the model's effectiveness in accurately predicting the predicted variable result for long run from the predictor variables. There are a few statistical assessments and parameters that can be utilized to make sure whether the model developed with multiple linear regression is logical or not.

The effects of each explanatory variable on the explained variable are shown in the coefficients table. A p-value of less than 0.05 indicates a significant connection between the explained and explanatory variables. Furthermore, the F-statistic in the Analysis of Variance (ANOVA) table is utilized to assess if the model sufficiently describes variations in the explained variable; if the F-statistic's p-value is less than 0.05, the model as a whole is considered significant. Additionally, in order to determine how much the explanatory variables contribute to the variance of the explained variable, an analysis of R-squared (R2) and adjusted R-squared (adjusted R2) is conducted.

Lastly, the Durbin-Watson (DW) test, also known as serial correlation, evaluates autocorrelation strength by assessing the correlation between variable values across

different data sets in regression analysis residuals. Autocorrelation issues can lead to underestimated standard errors and distorted results. DW statistics are expected to range between 0 and 4. A DW value of two denotes the absence of autocorrelation; values greater than two imply negative serial correlation, and values less than two denote positive autocorrelation (CFI Team, 2020).

$$BIIDB = \beta_0 + \beta_1 PE + \beta_2 EE + \beta_3 SI + \beta_4 FC + \beta_5 AW + Ɛ$$

Where:

BIIDB=Behavioral intention to use Islamic digital banking

PE=Performance Expectancy

EE=Effort Expectancy

SI=Social Influence

FC=Facilitating Conditions

AW=Awareness

β_0 = Coefficient of constant

$\beta_{1,2,3,4,5}$ = Beta Coefficient for different independent variables

Ɛ = Error Term

3.8 Conclusion

In essence, the whole of the Chapter 3 discusses the methodological approach of quantitative research utilized in this study. Testing with the Lecturer reviewing and a trial run must be carried out before the actual data processing. A minimum of 384 Malaysian respondents that aged between 18 - 28 who are users of Islamic digital

banking or potential users of Islamic digital banking is going on to be distributed a Google form survey to gather initial data. All data will be imported into SPSS 30.0 the analysis results will be discussed in Chapter 4.

CHAPTER 4: RESEARCH RESULTS

4.0 Introduction

This chapter concludes the data analysis. The initial study focuses on the descriptive features, whereas the next phase requires completing a performance consistency evaluation to confirm the constructs' reliability. Third, multicollinearity and normality concerns are identified in the stage of pre-analysis data review. Consequently, a multiple linear regression analysis is performed. These findings were performed employing the latest version 30.0 of SPSS.

4.1 Descriptive Analysis

Evaluation of descriptive data provides a structured overview of the data by highlighting how variables are related within the sample (Kaur et al., 2018). The starting point of the descriptive assessment focused on the demographics of the respondents, including their gender, age group, state, and race. These insights provided a better understanding of the respondent and offer deeper findings in the next section. Virtual aids such as the gathered data has been illustrated in an understandable and organised way utilizing tables and visualization.

4.1.1 Respondents' Demographic Profile

4.1.1.1 Gender

Table 4.1

Descriptive Analysis for Gender

Gender	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Male	141	141	36.62	36.62
Female	244	385	63.38	100

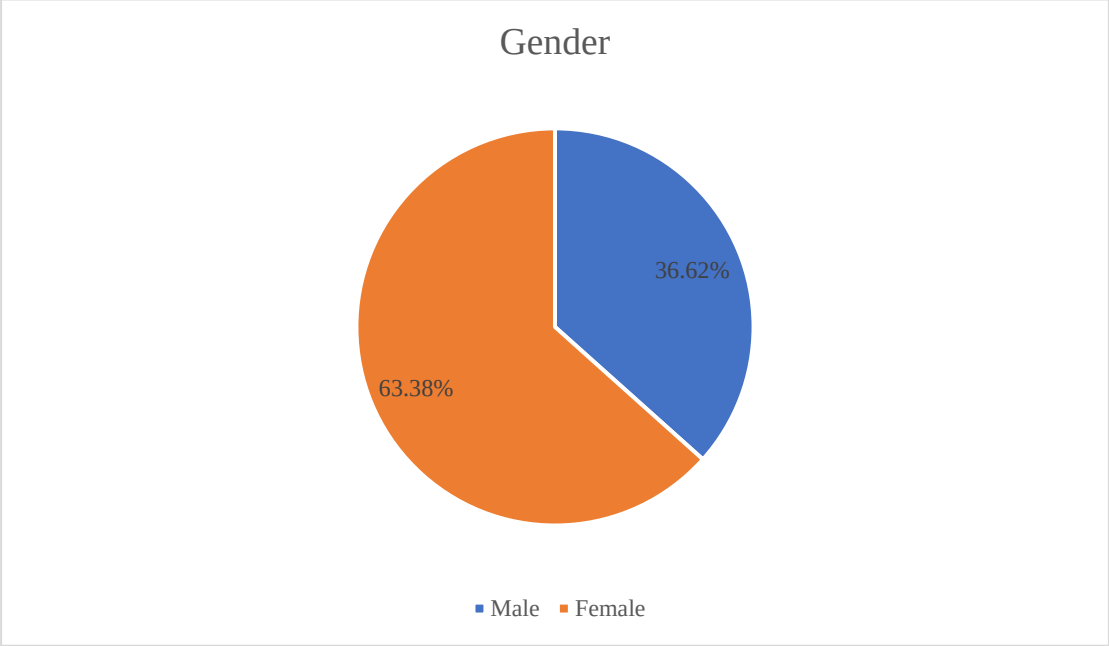

Figure 4.1. Pie Chart for Gender.

Initially, all the respondents were categorized by genders. Based on the Table 4.1 and Figure 4.1, out of the total 385 respondents, 244 (63.38%) were female, while 141 (36.62%) were male, this indicates that female respondents made up a larger proportion of the sample, suggesting a higher response rate among female in this study.

4.1.1.2 Age Group

Table 4.2

Descriptive Analysis for Age Group

Age Group	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
18-20	117	117	30.39	30.39
21-24	142	259	36.88	62.27
25-28	126	385	32.73	100

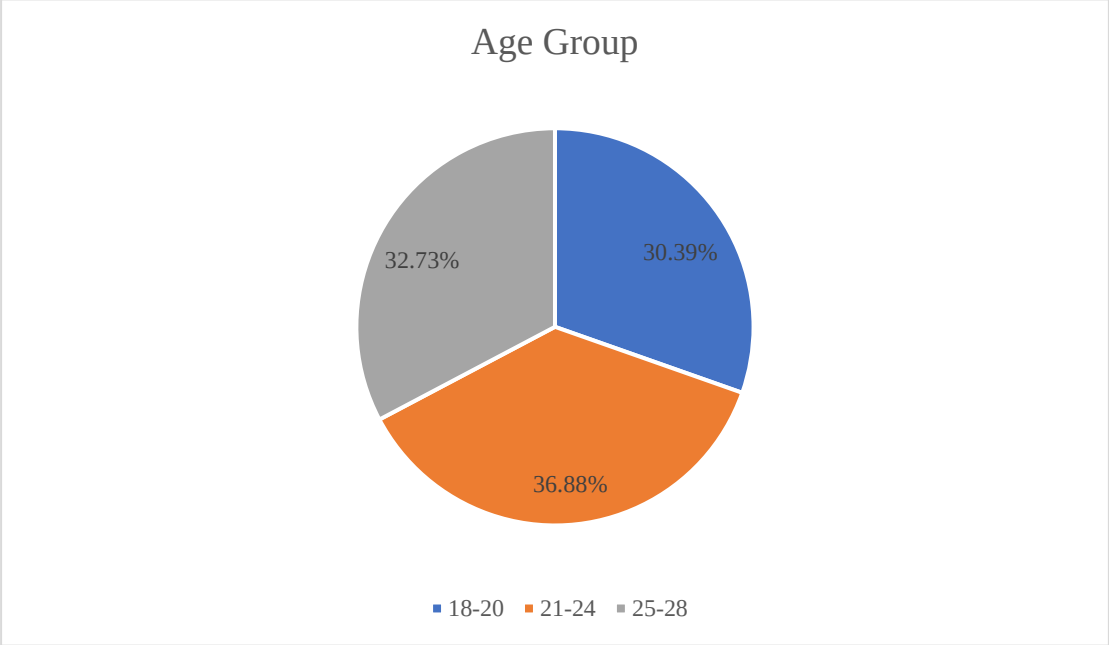

Figure 4.2. Pie Chart for Age Group.

The respondents were subsequently categorized into three age group. As shown in Table 4.2 and Figure 4.2, the largest proportion of respondents were aged between 21-24 years old, comprising 142 respondents (36.88%) of total sample. This was followed by the 25-28 years old with 126 respondents (32.73%). The smallest group

consisted of respondents aged 18-20 years old, accounting for 117 respondents (30.39%).

4.1.1.3 State

Table 4.3

Descriptive Analysis for State

State	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Johor	32	32	8.31	8.31
Kedah	24	56	6.23	14.54
Kelantan	11	67	2.86	17.40
Melaka	22	89	5.71	23.11
Negeri Sembilan	14	103	3.64	26.75
Pahang	10	113	2.60	29.35
Perak	68	181	17.66	47.01
Perlis	11	192	2.86	49.87
Pulau Pinang	73	265	18.96	68.83
Sabah	15	280	3.90	72.73
Sarawak	11	291	2.86	75.59
Selangor	57	348	14.81	90.40
Terenganu	6	354	1.56	91.96
W.P Kuala Lumpur	26	380	6.75	98.71
W.P Labuan	2	382	0.52	99.23
W.P Putrajaya	3	385	0.78	100

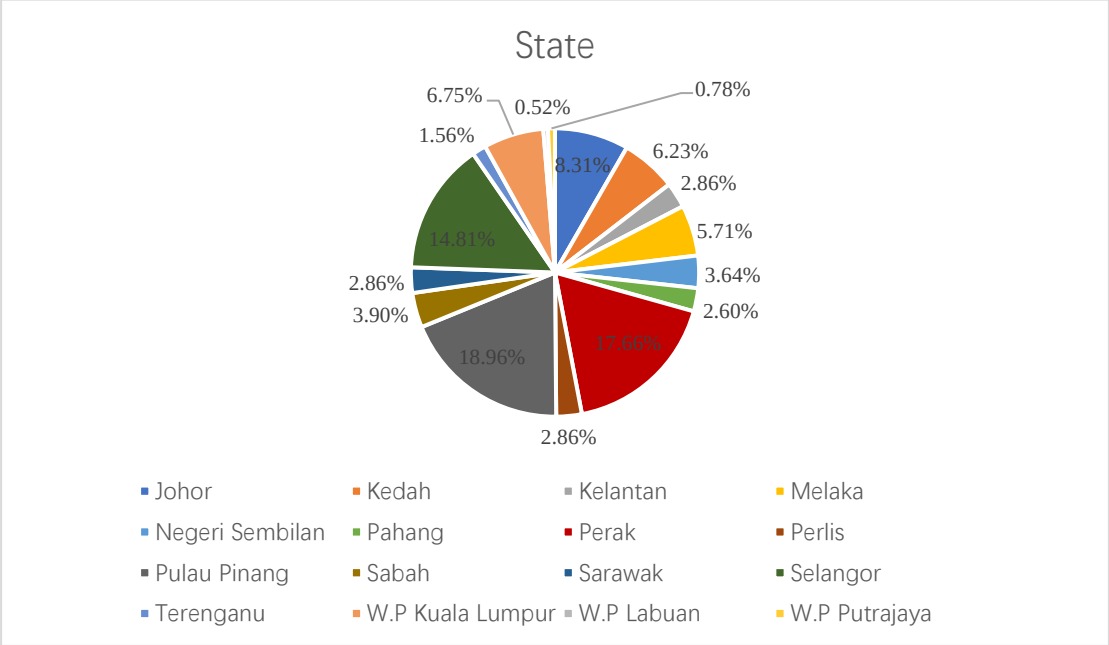

Figure 4.3. Pie Chart for State.

The above table and visualization show that all participants originated from various states across Malaysia. The highest number of respondents were from Pulau Pinang (18.96%), followed by Perak (17.66%) and Selangor (14.81%). Other states with remarkable number of respondents including Johor, W.P Kuala Lumpur, Kedah, and Melaka, are showing 8.31%, 6.75%, 6.23% and 5.71% respectively. Additionally, respondents from Sabah and Negeri Sembilan accounted for 3.90% and 3.64% respectively. It is also noteworthy that Kelantan, Perlis, and Sarawak each contributed an equal percentage of respondents at 2.86%. Furthermore, Pahang represented 2.60% of the sample. Lastly, the states with the lowest participation of respondents were Terenganu (1.56%), W.P Putrajaya (0.78%), and W.P Labuan (0.52%).

4.1.1.4 Race

Table 4.4

Descriptive Analysis for Race

Race	Frequency	Cumulative Frequency	Percentage (%)	Cumulative Percentage (%)
Chinese	258	258	67.01	67.01
Indian	42	300	10.91	77.92
Malay	83	383	21.56	99.48
Others	2	385	0.52	100

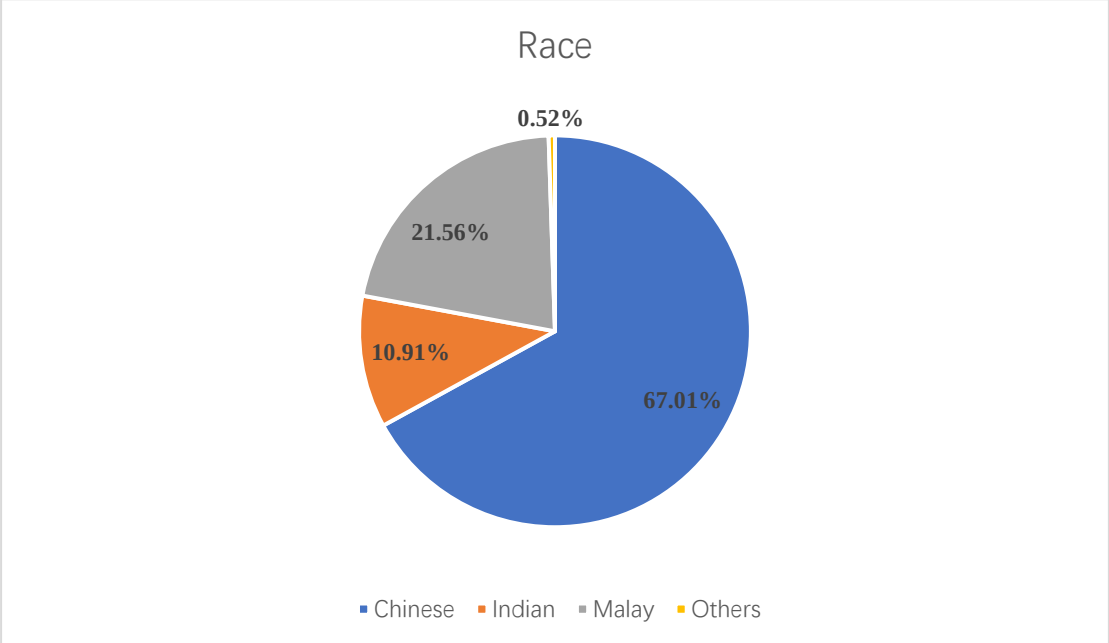

Figure 4.4. Pie Chart for Race.

Table 4.4 and Figure 4.4 indicates races of sampling testers. In this study, most of the people who responded are Chinese, representing 258 respondents (67.01%). This was followed by Malay at 83 respondents (21.56%), Indian at 42 respondents (10.91%), and others at 2 respondents (0.52%).

4.1.2 Central Tendencies of Independent Variables

The evaluation of central tendency about Islamic digital banking adoption among Gen Z in Malaysia highlights key perceptions related to the adoption process. It focuses on the five independent variables: Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Facilitating Conditions (FC), and Awareness (AW). By analyzing the mean and standard deviation values, this study identifies common response patterns and the level of response consistency across the sample. These findings help to determine which factors are perceived most positively and which may require further emphasis. Therefore, this analysis provides valuable insights into how each variable contributes to the intention to adopt Islamic digital banking services.

4.1.2.1 Behavioural Intention to use Islamic Digital Banking (BIIDB)

Table 4.5:

Central Tendency Assessment of BIIDB

Syntax	Sentence	Mean	Standard Deviation	Ranking of Mean
BIDB1	I intend to use Islamic digital banking products and services.	4.14	0.928	4
BIDB2	My first reaction to Islamic digital banking product was positive.	4.22	0.936	2
BIDB3	I am likely to use Islamic digital banking in the future.	4.14	0.920	4

BIDB4	I would be more likely to use Islamic digital banking if it fulfils my banking needs	4.23	0.880	1
BIDB5	I predict that I will frequently use Islamic digital banking in the future	4.20	0.959	3

Respondents demonstrated generally high levels of agreement on items measuring the intention to adopt Islamic digital banking. This trend is particularly evident among Gen Z, who tend to favor digital platforms that offer simplified transactions and minimal waiting time (Singh, 2024). Among the items measured, BIDB4 recorded the highest mean score (M = 4.23, SD = 0.880), indicating a strong inclination to adopt Islamic digital banking among respondents when it effectively meets their financial needs. This was followed by BIDB2 with a mean of 4.22, which reflects positive initial impressions of the service. The lowest mean scores were recorded in BIDB1 and BIDB3, both at 4.14, indicating a slightly more cautious stance regarding adoption. Meanwhile, BIDB5 achieved a mean of 4.20, highlighting respondents' willingness for continued and frequent usage in future use. These findings are consistent with previous studies, which emphasize the importance of perceived usefulness and value alignment in influencing the adoption of Islamic financial technologies (Idrees & Ullah, 2024).

4.1.2.2 Performance Expectancy (PE)

Table 4.6:

Central Tendency Assessment of PE

Syntax	Sentence	Mean	Standard Deviation	Ranking of Mean
PE1	I believe Islamic digital banking is useful in my daily life	4.02	0.870	4
PE2	I believe Islamic digital banking will bring benefits to my life	4.15	0.957	1
PE3	I believe Islamic digital banking is more time-saving, as it eliminates long queues and simplifies transactions	4.11	0.899	2
PE4	I believe using Islamic digital banking enables faster financial transactions	4.15	0.975	1
PE5	I believe Islamic digital banking would improve my ability to achieve my financial goals and manage my finance	4.08	0.978	3

PE2, which reflects the belief that Islamic digital banking provides meaningful benefits in managing personal finances, an average score of 4.15 was the highest recorded, accompanied by a standard deviation of 0.957. This suggests that users perceive Islamic digital banking as a useful tool that enhances their financial routines, which indicates a strong association with practical value. Similarly, PE4 also achieved a mean of 4.15 (SD = 0.975), highlighting users' agreement that the service enables faster financial transactions. PE3 followed closely with a mean of 4.11, reflecting a perception of the platform as time-saving and efficient. PE5 scored 4.08 (SD = 0.978), suggesting moderate confidence in using it to manage financial goals. PE1 recorded the lowest means at 4.02 (SD = 0.870), yet still reflects a generally positive perception of its usefulness in daily life. These findings are

consistent with previous research that highlights performance expectancy as a key factor influencing technology adoption (Zaman et al., 2025).

4.1.2.3 Effort Expectancy (EE)

Table 4.7:

Central Tendency Assessment of EE

Syntax	Sentence	Mean	Standard Deviation	Ranking of Mean
EE1	I believe that learning how to use Islamic digital banking would be easy for me	4.23	0.871	1
EE2	I believe that the interface of Islamic digital banking is clear and understandable	4.20	0.856	3
EE3	I believe that Islamic digital banking is user-friendly	4.22	0.893	2
EE4	I am worried that there are a lot of errors while accessing Islamic digital banking services	3.45	1.272	4
EE5	I think it is simple for me to turn into proficient in utilizing Islamic digital banking	4.23	0.858	1

Respondents demonstrated the highest levels of agreement with EE1 and EE5, both have 4.23 record in mean score. The standard deviations of 0.871 and 0.858 indicate a strong consensus among users that Islamic digital banking is easy to learn, and

they can quickly become proficient in using it. EE3 followed closely with a mean of 4.22, showing that users generally find the system user-friendly. In contrast, EE4 recorded the lowest mean score of 3.45 and the highest standard deviation of 1.272, revealing a broader range of responses. This suggests that while some respondents express concern about making errors when using the services, others are more confident. Users acknowledge the benefits of Islamic digital banking, although some individuals still experience challenges when using the platform. These findings are in line with previous research, which emphasizes the role of digital competence together user education in promoting successful uptake of digital financial technologies (Indri et al., 2025).

4.1.2.4 Social Influence (SI)

Table 4.8:

Central Tendency Assessment of SI

Syntax	Sentence	Mean	Standard Deviation	Ranking of Mean
SI1	I would use Islamic digital banking based on the recommendation of my relatives	4.09	0.941	4
SI2	I would use Islamic digital banking based on the recommendation of my friends	4.14	0.956	3
SI3	I would use Islamic digital banking if people who are important to me think that I should use it	4.16	0.939	2

SI4	I would use Islamic digital banking if there were persuasion from my family and friends	4.21	0.956	1
SI5	I would use Islamic digital banking based on the number of my friend who are using it	4.16	1.001	2

Respondents showed the highest level of agreement with SI4, with a mean score of 4.21, indicating that Generation Z in Malaysia is likely to use Islamic digital banking if influenced by persuasion from family and friends. The standard deviation of 0.956 shows that responses were fairly consistent. SI3 and SI5 followed with equal mean scores of 4.16, suggesting that support from important people and peer usage also strongly impacted their decision. SI5 had the highest standard deviation of 1.001, indicating more mixed views on the influence of peer adoption. The lowest mean of 4.09 was recorded for SI1, showing that while relatives' recommendations matter, they are slightly less influential. This shows that social pressure and peer influence are key factors in shaping Gen Z's intention to adopt Islamic digital banking in Malaysia (Si & Chin, 2023).

4.1.2.5 Facilitating Conditions (FI)

Table 4.9:

Central Tendency Assessment of FC

Syntax	Sentence	Mean	Standard Deviation	Ranking of Mean

FC1	I own the relevant expertise required to utilize Islamic online banking	4.04	1.010	5
FC2	I have access to the necessary resources (e.g., smartphone, internet, devices) to use Islamic digital banking services	4.29	0.877	1
FC3	I believe Islamic digital banking services are compatible with my daily financial activities and needs	4.23	0.876	3
FC4	I believe that technical support (e.g., customer service, help desks) is readily available if I encounter issues while using Islamic digital banking	4.28	0.827	2
FC5	I believe that the Islamic digital banking system is mandate and well-developed	4.21	0.861	4

Respondents showed the highest level of agreement with FC2 (M = 4.29), indicating that most Gen Z respondents have adequate access to the internet, smartphones, and other digital tools required to utilize Islamic digital banking. This implies that physical access to technology is not a major barrier for this group. FC4 (M = 4.28) received a high mean score, showing that many respondents believe technical support is available if they face any issues, which can increase their confidence in using the platform. This highlights the need for educational efforts or user-friendly guidance to help them better understand and adopt the services (Dass & Gani, 2023). Conversely, FC1 recorded the lowest mean score (M=4.04), indicating same

respondents may still feel uncertain or perceive themselves as lacking the necessary knowledge to use Islamic digital banking effectively.

4.1.2.6 Awareness (AW)

Table 4.10:

Central Tendency Assessment of AW

Syntax	Sentence	Mean	Standard Deviation	Ranking of Mean
AW1	I am aware of the principles and concept of Islamic digital banking	4.17	0.898	2
AW2	I have a full understanding of Islamic digital banking principles	4.11	1.026	4
AW3	I understand the differences between the conventional digital banking and Islamic digital banking	4.14	0.985	3
AW4	I am aware the financial instruments offered by Islamic digital banking	4.23	0.920	1
AW5	I am aware the benefits of using the Islamic digital banking products and services	4.23	0.887	1

Respondents showed the highest level of agreement with both AW4 and AW5 (M = 4.23), indicating that they are highly aware of the financial instruments and benefits

provided by Islamic digital banking. This suggests that Gen Z respondents recognize the practical advantages and services offered by the system, which may positively influence their intention to use it. AW1 also received a relatively high score (M = 4.17), showing that most participants are familiar with the basic principles and concepts of Islamic digital banking. Besides, AW2 recorded the lowest mean value (M = 4.11), suggesting that although many are aware of the system, fewer feel they have a full or deep understanding of how it works. This implies that while general awareness is strong, there may still be gaps in deeper knowledge that could be addressed through educational efforts or clearer communication from service providers (Abshor et al., 2024).

4.2 Scale Measurement

4.2.1 Reliability Test

Table 4.11

Internal Consistency Reliability Assessment

No.	Type of Variable	Variable Title	Element Counts	Cronbach's Alpha Value	Reliability Level
1.	Explained Variable	BIIDB	5	0.831	Good
2.	Explanatory Variable	PE	5	0.855	Good
3.	Explanatory Variable	EE	5	0.646	Moderate
4.	Explanatory Variable	SI	5	0.840	Good
5.	Explanatory Variable	FC	5	0.788	Acceptable
6.	Explanatory Variable	AW	5	0.859	Good

Table above presents the internal consistency as well as reliability key results every individual variable as generated by SPSS version 30.0. The variables that Cronbach's alpha exceeds 0.8, such as behavioral intention to use Islamic digital banking (BIIDB), performance expectancy (PE), social influence (SI), and awareness (AW), exhibit a remarkably strong level of reliability and reach high internal consistency. Meanwhile, the alpha value of 0.788 for facilitating condition (FC) shows acceptable dependability and is considered robust. Cronbach's alpha for effort expectancy (EE) has a fair and moderate reliability degree as the value is being over 0.60 but under 0.70. The reliability result of EE meets the minimum threshold value of 0.6, although it is considered slightly low validity of its data compared to other variables' Cronbach's alpha value. In short, Cronbach's alphas for both dependent and independent variables surpass 0.60, guaranteeing their reliability and retention throughout this assessment.

4.3 Preliminary Data Screening

4.3.1 Multicollinearity Test

Multicollinearity refers a high correlations among explanatory factors included in a developed model with multiple linear regression concept, might lead to inaccurate estimation of coefficients making it difficult to interpret the equation. Multicollinearity tests assess correlation between independent variables and employ methods like the VIF value and score of tolerance to identify and address issues.

Table 4.12

Collinearity Statistics

Predictor Variables	Variance Inflation Factors (VIF)	Tolerance
PE	2.868	0.349
EE	2.491	0.401
SI	3.024	0.331
FC	3.700	0.270
AW	2.288	0.151

Table 4.12 shows that the VIF values for all independent variables are not within the range of 5 to 10, indicating no high multicollinearity problem. All independent variables' VIF values lying between 1 and 5 are considered merely a minimal multicollinearity problem within the reasonable zone. Furthermore, they have tolerance thresholds above 0.1, confirming that no predictor variable is highly dependent on another. As a result, independent variables are definitely not the cause of the multicollinearity problem. The model handles multicollinearity without requiring any further adjustments, such as variable elimination or complicated statistical methods.

4.3.2 Normality Test

A normality test is another initial data diagnostic test that is needed after ensuring the independent variables do not have a multi-collinearity relationship with each other. This test aims to determine whether the distribution of all explanation and response variables approximates a normal distribution (Ghasemi & Zahediasl, 2012). This section will figure out normality by using skewness and kurtosis measurements as well as histograms and Q-Q plots.

Table 4.13:

Normality Test Outcome

Variable Type	Name of Variable	Skewness	Kurtosis
Explanied Variable	Behavioral Intention to Use Islamic Digital Banking	(1.864)	4.238
Explanatory Variable	Performance Expectancy	(1.862)	4.492
Explanatory Variable	Effort Expectancy	(1.393)	2.858
Explanatory Variable	Social Influence	(1.925)	4.537
Explanatory Variable	Facilitating Conditions	(1.571)	2.973
Explanatory Variable	Awareness	(1.896)	4.219

Kim (2013) reported that for an enough large in the size of sample (n > 300), skewness and kurtosis become the most appropriate measurements for assuming normality, whereas the Shapiro-Wilk test and Kolmogorov-Smirnov test are generally more reliable for small samples. As shown in Table 4.13, shows that all factors have a value of skewness generated fall between -2 and +2. Therefore, it can be summarized as all the variable has a normal distribution. The highest skewness is located at effort expectancy (-1.393) while the lowest skewness is situated at social influence (-1.925). Besides, the kurtosis values of all variables presented are fall in the value between -7 and +7. The obtained kurtosis score in the greatest record is located on social influence (4.537), while the lowest skewness is situated at effort expectancy (2.858). In short, these results provide strong evidence that all the factors follow a concept of residual is normally distributed.

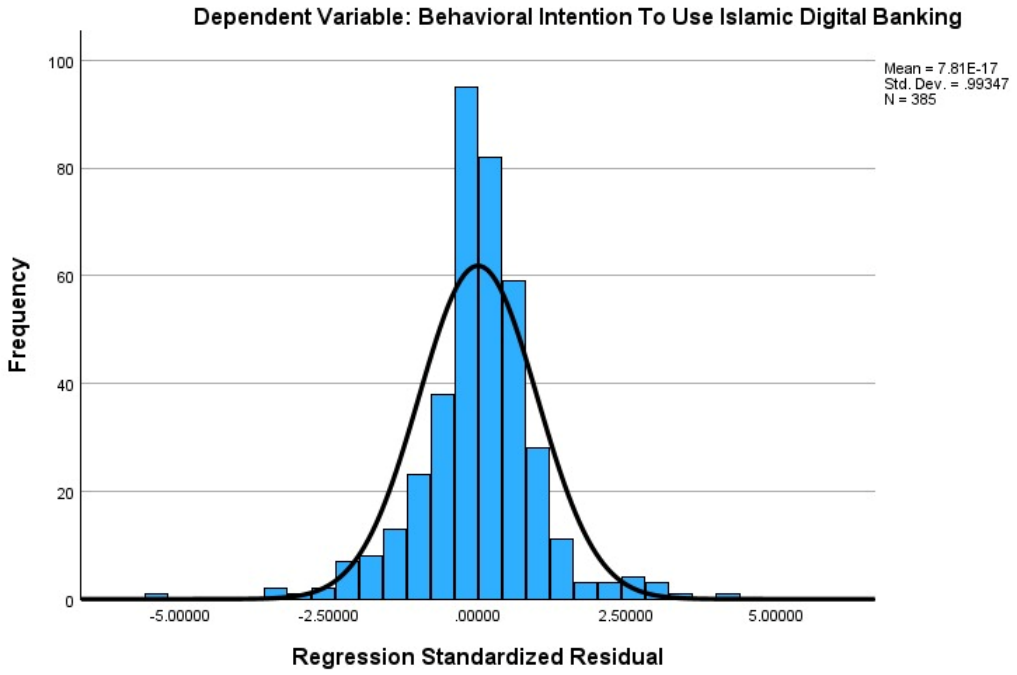

Figure 4.5. Histogram of Residual Normality.

Figure 4.5 demonstrates the normality distribution histogram of the residuals of the explained factor, adoption of Islamic digital banking. The normality assumption is crucial to ensure the validity of the conclusion as the violation of normality of residuals will cause suboptimal estimators, faulty inference statements, such as p-values, confidence intervals, and hypothesis tests, become unreliable, and incorrect predictions (Das & Imon, 2016). Firstly, the histogram of residuals is presented in a bell-shaped form that almost looks like a Gaussian distribution curve. Secondly, it is symmetric and centered around the value of zero, which means (7.81E-17) is located roughly at zero. Thirdly, most of the residual frequency values fall close to zero, with only a few values in the tails. Fourthly, there is no major skewness or extreme outliers. These support the normality assumption in the regression model then enhance the reliability of the t-statistic and p-value.

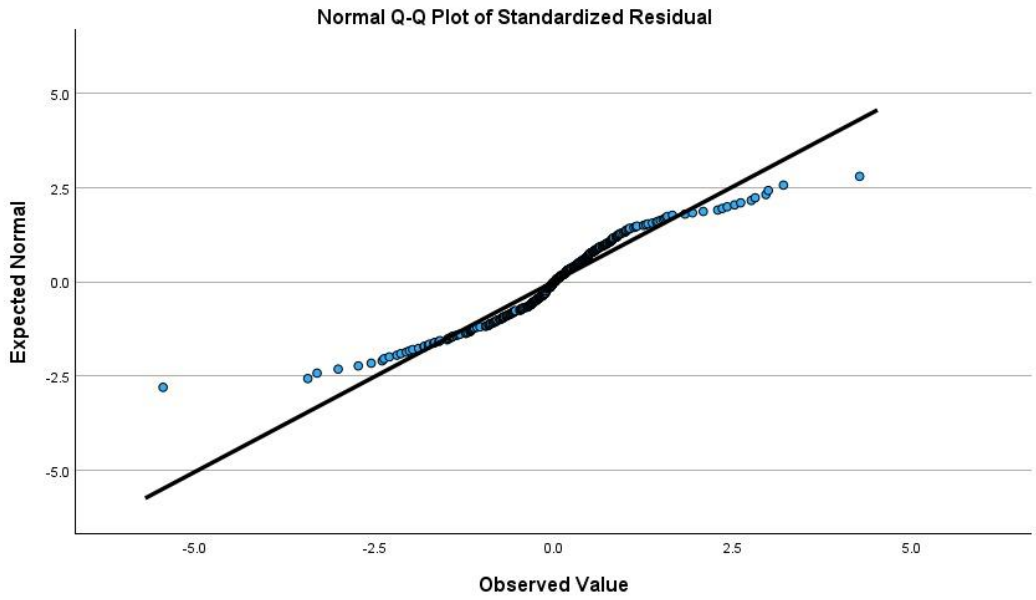

Figure 4.6. Normal Quantile-Quantile (Q-Q) Plot for Residuals

The Q-Q plot's ordinate depicts the quantile of sample data, while the abscissa represents the quantile of a hypothetical data set assuming a normal distribution. In common practice, it may be concluded that the data of behavioural intention to use Islamic digital banking among Gen Z in Malaysia is normally distributed if the points are "close enough" to a straight line (Habibzadeh, 2024). The black diagonal line represents the ideal normal distribution of this model while the blue dots are actual residuals (error). In this diagram, the middle portion around the center of the line follows the straight line closely. This means the central residuals are roughly normal. Despite the tails at left showing deviation from the line might be due to possibly slight skewness or kurtosis, however, this minor discrepancy is often acceptable, especially with a moderate to large sample size. The Central Limit Theorem states that as the sample size increases, a sampling distribution seems to become more normal, even if the population distribution is not normal or has an imperfect normality (Barri, 2019). In short, the residuals of this model are normally distributed, and the hypothesis testing will become reliable.

4.4 Inferential Analysis

4.4.1 Multiple Regression Analysis

Table 4.14

Behavioral Intention to use Islamic digital banking (BIIDB)'s Multiple Regression Result

Model	Unstandardized Coefficient		Standardized Coefficient	T-statistics	Significance
	Beta	Std. Error	Beta		
(Constant)	0.819	0.669	-	1.224	0.222
PE	0.298	0.043	0.311	6.989	< 0.001
EE	0.059	0.048	0.051	1.228	0.220
SI	0.208	0.043	0.218	4.781	< 0.001
FC	0.188	0.055	0.173	3.426	< 0.001
AW	0.216	0.038	0.228	5.755	< 0.001
R^2					0.739
Adjusted R^2					0.736
F-test					214.565
P-value for F-test					< 0.001
Durbin Watson					2.047

Multiple regression analysis was used in investigating the assumption whether the explained factor, adoption of Islamic digital banking (BIIDB), has relationship or association with the 5 explanatory factors (PE, EE, SI, FC, AW). Table 4.14 presents the outcomes, which indicate that performance expectancy, social influence, facilitating conditions, and awareness are statistically significant variables. The p-values for these factors fall below 0.01, 0.05, 0.10, and the t-statistics are 6.989, 4.781, 3.426, and 5.755. In contrast, a p-value greater than 0.01, 0.05, and 0.10, and a t-value of 1.228, effort expectancy is not significant.

This inferential analysis found that performance expectancy has a strongly statistically significant effect at a confidence level of about 99%, shown by a p-value of less than 0.001 significance threshold. This strongly strengthens the hypothesis of a robust relationship between performance expectancy and the behavioral intention to use Islamic digital banking. Furthermore, the unstandardized regression coefficient value is shown to be positive of 0.298 validates that when performance expectancy increases by 1unit, there is a corresponding increase of 0.298 units in the adoption of Islamic e-banking among Malaysian Gen Z, provided other variables remain unchanged. Performance expectancy is the highest significance on the dependent variable to others because it contributes the highest coefficient and t-statistic value compared to other indicators.

Besides, this study found that effort expectancy does not significantly impact the behavioral intention of Malaysian Gen Z in using Islamic digital banking. It is proved by a 0.220 p-value greater than all 0.01, 0.05, and 0.10 significance levels, so the H_0 should be rejected. The 0.220 in p-value means that it only has a 78% confidence level to say effort expectancy is significant in this study. This indicates that, in contrast to the study's original claim, effort expectancy is insignificant in affecting Malaysian's behavioral intention to use Islamic digital banking. Additionally, the unstandardized value of the regression coefficient is positive 0.059 inferred that, under the same assumptions, a unit rises in effort expectancy slightly rises the number of Generation Z wanted to use Islamic digital banking by 0.059 units.

Furthermore, this study has a 99% confidence level to say that social influence (SI), facilitating conditions (FC), and awareness (AW) have a significant effect on the behavioural intention to use Islamic digital banking among Generation Z in Malaysia. It is because SI, FC, and AW have a p-value of less than 0.001 is obviously less than all three confidence levels used. It shows a marked positive relationship positive relationship for each SI, FC, and AW to behavioural intention to adopt Islamic digital banking. For example, given a coefficient value of 0.208, show that for every 1% increase in the social influence, there will be a 0.208% increase in the behavioural intention to use Islamic digital banking. The determinant of social influence is ranked in third place in significance in affecting the dependent variable. In this way, awareness ranked second while facilitating conditions ranked in fourth place.

According to Zhang (2017), another key result is R-squared (R^2), which is a parameter to indicate what extent proportion of the variation in the predicted variable can be attributed to shifts in the predictor factors. The R^2 value of 0.739 shows that 73.9% of the variance in behavioural intention to use Islamic digital banking among Generation Z in Malaysia is caused by differences in how convinience the Islamic digital banking is, how they are affected by friends and family, how their surroundings' equipment to support, and whether they have notice Islamic digital banking in their vicinity. The remaining 26.1% of the variation in the count of Malaysian Gen Z who adopt Islamic digital banking are explained by excluded vital determinants. This shows a good fit model. The adjusted R^2 value is 0.736 indicates that 73.6% of the variation of the number of Malaysian Generation Z who have the intention to use Islamic digital banking can be explained by differences in PE, SI, FC, and AW, after adjusting the predictors included in this model, k=5.

The F-test statistic is 214.565, and the p-value of this model is less than 0.001, which has 99% confidence to indicate the multiple linear regression model is at overall important. Therefore, the model equation developed by this study illustrates

the relationship between the explained factor (desire to use Islamic digital banking) and the five explanatory factors (performance expectancy, effort expectancy, social influence, facilitating condition, and awareness). Lastly, the Durbin-Watson test result outcome is 2.047 is approximately equal to 2; it is a remarkable index to indicate no autocorrelation problems within this model's residuals.

4.5 Conclusion

SPSS version 30.0 was utilized to analyse the inputs. It assists in analysing and summarising the interviewees' responses. It turns out that the questionnaire results are trustworthy. Furthermore, there are no issues with multicollinearity between variables and non-normality of residuals. To summarise, the analysis of multiple linear regression reveals that 4 predictor variables—performance expectancy (PE), social influence (SI), facilitating condition (FC), and awareness (AW)—have a substantial impact on behavioural intention to use Islamic digital banking. However, only effort expectancy (EE) has a minor effect on the amount of Malaysian Generation Z that wish to utilise Islamic digital banking.

CHAPTER 5: CONCLUSION AND IMPLICATIONS

5.0 Introduction

This chapter will provide a detailed discussion of the findings and results presented in Chapter 4. Initially, start with a brief result of multiple regression analysis, then reveal how each determinant affects the outcome. The next section provides suggestions to better utilize these discoveries. The subsequent part pointed out this study's imperfection and the recommendations given to future similar research to help future researchers improve research quality and caliber.

5.1 Summary of Statistical Analysis

Table 5.1:

Overview of the Statistical Outcome

Explanatory Factors Name	T-test	Sig. Value	Outcome
Performance Expectancy (PE)	6.989	< 0.001	Significant
Effort Expectancy (EE)	1.228	0.220	Insignificant
Social Influence (SI)	4.781	< 0.001	Significant
Facilitating Conditions (FC)	3.426	< 0.001	Significant
Awareness (AW)	5.755	< 0.001	Significant

Table 5.1 presents the five main factors of this study, which include performance expectancy, effort expectancy, social influence, facilitating conditions, and

awareness act as a vital character in explaining the perception of users and behavioral intention of Generation Z in Malaysia to adopt Islamic banking. The outcome outlined in Table 5.1 shows that the relationship is statistically significant between adoption of Islamic e-banking and its determinants (PE, SI, FC, AW). However, the significance value shows the factor of EE does not contribute to a strong linkage with the dependent variable. In contrast, the other factors are trustworthy predictors of the behavioural intention to use Islamic digital banking. These independent variables provide valuable insights into the intention of Malaysian Generation Z to adopt Islamic banking digitalized.

5.2 Discussion on Major Findings

This portion presents a comprehensive analysis of the key outcomes outlined in the previous part, with a concentration on the elements affecting the desire to utilize Islamic digital banking. Each finding is discussed individually in relation to the initiatives implemented by financial and banking institutions, providing a deeper understanding of their significance and implications.

5.2.1 Key Factors Affecting the Behavioural Intention to Use Islamic Digital Banking among Generation Z in Malaysia

5.2.1.1 Performance Expectancy and Behavioural Intention to Use Islamic Digital Banking

H1: Performance expectancy significantly affect behavioural intention to adopt Islamic digital banking among Malaysians' Gen Z.

Performance expectancy refers to the degree to which individuals believe that using a particular system will help them attain gains in performance, is widely recognized as a key determinant in technology adoption behavior (Venkatesh et al., 2003). In the context of Islamic digital banking, performance expectancy encompasses not only general functional benefits, such as 24/7 account access, instant transfers, and bill payments but also distinct *Shariah*-compliant features such as takaful and halal lifestyle integration. The stated hypothesis are supported by studies such as Muttaqien et al., (2024) and Suswanto et al. (2025), which indicate that users are more likely to adopt Islamic digital financial services if they perceive significant benefits.

Research by Mingka et al. (2024) highlights that Gen Z users are particularly attracted to Islamic digital banking platforms that offer features enhancing perceived performance. These features include *Shariah*-compliant savings and investment products, AI-powered zakat and waqf management tools, digital gold trading, and real-time account analytics tailored for *halal* budgeting. For instance, platforms that offer automatic categorization of *halal* versus non-*halal* spending or provide zakat calculation reminders are perceived as highly useful by religiously inclined users (Sarif & Ariyanti, 2025). These services are seen as not only simplifying financial management but also reinforcing Islamic financial practices in daily life. This finding suggests that performance expectancy is not merely about digital functionality, but also how effectively the technology aligns with users' personal and religious financial goals.

Aziz (2024) emphasize that performance expectancy in Islamic digital banking is strongly influenced by users' past interactions with digital financial tools. For Gen Z users, who are digital natives, expectations are shaped by seamless app experiences, fast processing times, and integration with lifestyle features such as e-

wallets or QR payments. When Islamic digital banking apps fall short, such as experiencing delays in zakat payment processing, lacking real-time *halal* investment portfolio tracking or failing to provide automated financing eligibility checks, users may perceive the performance as inadequate, which can lead to reduced adoption intentions (Hajijah et al., 2025). This illustrates that while users may believe in the potential usefulness of Islamic digital banking, actual adoption depends on whether the system consistently deliver high-performance features that align with their everyday digital expectations.

5.2.1.2 Effort Expectancy and Behavioural Intention to Use Islamic Digital Banking

H2: Effort expectancy insignificantly affect behavioural intention to adopt Islamic digital banking among Malaysians' Gen Z.

Effort expectancy, as defined by Venkatesh et al. (2003), refers to the perceived ease of use associated with a particular technology or system. This typically involve features such as intuitive navigation, streamlined account setup, fast login processes, and user-friendly interfaces. Gen Z users are more concerned with the functional outcomes and value alignment of digital platforms rather than how easy they are to use, as ease of use is assumed by default (Indriyarti et al., 2023). For them, the decision to adopt Islamic digital banking is influenced less by usability and more about whether the platform aligns with their lifestyle values, ethical beliefs, and expectations for digital efficiency. These findings reinforces our hypothesis statement that while effort expectancy is acknowledged as a positive factor, it does not appear to be the primary driver behind their adoption behavior.

According to Adhikari et al. (2024), although ease of use remains an important feature in digital banking adoption, its impact may be diminished among tech-savvy

populations such as Gen Z. The study found that younger users, especially those who are frequently use smartphones and online services, often perceive digital platforms as inherently easy to navigate. This suggests that the majority of Gen Z have minimal concern over system complexity, noting that they may rarely read user guides or instructions before navigating a banking app. For this generation, the perceived effort involved in using Islamic digital banking applications is relatively negligible, as they expect all digital interfaces, whether conventional or Islamic, to operate with a certain standard of user-friendliness (Hajijah et al., 2025).

On the contrary, studies such as Julia et al. (2024) argue that effort expectancy still holds some degree of influence, particularly during the early stages of digital banking adoption. Their findings indicate that when Islamic digital banking platforms introduce new features or interfaces changes, even Gen Z users may hesitate if the system lacks clarity, intuitive navigation, or consistent design. For instance, delays in transaction processing, complex registration procedures, or confusing user interfaces can temporarily discourage adoption (Lambrecht, et al., 2010). However, this hesitation tends to diminish once users become familiar with the system, especially if the platform provides adequate tutorials or in-app guidance (Doros, 2025). This suggests that while effort expectancy might momentarily affect adoption behavior, it does not serve as a long-term or decisive barrier among tech-savvy Gen Z users, whose confidence in using digital tools allows them to overcome initial usability concerns more quickly than older cohorts.

5.2.1.3 Social Influence and Behavioural Intention to Use Islamic Digital Banking

H3: Social influence significantly affects behavioural intention to adopt Islamic digital banking among Malaysians' Gen Z.

The term "social impact" relates to how persons regard key persons in their life, such as relatives, peers, religious authorities, or social media influencers, believe they should use a particular system (Venkatesh et al., 2003). In the context of Islamic digital banking, social influence reflects the pressure or encouragement from one's social environment to adopt financial services that align with Islamic principles. Among Gen Z in Malaysia, a demographic known for its interconnectedness and receptiveness to social cues, this factor holds substantial weight in shaping behavioural intentions (Aisyah et al., 2023).

According to Zahari et al. (2024), Gen Z users prefer to adopt Islamic e-banking once those potential users observe peers or respected figures endorsing these platforms. For example, when popular Muslim influencers on platforms such as TikTok and Instagram promote the use of *halal* budgeting apps or demonstrate how to utilise AI-based zakat calculators, they help establish positive social norms around Islamic fintech adoption. This peer endorsement reinforces trust and reduces uncertainty, particularly in a space where both digital security and religious compliance are key concerns.

Furthermore, cultural norms in Malaysia tend to prioritise community consensus and familial input in financial decision-making. Research by Wahyuningsih et al. (2025) found that Gen Z respondents often consult financial tools with their parents or older siblings, who serve in as financial advisor role. In such cases, parental approval of *Shariah*-compliant digital platforms can significantly influence adoption intentions. Additionally, religious authorities such as JAKIM-certified endorsements or *fatwa* council validations can further legitimise digital banking platforms and sway public opinion (Noordin, 2024).

According to Alrasyid et al. (2023), Islamic digital banking providers are encouraged to actively collaborate with Islamic scholars, micro-influencers, and community leaders to foster positive perceptions through the mechanism of social proof. This strategic engagement highlights that social influence extends beyond

generational preferences, serving as a vital channel through which trust is established via collective validation in both digital environments and religious contexts.

5.2.1.4 Facilitating Condition and Behavioural Intention to Use Islamic Digital Banking

H4: Facilitating condition significantly affects behavioural intention to adopt Islamic digital banking among Malaysians' Gen Z.

Facilitating conditions refer to the degree to which individuals believe that the technical infrastructure, resources, and support mechanisms are in place to help them use a system (Venkatesh et al., 2003). For Islamic digital banking, this includes smartphone access, stable internet connectivity, application usability, availability of customer support, and guidance on *Shariah*-compliant services. For Gen Z in Malaysia, who are digital natives yet still require contextual support for religious compliance, facilitating conditions are a crucial determinant of adoption.

As highlighted by Muharromah et al. (2024), Gen Z users tend to favour Islamic digital banking platforms that offer seamless onboarding, built-in tutorials, and real-time support through live chat or AI-powered chatbots. These features reduce friction in the user experience and build confidence in promoting financial tasks such as zakat payments, *halal* investment, or takaful enrolment. For instance, when an Islamic banking app provides step-by-step guidance on setting up a *Shariah*-compliant savings plan or tracking *halal* expenses, users feel more supported and empowered to manage their finances in alignment with Islamic principles (Ghofar et al., 2024).

Moreover, facilitating conditions also encompass compatibility with users' existing digital behaviours. According to Saputra (2025), Gen Z users are more inclined to adopt platforms that integrate with digital wallets, QR code payments, biometric login, and other lifestyle technologies. Conversely, if the platform suffers from frequent downtime, lacks user-friendly interfaces, or does not offer localized language options, users may feel discouraged from continued use (Hajijah et al., 2025). Importantly, facilitating conditions are not limited to technology alone, but they also involve institutional readiness.

Moussa et al. (2024) also mentioned that banks can enhance adoption by creating an ecosystem that supports users through accessible FAQs on *halal* financial products, customer service personnel trained in Islamic finance and ensuring that digital infrastructure remains reliable and robust. Ultimately, strong facilitating conditions bridge the gap between user interest and actual engagement, making Islamic digital banking more inclusive, practical, and aligned with the expectations of a tech-savvy Muslim generation.

5.2.1.5 Awareness and Behavioural Intention to Use Islamic Digital Banking

H5: Awareness significantly affects behavioural intention to use digital banking among Malaysian's Gen Z.

Awareness refers to the state of being conscious or attention to something or present events (Brown & Ryan, 2003). The discoveries presented in previous chapter indicate awareness and the behavioural desire to try Islamic online banking services has a strong link between them. This funding can be supported by the previous studies, such as Sudarsono et al. (2021) and Thambiah et al. (2021), which confirmed that awareness has a positive influence on Islamic banking adoption.

Naz et al. (2019) emphasized that the degree of awareness will affect the behavioural intention level, such as a potential client will be aware Islamic e-banking service introduced by the banking institution at the first level of awareness. Over time, they will keep updating their knowledge about Islamic e-banking until they reach a sufficient awareness level to enhance their confidence and trust in it before they make a decision to become adopters or users. Similarly, Alzubi et al. (2017) found that the key factor influencing the decision to use Internet banking is the level of understanding and information possessed by the user. Their research also noted that intention to adopt a new technology needs a high level of awareness, which aligns with this study's findings, particularly given that Islamic digital banking is still relatively new to many Malaysians within the Gen Z demographic.

Xu et al. (2018) offered a relevant analogy, suggesting that individuals with environmental awareness are more likely to purchase an environmentally friendly car. This example reflects the characteristics of this study's target population, whose is the tech-savvy youth with a high level of technological and curiosity-driven awareness. This awareness enhances their perception about Islamic digital banking. For non-Muslim users in particular, Islamic digital banking may be a new concept and increased awareness could lead them to become potential adopters. In the same time, Vizano et al. (2021) revealed that *halal* awareness, which means Muslims' comprehension of *halal*-related issues, will positively influence the intention to consume *halal* products in the financial market. Accordingly, this study suggests that individuals who understand the difference between traditional e-banking and Islamic digital banking are more likely to choose the latter, as *halal* awareness encourages them to avoid *riba* (interest).

5.3 Implication of the Study

This section is aimed at providing suggestions on implications for a variety of organizations concerned about Islamic e-banking, such as government agency, non-government agency, policymakers, academics, and banking institutions.

Firstly, the performance expectancy is proven in multiple regression analysis to have a positive and significant effect on intention to adopt Islamic digital banking among Generation Z in Malaysia. The authorities should focus more on developing performance expectancy since it has the highest coefficient to the dependent variable compared to others. For instance, the banking institution that wants to promote Islamic digital banking should develop other features or functions apart from those already existing in current Malaysian Islamic digital banking to gain a competitive advantage. This target aligns with the research by Mohd Thas Thaker et al. (2022) pointed out that although Malaysia Islamic bank nowadays have practically all of their services integrated into the system including fast transaction speed, easy bill payment, instant zakat contribution, and Shariah-compliant investment tools but others, such as application of a direct loan, utilising cloud drive in processing document, and inaccessible disclosure of product that can increase the sustainability of Islamic digital banking are still lack in Malaysia's Islamic banking industry. Besides, the Malaysian government should always grant funding or incentives for banks to support innovation to develop advanced Islamic digital banking features. This is because the attribute and characteristic of one innovation will affect the adoption rate of that innovation. At the same time, innovation benefits can be seen and explored by potential users, then increases their intention to use (Hidayat & Kassim, 2023).

The second explanatory variable, effort expectancy, has shown an insignificant effect on the behavioural intention among Generation Z in Malaysia to use Islamic digital banking. Despite effort expectancy not directly stimulating people to adopt Islamic e-banking, it is still vital to help in shaping the behavioural attitude. To capture this outcome, the university together with school authorities should organize seminars or add Islamic and Technological literacy to enhance Generation Z's technological & Islamic terms' readiness. This can help Generation Z fulfil the

effort expectancy when faced with Islamic digital banking as a new technology for them, because that readiness lets them feel Islamic digital banking is easy to use compared to others. Besides, those Islamic banks should offer simple onboarding guides or short in-app video tutorials to help new users navigate the platform effortlessly. Furthermore, they can also make the window clean and intuitive user interfaces that can reduce steps in tasks like fund transfers, zakat payments, and account inquiries. These two alterations on Islamic digitalised banking platforms will fit customers nowadays, particularly those in younger demographics, who demand digital banking experiences to be easy, personalised, and dynamic, similar to super applications (Fintech News Malaysia, 2025). This will increase the user-friendly level, then improve users' experience and stimulate intention (Sari et al., 2024).

The third independent variable, social influence, plays a significant roles in shaping the adoption behavioural among Generation Z in Malaysia towards the Islamic digital banking. According to Abourrig (2021), acceptance of Islamic banking products can be mainly driven by three social influences factors, subjective norms, descriptive norms and Islamic identity. Subjective standard is a kind of culture stress derived from important referents such as family, peers and religious leader to perform or avoid something. Descriptive norms reflect the observing of individuals that what majority within their social circle are doing, while Islamic identity is the individuals defining themselves as part of the Muslim community. The research found that the descriptive norms exert the strongest influences on the participants and followed by subjective norms and Islamic identity. Hence, it was suggested that the Islamic banking or relevant authorities should emphasize on the social proof strategies by building the users community and collaborating with the community leader to activate the subjective norms. In addition, social environments will always influence individual in adopting the Islamic digital banking. Hence, Islamic banking must develop marketing strategies and customers retention programs to enhance the brand credibility, foster trust and build long-term relationship with their customers (Hasib et al., 2023).

The fourth independent variable, facilitating conditions, significantly affects Malaysian Generation Z to try the Islamic digital finance services in Malaysia. According to Alawiyah et al. (2024), the implementation of Shariah-compliant digitalized banking must have a combination with financial inclusion. It is suggested that the Malaysian government collaborate with industry companies to expand internet infrastructure to improve internet accessibility, especially in the rural and underserved areas of Malaysia, ensuring users can access Islamic digital banking platforms seamlessly. Aziz (2022) suggests that individuals who are currently unable to access financial services may be considered excluded from the system, definitely impossible to become potential users of Islamic digital banking. In this way, the Malaysian government can achieve its financial inclusion agenda goal as well in achievement of promote facilitating conditions. Mohd Thas Thaker et al. (2022) highlighted those Islamic banks in Malaysia should develop and reinforce digital banking infrastructure to ensure reliable internet and system uptime to create a strong backbone for service delivery. Furthermore, customer service, such as chatbots, helplines, can be improved to 24/7 to reduce technical obstacles and reassure customers.

Awareness acts as the last independent variable, affecting positively and significantly on Generation Z's intention to take up Shariah-compliant digital banking service. University authorities should cooperate with Islamic bank institutions such as Bank Islam or Bank Muamalat to hold a campaign to stimulate youth's awareness at the first level. For example, INCEIF University, in collaboration with Bank Negara Malaysia, organized Islamic Finance Future Leaders Bootcamp 2025 in Jun 2025 to provide students exposure and mentorship from prominent figures in the Islamic finance sector (Zulkiflihasan, 2025). Besides, universities should integrate Islamic Fintech education into their curriculum to provide a basic understanding and information about it. On the other hand, Islamic bankers should also consider softening their non-English terminology, specifically Arabic ones, to ensure that their products and services are familiar and plainly comprehensible among non-Muslims (Musse, nd). In other perspectives, government can use mainstream and digital media, including television, social media, and billboards, to promote Islamic digital banking and clarify how it aligns

with Shariah principles. Shinkafi et al. (2023) revealed that the Malaysian government should advertise in various supermarkets and malls to create public awareness, and the amount of Islamic bank knowledge in the public relies on the patronage of each business activity.

5.4 Limitations of the Research

This study has employed a non-probability convenience sampling technique, which provides much easier data collection from respondents through a cost-effective approach. However, there are some limitations for this sampling technique. Firstly, convenience samples may often suffer from biases problem. For example, non-coverage bias and self-selection bias. In the study, we applied online distribution to minimize the non-coverage bias, but the self-selection bias remained unavoidable. This is because the participants can voluntarily decide whether to fill in the questionnaires, which leads to bias and results in a non-random sample (Golzar et al., 2022). In addition, this study may be overlooked by individuals with limited access to digital technologies, particularly those living in rural areas. Secondly, non-probability convenience sampling techniques may also consist of non-generalizability problems. The information that we gained from the convenience sample does not reflect to the behavior of the general population. That means that the information in this study only represent a viewpoint regarding the adoption behavioural of Gen-Z towards the Islamic digital banking and not represents for adoption behavioural of the entire population of Gen-Z.

Moreover, one of the limitations of this study is the scope of variables. In this study, we had applied the Unified Theory of Acceptance and Use of Technology to explain the adoption behavioural of Gen-Z in Malaysia towards Islamic digital banking, with focusing on factors such as performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness. However, there are still consists of other possible factors that influences the behavioural are not examined in our

study. In the context of Islamic digital banking, religious compliance, trust in Shariah principles and cultural factors had not been captured in the UTAUT variables. This suggesting that the standard UTAUT model, which focus more on the technology adoption factors, may miss the relevant factors when it applies on research of Islamic digital banking. Riza (2021) had included the trust, satisfaction and acceptance among users of Islamic digital banking to modify the traditional UTAUT model. The result suggested that the modified UTAUT can better fits the Islamic financial industry and recommend including more relevant variables in the model.

Besides that, another limitation of this study is focusing only on Generation Z while excluding other generations. This may lead to the conflict that is called Age-Period-Cohort Confounding, Since the age, period and cohort effect is linearly dependent, it cannot be simply separate their independent influences by observing data along. Hence, this study may not determine that whether the observe behavioural of Generation Z are due to their specific experiences as a birth cohort, their current life stage as a young teenager, or broader environment and historical influences that affecting all age groups at this time. Therefore, the study's ability to pinpoint the actual cause of observed behavioral patterns is constrained in the absence of longitudinal data that monitor changes over time or comparable data on subsequent generations.

5.5 Future Research Recommendations

Based on the results of this study, future research could explore several important directions to further enhance the understanding adoption of Islamic digital banking among Malaysian Gen Z.

Since this study applied convenience sampling technique which may limit the generalizability of the results, the future research should use stricter sampling methods like stratified sampling. This method can ensure that more people from different subgroups within Gen Z are getting included, such as educational level and income level. By doing this, future research could reduce sample bias and generate results which more accurately reflecting the diversify of Gen Z in Malaysia. Moreover, future research could make sure their respondents are from both urban and rural areas of each state, which might show different views or levels of knowledge regarding Islamic banking, thus enhancing the comprehension of behavioural intention in this context.

Besides, this study examined various independent variables, including performance expectancy, effort expectancy, social influence, facilitating conditions, and awareness, to investigate their influence on Gen Z's intention to use Islamic banking. Though these variables provided a strong foundation based on an established model, future research could expand the study by incorporating new variables that capture additional psychological, cultural, or personal factors. For instance, religious belief might offer insight into the extent to which one's personal faith, spiritual commitments, or adherence to Islamic principles influence banking selections. Unlike general awareness or social influence, religious beliefs may directly affect the necessity or moral responsibility of using financial services that comply with Islamic principles. Other variables worth exploring include perceived risk, trust in Islamic financial institutions, digital literacy, and attitudes toward conventional banks. These variables may discover new ways to influence behavioural intentions. By incorporating a wider range of variables, future research could offer a more comprehensive understanding of Generation Z's intentions regarding the adoption of Islamic banking.

Lastly, future research could consider expanding the research beyond Generation Z to include comparisons with other generations, such as Millennials or the Generation X. Different generations may exhibit distinct financial behaviours, technology adoption patterns, and attitudes toward religious obligations, which

could influence their decisions regarding Islamic banking. For instance, Millennials may prioritize financial stability and trust, while the Generation X experienced the pre-digital banking and early digital banking eras, and they may place greater emphasis on reliability, personalized customer service, and a balance between traditional and digital banking channels. By conducting comparative studies across generations, researchers can identify factors that influence behavioral intentions, determining whether they are unique to Generation Z or prevalent across different age groups. This generational perspective not only enriches the theoretical contributions of the present study but also helps Islamic banking institutions adjust their marketing and service strategies more effectively to meet the unique needs of each group.

5.6 Conclusion

Overall, throughout Chapter 1 until Chapter 5, the primary objective is to determine the elements that contribute to the behavioural desire to use Islamic online banking among Generation Z in Malaysia. Data has been collected through distribution of survey form and then transcribed into SPSS 30.0 to generate outcomes for assement and evaluation. The outcomes of the assessment show that only hypothesis H2 is not been accepted, while hypotheses H1, H3, H4, and H5 have been approved. This proves that performance expectancy, social influence, facilitating conditions, and awareness influence the behavioural intention to use Islamic digital banking at different levels respectively. However, only the indicator of effort expectancy insignificantly affects the behavioural intention to use Islamic digital banking. The results are discussed in depth, and relevant implications are provided. Additionally, the study addresses its limitations and offers recommendations for future research. These insights may assist future researchers in selecting appropriate variables, designing effective data collection methods, and identifying suitable respondents.

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Appendices

Appendix 3.1: Questionnaire

Abstract

Determinants of Intention to Use Islamic Digital Banking among Generation Z in Malaysia

Dear Respondents,
Good day, we are Year 3 students of Bachelor of Business Administration (Honours) Banking and Finance from Universiti Tunku Abdul Rahman (UTAR) Kampar conducting a research focuses on the topic of "Determinants of intention to use Islamic digital banking among generation Z in Malaysia"

This questionnaire consists of THREE (3) sections:
Section A: Demographic information
Section B: Determinants of intention to use Islamic digital banking
Section C: Behavioral intention to use Islamic digital banking

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.

Personal Data Protection Statement

PERSONAL DATA PROTECTION STATEMENT

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

Notice:

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

- For assessment of any application to UTAR
- For processing any benefits and services
- For communication purposes
- For advertorial and news
- For general administration and record purposes
- For enhancing the value of education
- For educational and related purposes consequential to UTAR
- For the purpose of our corporate governance
- For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

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

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

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

Consent:

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

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

3. You may access and update your personal data by writing to us at Kevin Kung Meng Cen (kevin1031@1utar.my).

1. **Acknowledgment of Notice**

Mark only one oval.

- ( ) I have been notified by you and that I hereby understood, consented and agreed per UTAR notice.
- ( ) I disagree, my personal data will not be processed.

Section A: Demographic Information

Gender

Mark only one oval.

- Male
- Female

Age Group

Mark only one oval.

- 18-20
- 21-24
- 25-28

State

Mark only one oval.

- Johor
- Kedah
- Kelantan
- Melaka
- Negeri Sembilan
- Pahang
- Perak
- Perlis
- Pulau Pinang
- Selangor
- Terenganu
- Sabah
- Sarawak
- W.P Kuala Lumpur
- W.P Putrajaya
- W.P Labuan

Race

Mark only one oval.

- Malay
- Chinese
- Indian
- Others

Section B: Determinants of intention to use Islamic digital banking

Performance Expectancy

PE1- I believe Islamic digital banking is useful in my daily life

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

PE2- I believe Islamic digital banking will bring benefits to my life

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

PE3- I believe Islamic digital banking is more time-saving, as it eliminates long queues and simplifies transactions.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Disagree

PE4- I believe using Islamic digital banking enables faster financial transactions.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

PE5- I believe Islamic digital banking would improve my ability to achieve my financial goals and manage my finance.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

Effort Expectancy

EE1- I believe that learning how to use Islamic digital banking would be easy for me.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

EE2- I believe that the interface of Islamic digital banking is clear and understandable

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

EE3- I believe that Islamic digital banking is user-friendly.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

EE4- I am worried that there are a lot of errors while accessing Islamic digital banking services

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Disagree

EE5- I believe that it is easy for me to become proficient in using Islamic digital banking

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

Social Influence

SI1- I would use Islamic digital banking based on the recommendation of my relatives

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

SI2- I would use Islamic digital banking based on the recommendation of my friends.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

SI3- I would use Islamic digital banking if people who are important to me think that I should use it

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

SI4- I would use Islamic digital banking if there were persuasion from my family and friends

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

SI5- I would use Islamic digital banking based on the number of my friend who are using it.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

Facilitating Condition

FC1- I have the relevant knowledge required to use Islamic digital banking

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

FC2- I have access to the necessary resources (e.g., smartphone, internet, devices) to use Islamic digital banking services

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

FC3- I believe Islamic digital banking services are compatible with my daily financial activities and needs.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

FC4- I believe that technical support (e.g., customer service, help desks) is readily available if I encounter issues while using Islamic digital banking

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

FC5- I believe that the Islamic digital banking system is mandate and well-developed

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

Awareness

AW1- I am aware of the principles and concept of Islamic digital banking

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

AW2- I have a full understanding of Islamic digital banking principles

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

AW3- I understand the differences between the conventional digital banking and Islamic digital banking

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

AW4- I am aware the financial instruments offered by Islamic digital banking

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

AW5- I am aware the benefits of using the Islamic digital banking products and services

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

Section B: Behavioural intention to use Islamic digital banking

BIDB1- I intend to use Islamic digital banking products and services.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

BIDB2- My first reaction to Islamic digital banking product was positive.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

BIDB2- I am likely to use Islamic digital banking in the future.

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

BIDB3- I would be more likely to use Islamic digital banking if it fulfils my banking needs

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

BIDB4- I predict that I will frequently use Islamic digital banking in the future

Mark only one oval.

	1	2	3	4	5	
Stro	◯	◯	◯	◯	◯	Strongly Agree

Appendix 3.2: Pilot Test

Performance Expectancy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.862	.860	5

Effort Expectancy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.644	.700	5

Social Influence

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.877	.882	5

Facilitating Conditions

Reliability Statistics

Cronbach's Alpha	N of Items
.883	5

Awareness

Reliability Statistics

Cronbach's Alpha	N of Items
.898	5

Behavioural Intention to use Islamic digital banking

Reliability Statistics

Cronbach's Alpha	N of Items
.858	5

Appendix 4.1: Descriptive Statistic (Central Tendency & Standard Deviation)

Performance Expectancy

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PE1	385	1	5	4.02	.870
PE2	385	1	5	4.15	.957
PE3	385	1	5	4.11	.899
PE4	385	1	5	4.15	.975
PE5	385	1	5	4.08	.978
Valid N (listwise)	385				

Effort Expectancy

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
EE1	385	1	5	4.23	.871
EE2	385	1	5	4.20	.856
EE3	385	1	5	4.22	.893
EE4	385	1	5	3.54	1.272
EE5	385	1	5	4.23	.858
Valid N (listwise)	385				

Social Influence

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SI1	385	1	5	4.09	.941
SI2	385	1	5	4.14	.965
SI3	385	1	5	4.16	.939
SI4	385	1	5	4.21	.956
SI5	385	1	5	4.16	1.001
Valid N (listwise)	385				

Facilitating Condition

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
FC1	385	1	5	4.04	1.010
FC2	385	1	5	4.29	.877
FC3	385	1	5	4.23	.876
FC4	385	1	5	4.28	.827
FC5	385	1	5	4.21	.861
Valid N (listwise)	385				

Awareness

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
AW1	385	1	5	4.17	.898
AW2	385	1	5	4.11	1.026
AW3	385	1	5	4.14	.985
AW4	385	1	5	4.23	.920
AW5	385	1	5	4.23	.887
Valid N (listwise)	385				

Behavioural Intention to use Islamic digital banking

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
BIDB1	385	1	5	4.14	.928
BIDB2	385	1	5	4.22	.936
BIDB3	385	1	5	4.14	.920
BIDB4	385	1	5	4.23	.880
BIDB5	385	1	5	4.20	.959
Valid N (listwise)	385				

Appendix 4.2: Reliability Statistic (Cronbach Alpha)

Performance Expectancy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.855	.856	5

Effort Expectancy

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.646	.704	5

Social Influence

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.840	.841	5

Facilitating Condition

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.788	.789	5

Awareness

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.859	.859	5

Behavioural Intention to use Islamic digital banking

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.831	.831	5

Appendix 4.3: Multicollinearity Analysis (Variance Inflation Factor & Tolerance)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	.819	.669		1.224	.222					
	Performance_Expectancy	.298	.043	.311	6.989	<.001	.774	.338	.183	.349	2.868
	Effort_Expectancy	.059	.048	.051	1.228	.220	.678	.063	.032	.401	2.491
	Social_Influence	.208	.043	.218	4.781	<.001	.764	.238	.125	.331	3.024
	Facilities_Condition	.188	.055	.173	3.426	<.001	.771	.173	.090	.270	3.700
	Awareness	.216	.038	.228	5.755	<.001	.717	.283	.151	.437	2.288

a. Dependent Variable: Behavioral_Intention

Appendix 4.4: Normality (Skewness and Kurtosis)

Descriptives

			Statistic	Std. Error
BIDB	Mean		20.9143	.18210
	95% Confidence Interval for Mean	Lower Bound	20.5563	
		Upper Bound	21.2723	
	5% Trimmed Mean		21.3081	
	Median		22.0000	
	Variance		12.766	
	Std. Deviation		3.57296	
	Minimum		5.00	
	Maximum		25.00	
	Range		20.00	
	Interquartile Range		3.00	
	Skewness		-1.864	.124
	Kurtosis		4.238	.248
Performance_Expectancy	Mean		20.5091	.18988
	95% Confidence Interval for Mean	Lower Bound	20.1358	
		Upper Bound	20.8824	
	5% Trimmed Mean		20.9040	
	Median		21.0000	
	Variance		13.881	
	Std. Deviation		3.72569	
	Minimum		5.00	
	Maximum		25.00	
	Range		20.00	
	Interquartile Range		3.00	
	Skewness		-1.862	.124
	Kurtosis		4.492	.248
Awareness	Mean		20.8805	.19243
	95% Confidence Interval for Mean	Lower Bound	20.5022	
		Upper Bound	21.2589	
	5% Trimmed Mean		21.3124	
	Median		22.0000	
	Variance		14.257	
	Std. Deviation		3.77578	
	Minimum		5.00	
	Maximum		25.00	
	Range		20.00	
	Interquartile Range		3.00	
	Skewness		-1.896	.124
	Kurtosis		4.219	.248
Facilities_Condition	Mean		21.0468	.16724
	95% Confidence Interval for Mean	Lower Bound	20.7179	
		Upper Bound	21.3756	
	5% Trimmed Mean		21.3687	
	Median		22.0000	
	Variance		10.769	
	Std. Deviation		3.28156	
	Minimum		7.00	
	Maximum		25.00	
	Range		18.00	
	Interquartile Range		3.00	
	Skewness		-1.571	.124
	Kurtosis		2.973	.248
Social_Influence	Mean		20.7455	.19121
	95% Confidence Interval for Mean	Lower Bound	20.3695	
		Upper Bound	21.1214	
	5% Trimmed Mean		21.1703	
	Median		22.0000	
	Variance		14.076	
	Std. Deviation		3.75175	
	Minimum		5.00	
	Maximum		25.00	
	Range		20.00	
	Interquartile Range		3.00	
	Skewness		-1.925	.124
	Kurtosis		4.537	.248
Effort_Expectancy	Mean		20.4234	.15807
	95% Confidence Interval for Mean	Lower Bound	20.1126	
		Upper Bound	20.7342	
	5% Trimmed Mean		20.6616	
	Median		21.0000	
	Variance		9.620	
	Std. Deviation		3.10157	
	Minimum		6.00	
	Maximum		25.00	
	Range		19.00	
	Interquartile Range		3.00	
	Skewness		-1.393	.124
	Kurtosis		2.858	.248

Appendix 4.5: Multiple Regression

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.860[a]	.739	.736	1.83754	.739	214.565	5	379	<.001

a. Predictors: (Constant), Awareness, Effort_Expectancy, Performance_Expectancy, Social_Influence, Facilities_Condition

b. Dependent Variable: Behavioral_Intention

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3622.456	5	724.491	214.565	<.001[b]
	Residual	1279.715	379	3.377		
	Total	4902.171	384			

a. Dependent Variable: Behavioral_Intention

b. Predictors: (Constant), Awareness, Effort_Expectancy, Performance_Expectancy, Social_Influence, Facilities_Condition