FACTORS AFFECT THE ADOPTION OF MOBILE INVESTMENT SERVICES IN MALAYSIA

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

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

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This research project is especially dedicated to:

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and

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LIST OF ABBREVIATIONS

AI	Adoption Intention
DV	Dependent Variable
PU	Perceived Usefulness
PEOU	Perceived Ease of Use
PV	Perceived Value
ATT	Attitude
MIS	Mobile Investment Services
TAM	Technology Acceptance Model
PLS-SEM	Partial Least Squares Structural Equation
AVE	Average Variance Extracted
VIF	Variance Inflation Factor (VIF)
CR	Composite Reliability
HTMT	Heterotrait – Monotrait ratio of correlations

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ABSTRACT

This study utilized the Technology Acceptance Model (TAM) to examine the factors that influence the acceptance of MIS in Malaysia. With the aim of achieving this goal, potential determinants that impact the inclination to embrace mobile investment apps were recognized and thoroughly assessed. Following the TAM framework, the variables considered PU, PEU, ATT, and an additional factor, PV. The participants in this investigation consisted of individuals aged 16 and above from Malaysia, resulting in 389 responses. Questionnaires were distributed to collect reliable primary data. The study formulated seven hypotheses to gauge the impact of these factors on Malaysians' adoption of mobile investment services. The subsequent sections encompass an exploration of the findings, implications for research, limitations, and recommendations. Hence, the main aim of this research was to explore the willingness of Malaysians to embrace the use of mobile investment services, providing valuable insights for researchers, developers of mobile investment services, and users.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

The research aims to discern the determinants that impact the adoption of mobile investment services in Malaysia. This section will cover the research context, the research issue, the study goals.

1.1 Research Background

The practice of investing has been in existence since the emergence of Homo economicus. Investing, as it is known today, traces its origins back to the period spanning the 17th and 18th centuries (Picardo, 2022). The Code of Hammurabi established a legal structure for investment, creating a system for collateral through the formalization of rights for debtors and creditors concerning pledged land (King, 2008). The earliest form of investing can be connected to the choices involving risk and reward in long-distance trading (Andrew and Stephen, 2021). According to Hayes (2023), In contemporary society, an investment refers to an asset or item obtained with the intention of generating income or value appreciation. Investing serves as a potent method for accumulating wealth, encompassing areas such as stocks, bonds (Farley, 2022). In addition, Investment management services encompass the professional management of financial assets and various investments on behalf of clients, these clients may be individual investors or institutional investors. The investment service strives to achieve specific investment objectives for the advantage of clients, for whom they bear the responsibility of managing funds (Chen, 2023).

The investment service industry is growing rapidly, At the beginning of 2022, the global industry held around $131 trillion in assets under management, reflecting a growth of over 10% compared to the preceding year (Watson, 2022). According to Bursa Malaysia (2019), In Malaysia, millennials hold about 23% of the currently active trading accounts. By 2019, they had initiated 47% of all newly opened accounts, and this percentage is steadily increasing. According to Lim (2019), The growing millennial market is due to the financial education and investment knowledge readily available on the internet together with the rise of online stock trading. However, Despite the challenges of customer acquisition expenses and time limitations encountered by conventional advisors, a significant number of middle-class investors in Malaysia still lack sufficient guidance or access to portfolio management services. This is primarily due to the minimum investable asset requirements that are imposed (Kitces, 2013).

Starting from the 2005, the investment industry has encountered challenges arising from the proliferation of mobile investment services. and the availability of exchange-traded funds (Chen, 2023). While mobile investment service technology is not a recent addition to the investment arena, it has been utilized by financial advisors since the early 2000s. However, it was only in 2008 that it became accessible to the general public, allowing investors to personally manage their assets. Robo-advisors belong to a category of financial advisors that offer online financial advice and investment management, characterized by varying degrees of human intervention, ranging from moderate to minimal (Liber, 2014). The emergence of Robo investment services is regarded as a significant advancement in the previously realm of wealth management services. This innovation has expanded the reach of these services to a wider audience, all while offering cost benefits compared to traditional human-advised approaches (Deloitte, 2016). Robo-advisors allocate a client's assets in accordance with their risk inclinations and the target return they aim to achieve (Meola, 2017). Typically, traditional financial planners require a minimum investment of $50,000, whereas Robo-advisors offer much lower entry points, with minimum investments starting at just $500 in the United States. Furthermore, unlike human advisors, robo-advisors levy fees ranging from 0.2% to 1.0% of assets under management (Deloitte, 2016), whereas conventional financial planners typically billed clients at an average rate of 1.35% of their assets (AdvisoryHQ, 2021).

Over the years, FinTech is anticipated to disrupt the conventional banking business model, prompting banks to enhance and undergo transformation (Chen, 2017). According to Basdekis, Christopoulos, Katsampocakis and Vlachou (2022), FinTech technology has become increasingly vital in today's landscape, with a growing number of FinTech companies competing against traditional banks in the realm of financial products and services. This competition continues to escalate as digital technology advances. According to Citigroup researchers, the next decade will see a reduction of about one-third of the workforce in traditional banks as a result of FinTech innovation (Citi GPS, 2016).

1.2 Research Problem

The number of users of mobile investment are considered low in Malaysia compared to United State. As indicated by a Statista report, the count of mobile investment users in Malaysia is anticipated to rise to 1.8 million in 2021, an increase from 1.4 million recorded in 2019. As per the same report, the market size for mobile investments in Malaysia stood at approximately US$2,346 million in the year 2020. Forecasts anticipate this market to experience an annual growth rate of 13.8% between the years 2020 and 2025 (Statista, 2021). Although the number of users of mobile investment is lower as compared to the United State but a study conducted by the Securities Commission Malaysia found that the number of mobile trading

accounts in Malaysia is 520,064 in 2019 and there are 108.7 million of mobile investment users in the United State (Statista, 2021). This represents a significant increase in the adoption of mobile investment services in the country. These statistics suggest that mobile investment services are gaining popularity in Malaysia, and there is potential for further growth in the market. Nonetheless, a noteworthy segment of the populace has not embraced mobile investment services, underscoring potential avenues for service providers to broaden their outreach and enhance their offerings to entice a larger customer base.

Mobile investment is getting more popular lately, it is obvious because there are some new apps appear such as StashAway Simple, Raiz Malaysia, MYTHEO, Versa Cash, KDI (Kenanga Digital Investing) Save, TNG Go+, and BIMB Dana Al-Fakhim (Aziz, 2021). Financial technology technologies have changed the usual structure of financial organizations and disrupt the financial habits of individual. Furthermore, Robo-advisors have introduced a multitude of innovative products and unconventional approaches to storing, using, lending, and allocating funds (Philippon, 2016; Elsingeret et al., 2018). Furthermore, one of the research problems is "how to choose the best mobile investment app and what is the difference?".

The TAM is a popular framework for studying users' acceptance and adoption of new technology, including mobile investment systems. While there have been several studies on mobile investment adoption in Malaysia, it is possible that there is a lack of research specifically focused on using TAM to comprehending the elements that impact users' willingness to accept and embrace mobile investment platforms in Malaysia. Using TAM, researchers can identify and assess the factors that influence users' perceptions of mobile investment systems. These elements might encompass PU, PEU, PV, ATT and AI. The Technology Acceptance Model (TAM) has been employed in numerous research investigations to gain insights into the adoption of technology across diverse settings, including mobile banking, e-commerce, and social media. Given the increasing popularity of mobile investment systems in Malaysia, it is essential to understand the elements that influence users' adoption of these systems to improve their design. Therefore, more research that utilizes the TAM in studying the AI of MIS in Malaysia may be valuable in providing insights and recommendations for both researchers and practitioners in the field.

1.3 Research Objectives

1.3.1 General Objective

This study endeavors to investigate and assess the elements that affect the acceptance of mobile investment services in Malaysia, along with their corresponding determinants.

1.3.2 Specific Objectives

i. To examine the influence of PU towards Malaysian's adoption of mobile investment services.
ii. To examine the influence of PEU towards Malaysian's adoption of mobile investment services.
iii. To examine the influence of PV towards Malaysian's adoption of mobile investment services.
iv. To examine the influence of ATT towards Malaysian's adoption of mobile investment services.

1.4 Research Questions

i. Does **PU** affect Malaysian's adoption towards mobile investment services in Malaysia?
ii. Does the **PEU** affect the adoption towards mobile investment services in Malaysia?
iii. Does **PV** affect Malaysian's adoption towards mobile investment services in Malaysia?
iv. Does **ATT** affect Malaysian's adoption towards mobile investment services in Malaysia?

1.5 Research Significance

Our study can be beneficial for various sectors. Our research is significant in identifying the determinants that affects the adoption of mobile investment services in Malaysia. Mobile investment service developers can benefit from our research as they could have in-depth understanding of consumer perception and behavior towards the mobile investment services and help to identify new areas of inquiry from the customers in Malaysia. In addition, the developers could find out and design better marketing strategies or technology adoption to satisfy Malaysia mobile investment service users, enable developers to attract more mobile invest service users and improve user experiences and satisfaction by acknowledge the factors that affects mobile investment adoption in Malaysia.

Moreover, academics stand to gain valuable insights from this research in terms of expanding their knowledge and information base. Our research has the potential to bridge existing gaps in the understanding of mobile investment adoption within Malaysia as we include the additional variable of perceived value (PV) in our research construct, particularly due to the limited research attention on this subject and this essential variable. Additionally, it can offer fellow academics novel perspectives and comprehension of the underlying attitudes and perceptions held by Malaysians regarding the incorporation of mobile investment services. Consequently, our research can serve as a point of reference for scholars seeking to acknowledge and analyze this field for future studies related to the era of mobile investment services.

1.6 Conclusion

Chapter 1 centered on the research topic and its significance. Chapter 2 will extensively delve into the relevant theoretical models and comprehensive examinations of past literature studies.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, an assessment of previous research on the Technology Acceptance Model and the following research variables conducted. A framework of our research along with the development of hypotheses will be formulated, to delve into the variables influencing the adoption intentions pertaining to mobile investment services in Malaysia.

2.1 Underlying Theories

The TAM was first developed by Davis in 1989, this model was introduced to elucidate how users embrace novel technologies (Davis, 1989). The TAM proposes that users' assessments of a technology's utility and ease of use play pivotal roles in shaping their willingness to adopt it. The model proposes that users are more inclined to adopt a technology when they perceive it as advantageous and user-friendly.

The TAM model comprises of two primary components: perceived utility and perceived simplicity of use. PU involves the degree to which a user believes a technology will improve their effectiveness or efficiency. Conversely, PEU relates to how easily a user thinks they can operate a technology (Davis, 1989).

The TAM has been widely employed to gain insights into user acceptance across a diverse array of technologies, including mobile devices, social media, and online shopping. In the business context, TAM has implications for the adoption of technology-based products and services. For instance, organizations can apply TAM to pinpoint the factors that impact user acceptance of their offerings and services. By understanding users' perceptions of PU and PEU, organizations can make informed decisions about product design, marketing, and training" (Venkatesh & Bala, 2008).

The Technology Acceptance Model has several implications for business. First, it highlights the importance of understanding users' perceptions of PU and PEU. Organizations should focus on designing products and services that meet users' needs and are easy to use. Second, TAM suggests it is advisable for organizations to allocate resources for user training and support to improve user acceptance of technology-based services. Finally, TAM underscores the importance of user feedback and evaluation in improving the adoption of technology-based products and services (Venkatesh & Davis, 2000; Holden & Karsh, 2009; Kamal & Ali, 2016).

While the TAM has been extensively employed to understand user acceptance of technology, there is still much research to be done in this area. Future research could explore the applicability of TAM in different cultural contexts, as well as its potential for predicting long-term adoption of technology. Additionally, researchers could investigate how TAM can be applied to emerging technologies (Venkatesh & Davis, 2000; Holden & Karsh, 2009; Kamal & Ali, 2016).

Perceived usefulness pertains to how much an individual believes a particular technology will enhance their job effectiveness or facilitate the completion of tasks. In other words, if an individual perceives that a technology will aid them in completing their work duties with greater efficiency and effectiveness, they are more likely to use it (Davis, 1989). PEU, Conversely, it pertains to how much an individual believes that a technology will be user-friendly or easy to operate. This includes factors such as the complexity of the technology, how user-friendly the interface is, and the availability of training and support. When an individual perceives a technology as user-friendly, they are more inclined to adopt and utilize it (Davis, 1989).

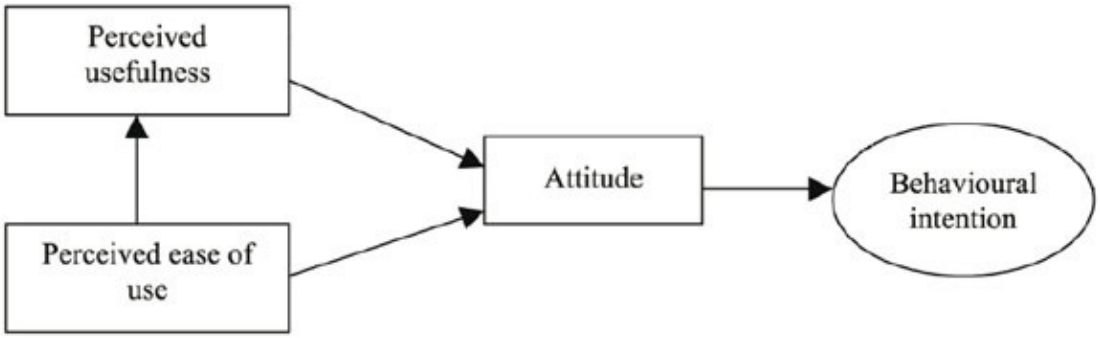

Figure 2.1 TAM model.

TAM is employed in this study due to its suitability in examining the intention to adopt mobile investment services among Malaysians. TAM consists of two basic components, PU and PEU.

Additionally, this theory extensively applied as a foundational framework in research examining user actions and intentions in the context of mobile technology, a study by Shih and Venkatesh (2004) used TAM to investigate determinants affect the adoption of mobile commerce among college students), E-commerce. A study by Lu et al. (2015) used TAM to explore determinants impacting consumers' acceptance of social commerce, healthcare technology. A study by Davis et al. (1989) used TAM to investigate physicians' acceptance of CPOE systems, and lastly social media. A study by Beldad et al. (2017) used TAM to investigate the factors influencing consumers' use of social media for purchasing products.

In this study, an additional independent variable of perceived value was included. Perceived value refers to the assessment made by individuals regarding the benefits and worth they believe they will gain from using a particular system or service. Prior research has consistently shown that perceived value plays a crucial role

in shaping individuals' decisions to adopt new technologies (Zeithaml, 1988; Venkatesh et al., 2003; Smith & Colgate, 2007). It encompasses the overall utility, benefits, and satisfaction individuals expect to derive from a technology.

Therefore, in the context of this study, perceived value in mobile investment services, which reflects users' assessment of the benefits and advantages of using such services, was introduced as an independent variable. This variable aims to explore its potential influence on the outcomes under investigation.

This research aims to understand the effect of the mentioned variables on the adoption intention of Malaysians towards mobile investment services, which relates to their inclination to adopt these services.

2.2 Review of Variables

2.2.1 Dependent Variable (DV) – Adoption Intention (AI)

Adoption intention refers to the extent to which an individual is inclined to embrace or decline an innovation (Rogers, 1995). According to research by Venkatesh et al. (2013) adoption intention refers to one's disposition or viewpoint concerning the adoption of a novel product or service. Moore and Benbasat (1991) mentioned that Adoption intention signifies an individual's deliberate intention to either embrace or decline an innovation. According to Davis (1989), Adoption intention describes an individual's choice to embrace or decline a novel technology based on his or her perceptions of the technology and its usefulness. Lastly, Schiffman and Kanuk (2007) mentioned that adoption intention indicates the probability or likelihood of an individual trying a new product or service soon.

2.2.2 Independent Variable (IVs) - Perceived usefulness (PU)

Davis (1989) provided a definition of PU as the degree to which an individual believes that utilizing a particular system would enhance their capability to accomplish a task. Similarly, Venkatesh et al. (2003) described PU is described as how much an individual believes that utilizing a specific technology would amplify their productivity or effectiveness. Moore and Benbasat (1991) underscored that PU indicates how much an individual maintains the belief that utilizing a specific system would be advantageous in assisting them to achieve particular goals. Bhattacherjee (2001) added PU pertains to the extent which an individual perceives that using a specific system would prove advantageous in facilitating the attainment of specific goals.

2.2.3 Perceived Ease of Use (PEU)

PEU involves a person's evaluation of the simplicity and effortlessness associated with utilizing a specific technology. This is a critical factor influencing an individual's decision to adopt and utilize a technology. Davis (1989) provided a definition that PEU can be encapsulated as how much an individual perceives that using a specific system would demand minimal exertion. Venkatesh et al. (2003) built upon Davis's definition and described. As Moore and Benbasat (1991), perceived ease of use pertains to the level to which an individual believes that using a particular system would be straightforward and uncomplicated. Bhattacherjee (2001) further contributed that PEU is characterized by the degree to how easily an individual views the use of a specific system and requiring minimal cognitive effort.

2.2.4 Perceived Value (PV)

Perceived value pertains to an individual's judgment of whether a specific product, service, or experience is worth the effort or expense required for acquisition. This involves a personal assessment where the person weighs the advantages they would gain from the product or service against the associated cost or effort. Zeithaml (1988) elucidated perceived value as an individual's comprehensive evaluation of a product's usefulness, formed by gauging what is obtained versus what is expended. Sweeney and Soutar (2001) stressed that PV reflects a balance between the perceived benefits of a product or service and the related costs or efforts. In addition, Parasuraman and Grewal (2000) contributed by underlining perceived value as a subjective appraisal by customers of the worth or appeal of a product or service, founded on the benefits received compared to the concessions made. Finally, in the perspective of Holbrook (1999), perceived value is delineated as a customer's assessment of the overall value of a product or service, formed by evaluating the balance between perceived benefits and related costs.

2.2.5 Attitude (AT)

As noted by Eagly and Chaiken (1993), attitudes encompass "a psychological inclination that is manifested through the assessment of a specific entity with different levels of preference or aversion." Similarly, Ajzen and Fishbein (2000) describe attitudes as "overall evaluations of an object, person, group, or issue that reflect a person's general positive or negative affect toward the object." Attitudes are formed through a variety of processes, including personal experiences, socialization, and persuasion (Petty & Cacioppo, 1986).

2.3 Conceptual Framework

The research framework is enhanced through a thorough analysis of relevant foundational literature. As illustrated in the figure below, the Independent Variables (IVs) comprise PU, PEOU, PV, and ATT, all of which are envisaged to influence the Dependent Variable (DV), specifically adoption intention (AI) towards MIS.

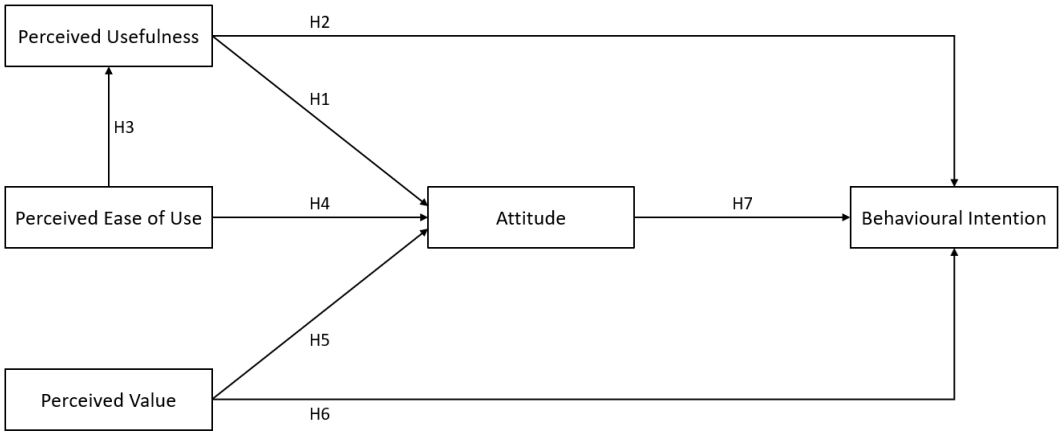

Figure 2.2 Conceptual Framework

2.4 Hypothesis Development

H1: PU will influence ATT towards mobile investment services.

H2: PU influence AI towards mobile investment services.

Prior studies concentrating on the evaluation of PU of a system have consistently revealed a positive impact on consumers' attitudes towards the respective system (Al-Fahim, 2016; Chuang, Liu & Kao, 2016). The favorable attributes associated with technology acceptance factors have a beneficial impact on attitude. According to Chuang et al. (2016), Users hold the belief that the advantages offered by Fintech Services hold utility, thereby contributing to a positive elevation of users' attitudes towards Fintech Services. When consumers perceive Fintech Services as more beneficial to their tasks, their inclination to use these services also becomes stronger. Consequently, the PU of Fintech services stands as a cognitive determinant that drives consumer acceptance of Fintech services. An investigation conducted by Chuang et al. (2016) unveiled a robust connection between PU and consumers' attitudes concerning the acceptance of FinTech products. Another study by Al-Fahim (2016), the study demonstrates that the PU of a banking system has a positive impact on users' attitudes and intentions to use internet banking. In this context, it suggests that when an

individual perceives mobile investment services as valuable and beneficial, it will contribute to a more favorable attitude towards the technology.

The research underscores that for the rapid adoption of a new technology within a community, users must possess a distinct motive for embracing it. This rationale is a manifestation of the technology's usefulness to the user (Chauhan, Choudhary & Mathur, 2016). Research findings suggest that people are more inclined to adopt a new technology if they perceive it could bring benefits to them (Chin and Todd, 1995). The augmentation in perceived financial benefits signifies the sought-after usefulness and concurrently amplifies the intention to utilize mobile money services. This increase in financial benefits translates into saved time and capitalized opportunities (Lubua and Semlambo, 2017). Customers have primarily exhibited a motivation to embrace online banking channels owing to the elevated functional utilities perceived in utilizing these channels (Akturan and Tezcan, 2012).

Past research has demonstrated that a cutting-edge technological tool is commonly perceived as advantageous, leading to an elevation in the adoption rate (Dutot, Bhatiasevi & Bellallahom,2019) (Krey, Chuah, Ramayah & Rauschnabel, 2019). Moslehpor, Pham, Wong and Bilgicli (2018) conducted a study examining the online purchase intentions of Taiwanese consumers. The study revealed that perceived usefulness emerged as a predictor for consumers' inclination to adopt FinTech for their online purchases.

H3: PEU influence PU of MIS.

H4: PEU influence ATT towards MIS.

Earlier investigations have pointed out that the level of ease in using a system contributes to shaping an individual's stance when considering the adoption of novel technology (Chen and Chan, 2014). Rahi et al. (2019) observed that alterations in expectations related to effort have an influence on user attitudes and significantly influence their willingness to adopt new technology. Similarly, Fedorko et al. (2021), in their exploration of electronic banking, established that the PEU considerably shapes a user's inclination to engage with internet banking services. This underscores the notion that the PEU wields a favorable impact on an individual's disposition towards technology (Kim et al., 2016; Dwivedi et al., 2019). As individuals engage in more frequent interactions with technology and mobile innovations, coupled with attaining a satisfactory level of technological proficiency, awareness, skills, and knowledge, they tend to cultivate a sense of confidence in their capacity to acclimate to new technologies (Ali, 2020).

PEU exerting a positive impact on the PU. This influence stems from the recognition that ease of use can enhance performance by reducing required effort (Davis et al., 1989). Nonetheless, the significance of PEOU

is also associated with the anticipated benefits of adopting MIS (Kim et al., 2010; Raza et al., 2017). Barhoumi (2016) additionally highlighted that PEU can amplify PU and contribute to a deeper understanding of technology adoption. Djamasbi et al. (2010) revealed that PEU has a positive effect on both PU and AI. Moreover, PEU has demonstrated a notable impact on behavioral intention (Venkatesh, 2000; Venkatesh and Morris, 2000).

H5: ATT influence AI towards MIS.

A majority of previous research has consistently shown that attitude exerts a notable and positive influence on individuals' behavioral intention (Venkatesh and Davis, 2000). A consumer's attitude towards adopting Fintech services is expected to exhibit a significantly positive relationship. When consumers hold favorable assessments, they are likely to perceive using Fintech services as a positive experience, thereby enhancing their willingness to use them. As a result, it is hypothesized that attitude maintains a favorable influence on the connection with behavioral intention to use (Chuang, 2016).

Consumers indeed hold attitudes towards innovative technology, and these attitudes can evolve positively through information and knowledge acquisition. For instance, mobile investment services being relatively new can elicit mixed emotions in relation to attitudes. A positive attitude towards a specific product or entity, particularly in an online context, serves as a robust predictor of behavioral intention (Hausman and Siekpe, 2009). A substantial attitude towards a specific matter serves as a catalyst, propelling consumers towards engaging in behavior (Belanche, Casalo & Flavian, 2019). The subsequent hypothesis is put forth.

H6: PV influence AI towards MIS.

Johnson and Payne (1985) propose that a person's decision-making process relies heavily on balancing the value of the decision with the effort needed to make it – akin to perceived value. Ample research highlights that PV has a positive impact on consumers' attitudes and their behavioral intention (Roy, 2016; Gordon, Dibb, Magee, Cooper & Waitt, 2018). Sweeney and Soutar (2001) study revealed PV influences their purchase intentions by assessing the worth of products. Kim, Chan and Gupta (2007) found that PV shapes consumers' adoption of M-internet. In the realm of e-commerce, Shaw and Sergueeva (2019) discovered that PV positively affects consumer intentions.

H7: ATT influence AI towards MIS

The majority of prior research indicates a substantial positive link between attitudes and individuals' behavioral intentions (Venkatesh & Davis, 2000). A consumer's attitude towards adopting Fintech services is expected to exhibit a significantly positive correlation. Positive evaluations lead consumers to perceive Fintech services as beneficial experiences, enhancing their willingness to use them. As a result, a favorable attitude is positively connected to the intention to use (Chuang, 2016).

Consumers do hold attitudes toward novel technology; however, with the acquisition of information and knowledge, these attitudes can transform into positive acceptance and usage. For instance, mobile investment services are a relatively new technological advancement, leading to mixed sentiments regarding attitudes toward them. A constructive attitude, particularly in the online realm, notably predicts behavioral intentions (Hausman and Siekpe, 2009). A pronounced positive attitude towards a specific product significantly propels consumers toward engaging in the behavior (Belanche, Casalo & Flavian, 2019). Hence, the ensuing hypothesis is posited.

2.5 Conclusion

This chapter delves into underlying theories and also outlines a study framework and hypotheses that showcase the relationships between variables.

CHAPTER 3: METHODOLOGY

3.0 Introduction

A pilot test to assess the research's viability and an evaluation of the suggested smart PLS4 tools will be in this chapter.

3.1 Research Design

3.1.1 Quantitative Research

The adoption of mobile investment services in Malaysia is a rapidly growing trend, which has garnered considerable attention in recent times. The factors that affect the adoption of these services have become a subject of interest for researchers and practitioners alike. To investigate the factors affects the acceptance of MIS in Malaysia, a quantitative research approach will be employed. The quantitative research approach is based on the collection and analysis of measurable and organized data that can be statistically represented (Goertzen, 2017). This approach is particularly useful for providing accurate and reliable measurements for statistical analysis. It also allows for obtaining results from a larger sample size, which is necessary to ensure the generalizability of the findings. By using a quantitative approach, the research seeks to offer a comprehensive insight into the elements that influence the adoption of MIS in Malaysia.

3.1.2 Descriptive Research

A descriptive research design will be implemented to pinpoint the determinants that influence Malaysians' adoption intention of mobile investment services. Descriptive research methods are used to explain phenomena and traits using statistical analysis (Akhtar, 2016). This research design is frequently employed to explore present circumstances and address inquiries related to what, who, where, how, and when. The descriptive research design emphasizes the determinants rather than the association between variables. This approach is particularly advantageous for exploring adoption intention determinants, as it facilitates the identification of pivotal factors that shape individuals' choices regarding the adoption or rejection of mobile investment services. A quantitative research approach using a descriptive research design will be employed to investigate the determinants affecting the adoption of MIS in Malaysia. This study is expected to contribute to the existing literature on mobile investment services adoption and provide valuable insights for

practitioners and policymakers.

3.2 Sampling Design

3.2.1 Target Population

The demographic under consideration in this study are Malaysians aged 16 and above (because even RM 10 can invest in the MIS apps) who do not use mobile investment services (MIS). As indicated by a Statista report, the projected count of mobile investment users in Malaysia is anticipated to rise to 1.8 million in 2021, marking an increase from 1.4 million recorded in 2019. This indicates a significant proportion of the population who have not adopted MIS. Furthermore, a study conducted by Cheah and Ng (2019) on Malaysian millennials' investment behavior found that only 36% of their sample used online platforms for investment purposes. Hence, the intended population for this study will consist of Malaysians who have not yet embraced mobile investment services and refrain from utilizing online platforms for investment activities.

3.2.2 Sampling Method

For this study, the target population is Malaysians who do not use mobile investment services (MIS). Since the sampling frame for this population is unknown, a non-probability sampling method called judgmental sampling will be employed to collect data. Judgmental sampling is a technique in which the researcher deliberately chooses samples based on their own judgement (Etikan and Bala, 2017). This method has been used by previous researchers studying adoption intention (Rosnidah et al., 2018; Daka and Phiri, 2019; Mahardika and Giantari, 2020) and is ideal for quantitative research design as it is cheap, easy, and timesaving (Taherdoost, 2016). For this study, the selected samples will be 384 (According to the power table). One screening question will be shown to figure out whether the respondent is the user of MIS. The study will focus on Malaysians who meet the following criteria: (1) aged 16 years old and above, (2) possess awareness of mobile investment services, and (3) have neither used nor are presently using MIS. Furthermore, it is expected that respondents possess the capability to comprehend English, and our questionnaire will be administered in the English. This method will allow the researchers to reach the appropriate target audience and collect data that is relevant to the study's objectives.

3.2.3 Sample Size

The complete populace of Malaysia comprises 32,776,195. As reported by Statista in 2021, the projected count of mobile investment users in Malaysia is expected is projected to increase to 1.8 million this year, a

rise from 1.4 million in 2019. According to The Star Statistic Department, around 9.9 million Malaysians are under the age of 16. Thus, it can be approximated that about 21,076,195 individuals in Malaysia do not use mobile investment services. At a 95% confidence level, there exists a 5% margin of error, the determined sample size for the research will be 384 participants.

3.3 Data Collection Methods

3.3.1 Primary Data

This refers to data that originates acquired directly by researchers to address specific study objectives. Diverse techniques can be employed to gather primary data (Salkind, 2010). For this study, we will gather primary data by employing questionnaires. As it offers a cost-effective, efficient, and productive approach to accumulating comprehensive data from a significant number of participants. One advantage is the rapid data collection process, as researchers do not need to be physically present while respondents complete the surveys (Mcleod, 2018). The online questionnaire tool chosen for this research is Qualtrics. Utilizing online questionnaires through platforms like Qualtrics allows researchers to effectively engage with a large number of individuals for data collection. The online surveys will be disseminated via social media platforms, the primary data collection phase will involve disseminating questionnaires to a total of 384 participants.

3.3.2 Research Instrument

The survey, presented in English: Pre-Screening, Section A, and Section B. The pre-screening part ensures eligibility by having respondents answer a screening question before proceeding. Section A gathers essential demographic data like age, gender, income and education from the targeted participants. Section B focuses on gathering respondents' viewpoints regarding PU, PEU, PV, and ATT and AI of this research. This section consists of a total of 15 questions. The chosen items are customized to fit the research's specific needs. In Section B, questions are thoughtfully crafted using a Five-Point Likert Scale, covering a range from "strongly disagree" to "strongly agree."

Table 3.1 Sources of Measurement Items

Constructs	**Measurement Items**	**Adapted from**
Perceived Usefulness	PU1: I believe that using mobile investment services would be convenient.	Nair et al. (2022)

	PU2: I believe that using mobile investment services would enhance my productivity.	
	PU3: I believe that using mobile investment services would improve my efficiency.	
	PU4: I believe that using mobile investment services would be useful for my current situation.	
Perceived Ease of Use	PEU1: Learning how to use mobile investment services would be easy for me.	Balakrishnan et al. (2022)
	PEU2: It would be easy for me to become skilful at using mobile investment services.	
	PEU3: I would find mobile investment services easy to use.	
	PEU4: My interaction with mobile investment services would be clear/understandable.	
Perceived Value	PV1: I think that using mobile investment services would provide me with good value.	El-Haddadeh et al. (2019)
	PV2: I think that using mobile investment services would benefit me.	
	PV3: I think that using mobile investment services would be worthwhile.	
Attitude	ATT1: I have good feeling about using mobile investment services.	Alhassan et al. (2020)
	ATT2: I have a favorable attitude towards using mobile investment services.	
	ATT3: I like the idea of using mobile investment services.	
Adoption Intention	AI1: I am open to use mobile investment services in the future.	Loh et al. (2022)
	AI2: I am willing to use mobile investment services	

	in the future.	
	AI3: I intend to use mobile investment services if the opportunity arises.	
	AI4: I will use mobile investment services if the opportunity arises.	

3.3.3 Pre-Test

Measurements subjected to pre-testing to ensure their effective functioning across various research scenarios (Kumar et al., 2017). The questionnaire underwent a review process with the guidance of my supervisors. Minor adjustments were implemented in response to their suggestions, aimed at enhancing clarity and maintaining consistency.

3.3.4 Pilot Study

A pilot study is a preliminary and scaled-down feasibility assessment aimed at evaluating various facets as one of the methods intended for a more comprehensive, and corroborative examination (Arain et al., 2010). The aim of a pilot study is to gauge the appropriateness and effectiveness of the proposed methods and procedures (Polit and Beck, 2017). Its essential purpose is to steer researchers away from launching a comprehensive study without a satisfactory grasp of the proposed methodologies.

Hence, our research employed pilot study as the essential initial step to administer the questionnaire. Regarding to the sample size, A common rule of thumb is to use a sample size 10-20% of the full-scale survey sample, is a reasonable number for conducting a pilot study (Baker, 1994). Prior scholarly literature suggests that the size of sample for pilot studies should generally encompass approximately 10% of the anticipated sample size for the main study (Connelly, 2008). According to the literatures, the sample size for our pilot test will be 40 people above age 16.

To gauge the internal reliability of the scales measuring individual variables, the Cronbach's alpha values for these scales were calculated using Smart PLS 4. A commonly recognized guideline suggests that an α value falling between 0.6 and 0.7 signifies an acceptable level of reliability, whereas a value of 0.8 or higher signifies a very good level of reliability (Ursachi et al., 2015). According to the Table, the constructs in our survey exhibit reliability, as indicated by Cronbach’s Alpha scores exceeding 0.7 for each component., which

indicates the questionnaire items are reliable.

3.4 Data Analysis Tool

3.4.1 Descriptive and Inferential Analysis

This is a technique employed to provide an unbiased description regarding the characteristics and scope of sensory attributes (Kemp et al., 2018). In our research, it is used to demonstrate, explain, and condenses our collected data in a way that is directed towards a specific purpose, organized logically, and serves a functional role (Vetter, 2017). Furthermore, inferential analysis was applied to derive conclusions from the sample data and extend the findings to the broader population (Statistics, 2013). In our research, we utilized it to make forecast, explanation and draw the conclusion regarding the constructs and validate the hypotheses we put forth.

3.4.2 SmartPLS Software

At present, SmartPLS is widely regarded as the most comprehensive software tool for conducting analyses using PLS-SEM (Schamberger, 2017). Following that, SmartPLS is frequently employed as the go-to software for PLS-SEM analysis, as evidenced by numerous review studies that highlight its widespread application across various disciplines (Hair, 2020; Fauzi, 2022).

3.4.3 Partial Least Squares Structural Equation Modelling (SEM)

The research will utilize PLS-SEM approach. The structural model for this research encompasses numerous constructs and their interrelationships. Given that the study's objective involves examining a theoretical framework from a predictive standpoint., employing this model is suitable and relevant (Hair et al., 2019).

In PLS-SEM, model specification covers both the structural framework and the measurement models. Both of these models require evaluation to validate the research hypotheses.

3.4.3.1 Measurement Model Assessment

The initial phase of evaluating PLS-SEM results entails scrutinizing the measurement models. The assessment of the measurement models aims to verify the connection of each variable with its designated

construct and to ensure distinctiveness among the various constructs (Hair et al., 2021). During the evaluation of reflective measurement constructs, researchers should start by scrutinizing indicator loadings. Loadings greater than 0.708 are recommended since they indicate that the construct accounts for more than 50 percent of the indicator's variability, thereby ensuring robust item reliability.

The subsequent step involves evaluating internal consistency reliabilities. Generally, higher values denote greater reliability. In exploratory research, reliability values falling within the range of 0.60 to 0.70, while values within the range of 0.70 to 0.90 are categorized as "satisfactory to good".

Moving to the third stage, the assessment involves evaluating both convergent and discriminant validity (Hair et al., 2019; Sarstedt et al., 2020). Convergent validity gauges the extent to which a construct coherently elucidates the diversity encompassed by its constituent items (Krabbe, 2017). This appraisal can be executed by computing the AVE across all items within each construct. An AVE value of 0.50 or higher is deemed minimally satisfactory, indicating that the construct explains at least 50 percent of the variability within the items composing that construct.

Proceeding onward, the fourth phase encompasses the assessment of discriminant validity. This refers to the degree to a construct could be distinctly identified within the structural model, when contrasted with other constructs (Hamid et al., 2017). The outcomes can be gauged through the conventional criterion introduced by Fornell and Larcker (1981). It is advisable to assess the AVE for each variable, comparing it to the squared inter-construct correlation of the same construct. It's essential to ensure that the common variance among all constructs within the model doesn't surpass their individual average variance extracted (AVE) values.

3.4.3.2 Structural Model Assessment

Once the measurement model assessment's adequacy is confirmed, the subsequent step involves a thorough examination of the structural model. Standard criteria for assessing the structural model, consider metrics like the coefficient of determination (R^2), Q square based on blindfolding, as well as the statistical and substantive importance of path coefficients' statistical significance (Shmueli et al., 2019). The evaluation of the structural model entails using estimations from the path diagram and conducting hypothesis tests to assess the causal relationships between independent and dependent variables (Aburumman, 2022). To initiate the assessment, collinearity was evaluated to prevent introducing bias to regression outcomes. This was achieved by examining the VIF. VIF values exceeding five might suggest possible collinearity concerns among predictor constructs. Ideally, VIF values should be approximately three or lower to address potential collinearity issues effectively (Becker et al., 2018).

The assessment of presumed relationships between constructs involves examining the path coefficients. This evaluation entails considering factors such as the path coefficient value, t-statistic, R^2, Q^2, and to formulate THE hypotheses (Tee, 2021). R square, which ranges from 0 to 1, indicates the extent of explanatory power (Henseler et al., 2009). Typically, R square values should exceed 0.7 (Ranatunga et al., 2020). In a two-tail test, values are considered acceptable if the p-value is below 0.01, and the t-value is beyond ±1.96, while Q square should be above 0 to establish predictive relevance.

3.5 Conclusion

This chapter delineates the sampling methods and the envisaged analytical tools. It offers an all-encompassing insight into the employed data collection process within the study.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

554 questionnaires are disseminated, yielding 389 valid responses for analysis. The analysis begins with a descriptive examination, followed by a reliability test. To identify any potential multicollinearity and non-normality concerns, preliminary data screening is conducted. Nonetheless, the collected data is ultimately subjected to analysis through Multiple Linear Regression Analysis. For this purpose, Version 26.0 of the SmartPLS software is utilized to carry out the data examination.

4.1 Descriptive Analysis

4.1.1 Gender

Figure below shows the number and percentage of each gender among the respondents. The number of female respondents is 216 and it is 55.53% from the total of respondents. The number of male respondents is 173 and it is 44.47% from the total of respondents.

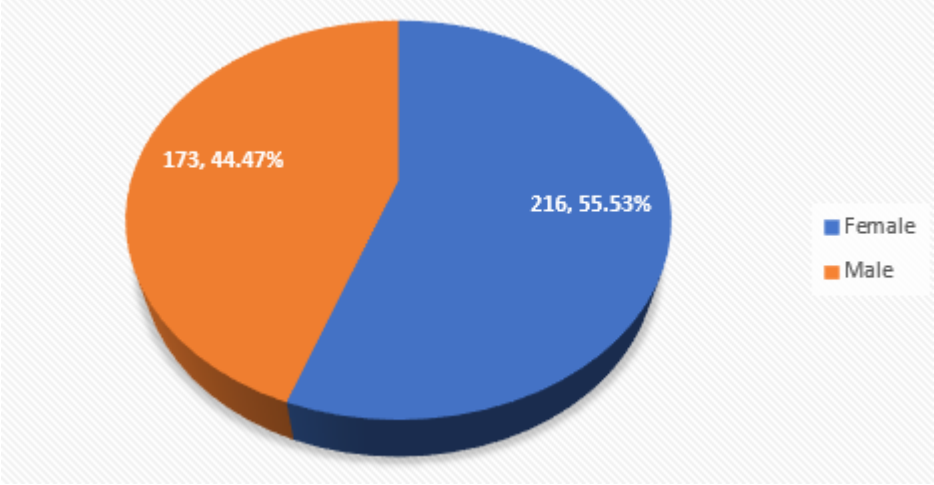

Figure 4.1 Gender

4.1.2 Age

The figure 4.1 indicates the number and percentage of respondents from each age class: 16-20 years

old = 17, 4.37%, 21-25 years old = 83, 21.34%, 26-30 years old = 61, 15.68%, 31-35 years old = 102, 26.22%, 36-40 years old = 54, 13.88%, 41-45 years old = 38, 9.77%, 46-50 years old = 19, 4.88%, 51-55 years old = 12, 3.08%, 56-60 years old = 2, 0.51%, above 60=1， 0.26%.

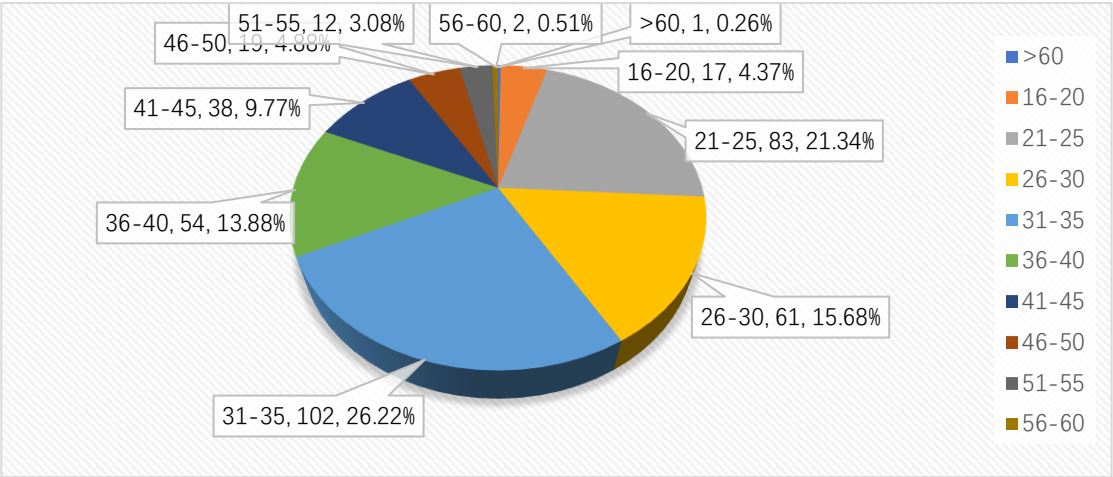

Figure 4.2 Age Class

4.1.3 Education Level

The figure 4.3 demonstrates the number and percentage of respondents from each highest education level class (Primary or Secondary School, Pre- U or Diploma or Advanced Diploma, Bachelor or Professional Qualifications, Master or PhD. The number and percentage of respondents from each class are Primary or Secondary School= 20, 5.14%, Pre- U or Diploma or Advanced Diploma= 105, 26.99%, Bachelor or Professional Qualifications = 212, 54.50, Master or PhD= 52, 13.37%.

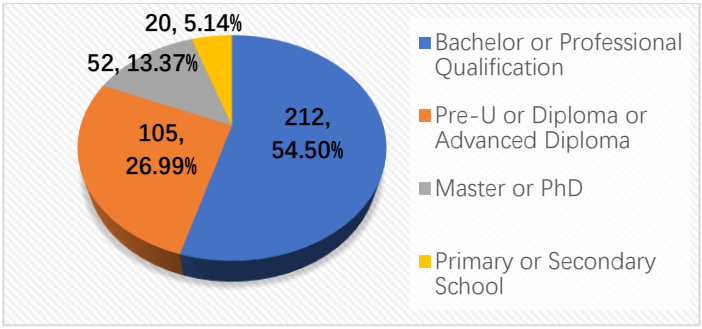

Figure 4.3 Education Level

4.1.4 Income Level

The figure 4.4 demonstrates the number and percentage of respondents from each income level class:

RM2,000 and below= 129, 33.16%, RM2,001-RM4,000= 116, 29.82%, RM4,001-RM6,000= 85, 21.85%, RM6,001-RM8,000= 38, 9.77%, RM8,001-RM10,000= 10, 2.57%, Above RM10,000= 11, 2.83%.

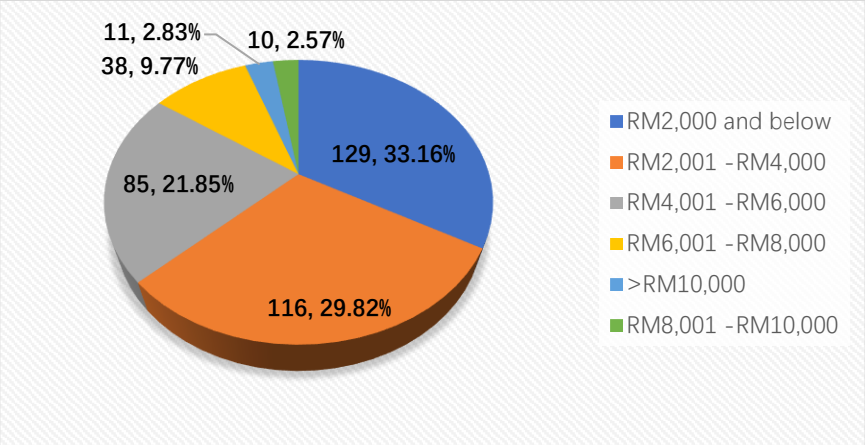

Figure 4.4 Income Level

4.1.5 Employment Status

The figure 4.5 shows the number and percentage of respondents from each employment status: Student= 129, 33.16%, Employee= 205, 52.70%, Self- Employed= 42, 10.80%, Unemployed= 8, 2.06%, Retired= 5, 1.29%.

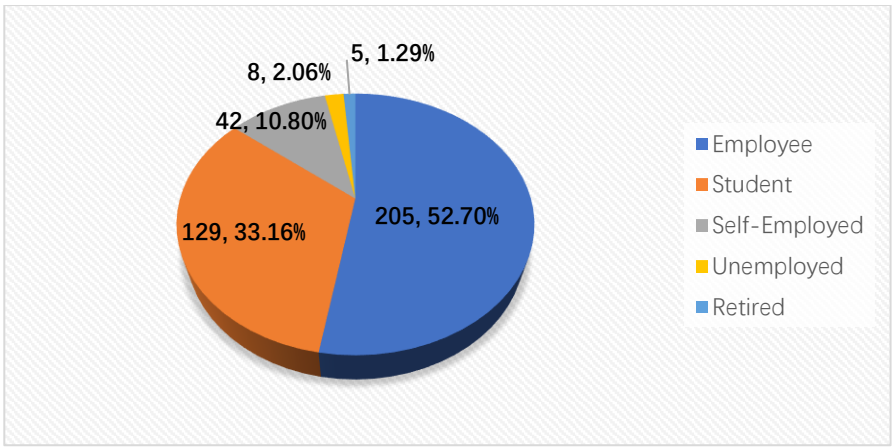

Figure 4.5 Employment Status

4.2 Inferential Analysis

4.2.1 Measurement Model Assessment

The measurement model is subject to evaluation for convergent validity, which involves analyzing Cronbach's alpha, CR, and AVE. Furthermore, the assessment of discriminant validity encompasses the

Fornell-Larcker criterion and HTMT.

4.2.1.1 Internal Consistency Reliability and Convergent Validity

As results shown in the Appendix 4.1, CR and AVE. The Cronbach's alpha values surpassed the 0.7 threshold (0.917- 0.938 range), whereas the CR values surpassed the 0.6 in all cases (0.916 - 0.939). Both CR and Cronbach's alpha outcomes are deemed to have achieved the desired level of internal consistency reliability (Nunnally, 1978; Bagozzi,1988). In terms of convergent validity, AVE value surpassing 0.50 is acceptable (Hair et al., 2014). The AVE for each construct higher than 0.5 (ranging from 0.827 to 0.858). Given that all AVE values surpass 0.5, the convergent validity is substantiated (Fornell,1981).

4.2.1.2 Discriminant Validity

The evaluation of discriminant validity involved HTMT, Fornell-Larcker and cross-loading, with comprehensive results provided in Appendix 4.2, the highest values recorded for each variable were as follows: PU (0.918), PEU (0.922), PV (0.934), ATT (0.932), and AI (0.921). The analysis indicates that discriminant validity is accepted, given that the square root of AVE for each variable more than the matching inter-construct correlation. Furthermore, the cross-loading analysis in Appendix 4.3, indicate that each construct exhibits the greatest cross-loading value among its related latent variables. This strongly supports the establishment of discriminant validity. However, it's noteworthy that the HTMT should ideally be below 0.9 (Rasoolimanesh, 2022). It's important to acknowledge that the HTMT value for PV surpasses the recommended threshold of 0.9 refer to the Appendix 4.4, suggesting potential multicollinearity concerns between the compared constructs. As a result, we made the decision to exclude PV from the subsequent discussions in our research.

4.3 Structural Model Assessment

4.3.1 Path Analysis

Appendix 4.6 presents the outcomes of path coefficients, T-statistics, P values, and VIF values. All pathways have been scrutinized through bootstrapping analysis, with the details showcased in Appendix xxx. This provides an illustration of the interrelationships among the constructs. According to Vittinghoff (2006) VIF values higher than 10 is problematic. The VIF results for our research ranged from 1 to 6.121 indicates there is not collinearity and the influential assessed factors are acceptable. The path coefficient values for all

constructs are positive, spanning from 0.114 to 0.721. This observation signifies the presence of positive and statistically significant relationships, specifically between PU→ATT, PU→AI, PEoU→ATT, PEoU→PU, and ATT→AI. Furthermore, the two tailed tests with 0.05 significant level require t-value > 1.96 or < -1.96 with p-value < 0.025 (Ross and Wilson, 2017). The outcomes have demonstrated that all hypotheses have been substantiated, given that the t-statistic values (ranging from 2.432 to 21.166) more than the critical value of 1.96. Moreover, the p-values span from 0 to 0.015, all of which are below 0.025.

Consequently, all hypotheses H1-5 have been affirmed, and the relationships are corroborated through the Path Analysis.

4.3.2 R^2 and Construct Cross Validated Redundancy

The collective magnitude of the relationships among the constructs is assessed through the R-squared values. According to the details presented in Appendix 4.7, an R-squared value within the range of 0.6 to 0.99 is considered acceptable, particularly when a majority of the explanatory variables exhibit statistical significance (Ozili, 2023). the R square values of AI (0.772), ATT (0.83), PU (0.52) suggested that the model's independent constructs possess a moderate to substantial predictive capability. In addition, the results of construct cross validated redundancy establish the predictive relevance of the endogenous constructs as shown in Appendix 4.8, The Q square predict value of AI (0.726), ATT (0.821), PU (0.517) are above 0 which shows the variables are effectively reconstructed, and the model exhibits predictive relevance.

4.4 Conclusion

Within this chapter, all hypotheses pertaining to the specified constructs have been affirmed.

CHAPTER 5: DISCUSSION, CONCLUSION AND IMPLICATION

5.0 Introduction

This chapter encompasses a summarized overview of the statistical outcomes, along with a discussion of the principal findings. It further delves into the implications arising from these findings and offers recommendations aimed at enhancing the quality of future research endeavors.

5.1 Summary of Statistical Analysis

Table 5.1:

H1	The relationship between PU and ATT	Significant
H2	The relationship between PU and AI	Significant
H3	The relationship between PEoU and PU	Significant
H4	The relationship between PEoU and ATT	Significant
H5	The relationship between ATT and AI	Significant

5.2 Discussions of Major Findings

H1: PU significantly influences attitude towards mobile investment services

H2: PU significantly influences AI towards mobile investment services

The research findings reveal a significant impact of PU on the attitude towards mobile investment services in Malaysia. This suggests that consumers tend to form perceptions about mobile investment services based on the information and knowledge they possess. Depending on the perceived usefulness of these services, consumer attitudes can range from negative to positive. This discovery aligns with the outcomes of previous studies undertaken by Chang and Yan (2012) and Belanche et al. (2019), underscoring the significance of positive attitudes in fostering adoption intention. Furthermore, the findings also establish a meaningful and positive correlation between PU and AI towards investment apps. The nature of automated mobile investment

services, which operate without human intervention, could contribute to elevated performance expectations among consumers compared to traditional financial advisors. These findings align with previous fintech studies conducted by Oliva (2019) and Ruh et al. (2019), both of which identified PU as a strong predictor of the intention to adopt fintech services.

H3: PEU significantly influence PU of MIS

H4: PEU significantly influence attitude towards MIS.

The finding demonstrates PEU has a significantly positive influence on PU of mobile investment services. That means the customers of mobile investment services in In Malaysia, there is an anticipation for investment applications to feature a user-friendly interface that encourages users to explore, especially since these apps allow investment activities to be conducted conveniently on-the-go. Consumers are inclined to view the adoption of new technologies as significantly advantageous. This outcome aligns with earlier research findings (Abdullah and Ward, 2016; Amin et al., 2014) shown that as new technologies continue to emerge, consumers tend to perceive them as user-friendly and associated with tangible benefit and readily available information.

The findings reveal that Perceived Ease of Use (PEU) significantly impacts the attitude towards Mobile Investment Services (MIS), which is corroborated by our study's results. PEU demonstrates a positive outcome and emerges as a crucial factor in shaping consumers' attitudes toward the acceptance of novel technology. This outcome is congruent with research conducted by Belanche and Casalo (2019), Chang and Yan (2012), and Yoon and Kim (2007). Consumers tend to form a positive attitude when they perceive that adopting mobile investment apps as a habitual practice offers them beneficial outcomes.

H5: ATT influence AI towards mobile investment services.

Confirming H7, the study establishes a meaningful connection between ATT and AI towards MIS. This aligns with established behavioral theories, indicating that positive attitudes influence the intention to engage. The research highlights attitude's pivotal role in driving intention, suggesting that individuals with more favorable attitudes are more inclined to intend engagement. This finding is echoed by Johnson and Smith's study (2021) in the financial sector, emphasizing attitude's immediate influence on the intention to utilize online investment platforms.

5.3 Implication of The Study

5.3.1 Implication on Management

The findings of our research have implications for consumers, mobile investment services providers, traditional financial advisory companies and regulatory bodies. Our findings demonstrate that PU, PEU and ATT have positive and significant influences on the adoption of mobile investment services. The advantages and convenience of mobile investment apps are evident for Malaysian's customers as it provides automated financial planning provide zero to minimal human interaction while maintain at a low cost for its users. In addition, Attitudes towards MIS positively influenced by PU, PEU and PV, the consumer's perception and impression were formed and enhanced by the performance of MIS, thereby driving the willingness to utilize mobile investment applications. Regarding to the PV, mobile investment services utilize finance technology and AI algorithms to established customized financial investment plans for customers which free from human emotions could provide value for the customers compared to the traditional financial advisory services.

The results of our research are advantageous to mobile investment help service providers comprehend the key factors that drive the adoption MIS in Malaysia. Based on our research findings, PU, PEU and ATT are the significant factors for accelerating the adoption intention process, therefore, MIS providers could focus on improving the benefits and values offered by the investment services regarding to lower cost charged, higher return on investment, more transparent and unbiased financial planning alternatives and customized risk profiling. The interface for MIS should be designed as user-friendly with simple interface as well. The implication for traditional financial advisory firms is they can consider to offer mobile investment services, As the traditional financial industry was influenced by the implementation of MIS. The findings carry implications for government and regulatory bodies as well, the regulators can launch initiatives to increase awareness of the MIS in Malaysia, at the same time increase the financial investment knowledge levels of all Malaysians.

5.3.2 Theoretical Implication

Regarding theoretical ramifications, this research shedding light on the "Factors affect the adoption intention of mobile investment services in Malaysia". The study is anchored in the TAM (Technology Acceptance Model), which offers a robust framework to explore users' inclinations to embrace technological advancements. The model's constructs are employed to investigate the adoption intention of mobile investment services, providing insights into users' PU, PEU and ATT towards such services. Notably, the study extends the TAM model to explore users' attitudes (AT) towards mobile investment services. The findings indicate that positive attitudes significantly influence users' adoption intentions, suggesting that

users who hold favorable attitudes are more inclined to adopt these services. This nuanced insight contributes to both the TAM framework and the broader understanding of technology adoption behaviors. The research gap addressed by introducing within the context of TAM is particularly noteworthy. Previous studies use TAM model to understand the customers' adoption intention of E-wallet (Pertiwi et al., 2020), mobile banking services (Mutahar, etal., 2018), mobile government (Wang, 2014), mobile hotel booking (Hanafiah and Radzi, 2021). but the investigation of adopting technology within the context of mobile investment services using this model appears to be limited. As a result, this study offers relevant and applicable insights for researchers exploring similar topics within the TAM framework. It bolsters the understanding of users' motivations and perceptions in adopting mobile investment services, and this study has an academic contribution that examines the empirical aspect of TAM model in prediction of adoption intention towards mobile investment services.

5.4 Limitation and Recommendation of Study

The data collection methods employed in this study exhibit certain limitations that warrant consideration. Both online (Qualtrics) and physical (paper) survey methods were chosen for data collection due to the diverse survey administration methods. However, the study team acknowledged the potential for respondents to not fully engage or provide genuine responses. This circumstance introduces a concern that the collected data might not accurately capture authentic attitudes and behaviors towards the adoption of mobile investment services.

The widespread use of research questionnaires distributed through social media platforms for the sake of convenience has contributed to a phenomenon where surveys are often disregarded or neglected by potential participants. Even when individuals are aware of the existence of these questionnaires, a considerable portion of them might exhibit a lack of interest in participating. This phenomenon poses challenges in terms of ensuring efficient data collection and managing the time required for the process. In light of these observations, future researchers are advised to consider incentivizing respondents who successfully complete the questionnaires. Providing rewards could enhance data collection effectiveness by motivating potential participants and heightening their attention to the distributed questionnaires. Incentives may evoke a sense of sincerity and worthiness, ultimately fostering increased willingness to participate.

A significant limitation of this study arises from its exclusive focus on respondents from Malaysia. While this targeted approach offers valuable insights into the perceptions and behaviors of individuals within the Malaysian context, it inherently restricts the extent to which the findings can be applied to broader contexts beyond Malaysia's borders. The diverse cultural, social, and economic dynamics present in other regions

might lead to variations in attitudes and responses that are not captured within the scope of this study. As a result, while the research provides valuable insights into the behaviors and attitudes of the chosen demographic within Malaysia, it might not provide a comprehensive understanding of similar behaviors and attitudes among individuals from different countries or regions. Therefore, the study's applicability and generalizability to a more global context should be interpreted with caution due to this inherent limitation.

To overcome the constraints associated with data collection methods, future research endeavors could be enhanced by incorporating a mixed-methods approach. This strategy entails integrating quantitative surveys with qualitative techniques like interviews or focus groups. Through qualitative methods, researchers can delve deeper into participants' perspectives and experiences, enabling a more comprehensive comprehension of their attitudes and behaviors. Additionally, employing interactive and engaging survey formats, both online and offline, can enhance respondent engagement. Integrating multimedia elements, clear instructions, and personalized communication can encourage participants to provide more authentic and detailed responses. This comprehensive approach would mitigate concerns regarding data accuracy and enrich the validity of the findings.

In response to the challenge posed by survey distribution through social media, future researchers are encouraged to implement proactive participant engagement strategies. To counter the tendency for surveys to be overlooked, researchers could establish partnerships with relevant communities or organizations that share an interest in the research topic. This can help in reaching a more targeted and interested audience. Moreover, as suggested, introducing incentives for completing surveys could serve as a motivator, fostering a sense of value and reciprocity. This approach might not only enhance response rates but also ensure that the collected data is more representative and reflective of the participants' authentic perspectives.

To address the limitation arising from the study's exclusive focus on Malaysia, researchers are advised to explore comparative studies that involve multiple countries or regions. his strategy has offered a holistic comprehension of the cultural, social, and economic factors that shape adoption behaviors. By examining the variations in responses across different contexts, researchers can uncover universal patterns as well as context-specific factors. Collaborative efforts with international researchers and organizations can facilitate cross-cultural comparisons and enrich the findings' external validity. This expansion of scope would provide a a more intricate grasp of adoption intentions while acknowledging the diversity of perspectives that might exist beyond the study's initial target region.

In conclusion, by adopting a mixed-methods approach for data collection, proactively engaging participants through partnerships and incentives, and broadening the geographic scope of study, future researchers can overcome the limitations outlined in this study. These recommendations not only enhance the research's credibility and validity but also add to a more thorough comprehension of adoption intentions within a

broader and more diverse context.

5.5 Conclusion

In brief, the study examined key findings through hypothesis testing results. The aim was to offer enhanced insights and recommendations for future practitioners and policymakers. The research also presented theoretical and managerial implications to provide valuable guidance. Addressing limitations and offering recommendations were also part of the study, aimed at aiding future researchers in enhancing the quality of their research endeavors.

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Appendices

Appendix 3.1

Reliability Analysis for Pilot Study

Variables		Number of Items	Cronbach's Alpha	Results of Reliability
Dependent Variable (DV)	AI	4	0.967	Very Good
Independent Variables (IV)	PU	4	0.978	Very Good
	PEU	4	0.966	Very Good
	PV	3	0.971	Very Good
	ATT	3	0.973	Very Good

Appendix 4.1: Convergent Validity Results

Convergent Validity Results

	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
AI	0.941	0.942	0.849
ATT	0.925	0.925	0.869
PEU	0.941	0.941	0.85
PU	0.938	0.938	0.842
PV	0.927	0.928	0.873

Appendix 4.2: Fornerll - Larcker Criterion Results

Fornerll-Larcker Criterion

	AI	ATT	PEU	PU	PV
AI	0.921				
ATT	0.837	0.932			
PEU	0.683	0.745	0.922		
PU	0.812	0.815	0.738	0.918	
PV	0.853	0.897	0.721	0.848	0.934

Appendix 4.3: Cross Loadings Results

Cross Loading Results

Items	PU	PEU	PV	ATT	AI
PU1	0.915	0.703	0.789	0.74	0.758
PU2	0.919	0.658	0.785	0.776	0.756
PU3	0.926	0.66	0.78	0.743	0.734
PU4	0.912	0.687	0.759	0.731	0.733
PEU1	0.67	0.927	0.668	0.682	0.609
PEU2	0.673	0.918	0.663	0.691	0.644
PEU3	0.711	0.93	0.673	0.694	0.665
PEU4	0.666	0.912	0.655	0.678	0.599
PV1	0.784	0.68	0.929	0.804	0.778
PV2	0.814	0.683	0.932	0.863	0.795
PV3	0.779	0.659	0.942	0.844	0.817
ATT1	0.754	0.694	0.828	0.929	0.772
ATT2	0.76	0.68	0.84	0.934	0.763
ATT3	0.764	0.708	0.839	0.933	0.806
AI1	0.714	0.642	0.736	0.747	0.907
AI2	0.775	0.641	0.783	0.758	0.927
AI3	0.73	0.595	0.782	0.761	0.929
AI4	0.772	0.64	0.838	0.816	0.923

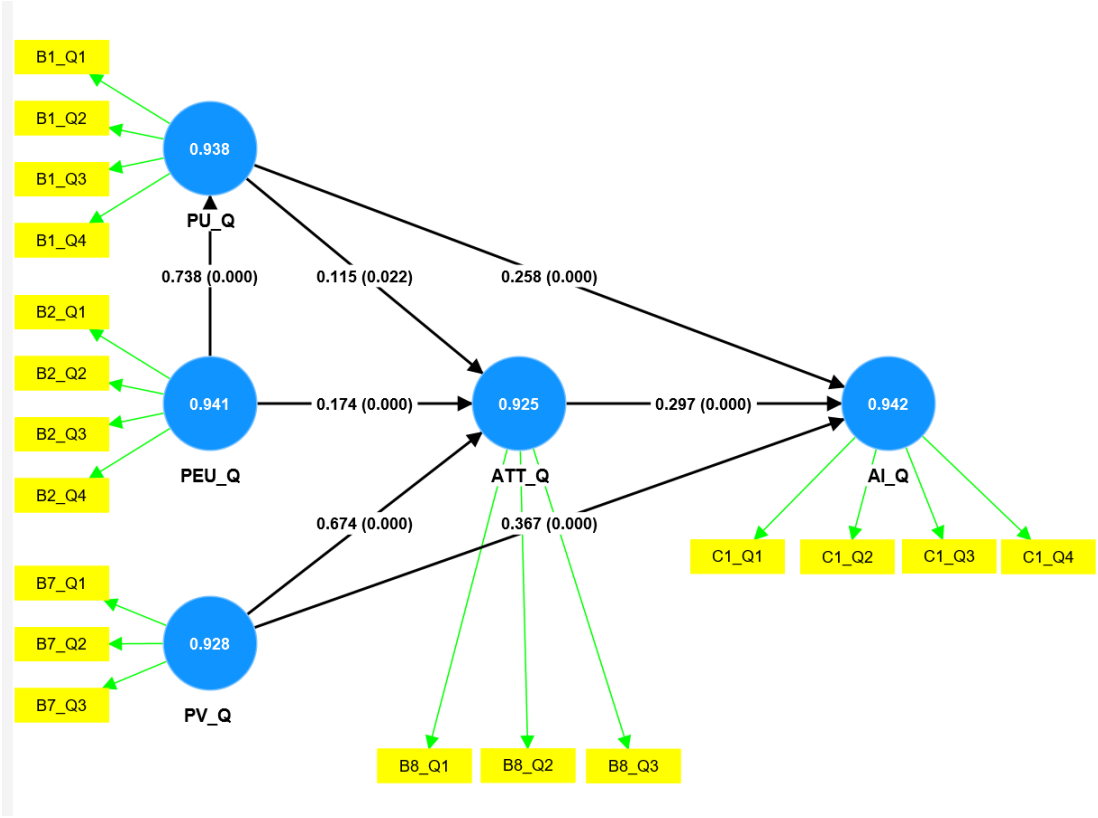
Appendix 4.4: HTMT

Heterotrait-monotrait Ratio

	AI	ATT	PEU	PU	PV
AI					
ATT	0.896				
PEU	0.725	0.798			
PU	0.864	0.875	0.785		
PV	0.912	0.968	0.772	0.909	

Appendix 4.5:

Partial Least Square (SMART-PLS 4) Model



Appendix 4.6:

Path Analysis Results

	Path	VIF	Path Coefficient	T statistics	P values	Result
H1	PU -> ATT	4.038	0.115	2.285	0.022	Support
H2	PU -> AI	3.76	0.258	4.288	0	Support
H3	PEU -> PU	1	0.738	21.398	0	Support
H4	PEU -> ATT	2.364	0.174	3.665	0	Support
H5	PV -> ATT	3.831	0.674	14.277	0	Support
H6	PV -> AI	6.454	0.367	4.484	0	Support
H7	ATT -> AI	5.389	0.297	4.012	0	Support

Appendix 4.7:

R Square Results

	R-square
AI	0.772
ATT	0.827
PU	0.545

Appendix 4.8:

Construct Cross validated Redundancy Results

	Q^2predict	RMSE	MAE
AI	0.718	0.534	0.409
ATT	0.819	0.427	0.314
PU	0.541	0.682	0.481