

What Drives the Intention to Adopt Digital Banking in Malaysia?

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Abstract. Being somewhat new in Malaysia in 2022, the digital banking industry will undoubtedly face more challenges than opportunities. Along with options given by digital banking, many potential risks related to issues such as operation, strategy, and security are expected to be significant concerns for bank customers simultaneously. For the industry to be accepted and taken off, understanding customers' problems will pave the way for digital banks to personalize their needs. Thus, this study aims to examine factors that influence the adoption of digital banking in Malaysia. Adapting two technology acceptance models, i.e., UTAUT and TPB, a conceptual model is proposed with ten independent variables and one dependent variable. Four hundred-thirty respondents participated in a face-to-face and online survey between April 2022 and January 2023. Findings show that performance expectancy, effort expectancy, social influence, awareness, attitude, financial literacy, misconceptions, trust, and gender significantly influence the adoption of digital banking, except for perceived risk. The model has strong predictive power with an R-squared of 69% and predictive relevance with a Q-squared of 67.5%. All constructs of the model passed Convergent Validity, Internal Consistency Reliability, and Discriminant Validity tests. The results of this study are essential to the current five licensed digital banks and regulators to have strategic policies for the sustainable growth of digital banking in Malaysia. This study has first-hand empirical findings on factors affecting the intention to adopt digital banks in Malaysia.

Keywords: digital banking, technology adoption, financial literacy, FinTech, trust, perceived risk

1. Introduction

As technological advancements and innovation have grown exponentially in recent years, most companies worldwide have no choice but to embrace the digital transformation process at any level. For the banking sector, digitalization is necessary for sustainable growth. Simply put, a digital bank allows customers to access all banking services via mobile phones, computers, and smart devices anywhere and anytime, without visiting a bank branch. Making a turning point in 2011 (McKinsey & Company, 2015), the digital banking industry expanded rapidly across Asian countries. The tripled penetration rate for internet and smartphone users between 2011 and 2014, and the rapid growth in E-commerce, especially during the Covid-19 pandemic, have accelerated the demand for digital banking in Asia in recent years. Traditional banks have shown many shortfalls in assisting consumers in managing simultaneous financial goals and obtaining loans when needed. Therefore, digital banking is believed to attract more customers to shift more or all their savings deposits, credit card and investment balances from incumbent banks in the coming years.

On April 29, 2022, five licenses of digital banks were issued by Bank Negara Malaysia (BNM) (BNM, 2022). Being somewhat new in Malaysia in 2022, the digital banking industry will undoubtedly face more challenges than opportunities. According to Laycock (2022), the 2002 global survey conducted by Finder shows a decline in the percentage of people with a digital bank account in Malaysia, which dropped from 20% in 2021 to 13% in 2022. Although it is projected that there will be more people in Malaysia with digital bank accounts by 2028, the percentage remains small, i.e., 28%. To be fully embraced by people, the industry needs to have effective business models that can stand beyond the foundation phase of 5 years, as indicated by Bank Negara Malaysia (ASEAN Briefing, 2021). For the industry to be accepted and taken off, understanding customers' concerns will pave the way for digital banks to personalize their needs. Thus, this study aims to examine factors that influence the adoption of digital banking in Malaysia. The study's findings will benefit various parties, including bank customers, operating digital banks and regulators for a better understanding and strategic plan to make digital banks more sustainable in Malaysia.

The structure of the paper is as follows: Section 2 explains some relevant literature reviews and theoretical development; Section 3 provides the conceptual framework, hypothesis development and methodology; Section 4 discusses the analysis result; and Section 5 provides conclusions.

2. Related Literature and Hypothesis Development

2.1. Definition of digital banking

As the digital world is still revolving, a definitive understanding of "digital banking" has not been reached by many stakeholders. Therefore, the term "digital banking" has been easily misunderstood by many as either "mobile banking" or "internet banking". According to Napoletano (2021), digital banking services are a combination of online and mobile banking services, where bank customers can access banking services via desktop and mobile devices 24/7 to obtain better rates and lower fees compared to brick-and-mortar financial institutions. In Haralaya (2021), digital banking is defined as the computerization of traditional banking services, where banking products and services can be accessed via online or electronic platforms. Therefore, bank customers can visit branches of banks virtually anytime and anywhere at their convenience.

As digital banking is still somewhat new to Malaysians and, like other technology, the design of such FinTech may need to be better accepted (Davis, 1989; Venkatesh et al., 2003). User behavior is an essential factor for the adoption of technology. This study adopts two well-established frameworks, known as the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al., 2003) and the Theory of Planned Behavior (TPB) (Ajzen, 1991). Important factors adopted from the above models will be discussed as follows.

2.2. Factors affecting behavioral intention of digital banking.

2.2.1. Performance Expectancy (PE)

Performance expectancy (PE) is defined as the extent to which an individual believes that using the system will help the user attain a better result (Venkatesh & Zhang, 2010). In multiple studies, PE was found to influence behavioral intention significantly to use technology. In other words, people are more likely to accept new technologies when they believe they will help them perform their work more efficiently. Many studies found a significant positive impact on the intention to adopt a technology, i.e., mobile banking or electronic banking (Khan et al., 2017; Maduku, 2017). In this study, performance expectancy refers to how using a digital banking service will benefit bank users with lesser time and effort and thus achieve more job performance efficiency. Hence, the intention to adopt digital banking will increase as their performance expectancy rises. The following is hypothesized:

H₁: Performance expectancy has a significant positive influence on the intention to adopt digital banking services.

2.2.2. Effort Expectancy (EE)

Effort expectancy (EE) is defined as the level of ease of implementing the system (Venkatesh & Zhang, 2010). Most consumers were likelier to adopt new technology if it required little effort to learn and use (Merhi et al., 2019). When it comes to any technology, users will think that it is more valuable and, thus, will adopt it if it has a simple and easy-to-understand interface and function that requires less time to learn (Talukder, Quazi, & Sathye 2014; Mehta, Morris, Swinnerton, & Homer, 2019; Nguyen & Nguyen, 2020). Thus, the following is hypothesized:

H₂: Effort Expectancy positively influences individuals' Intention to Adopt Digital Banking.

2.2.3. Perceived Risk (PR)

Using new technology in financial services always arouses users' risk awareness as it involves the possibility of monetary losses. Perceived risk is an additional factor adopted in this study that was excluded from the UTAUT model. The degree of uncertainty arising from using technologies defines this factor. The uncertainty refers to a different context, including the potential loss caused by the outcome (Gerrard & Cunningham, 2003) and security issues (Cruz, Neto, Murioz-Gallego and Laukkanen, 2010). According to Featherman and Pavlou (2003), the potential risks can be categorized into several aspects: performance risk, financial risk, psychological risk, privacy risk, and overall Risk. These risk factors can affect the user's willingness to accept a technology (Rossi and Utkus, 2020; To & Trinh, 2021; Yang, Al Mamun, Mohiuddin, Nawi, & Zainol, 2021).

Prior studies (Baek and King, 2011; Slade, Dwivedi, Piercy and Williams, 2015; Bhatia, Chandani, Atiq, Mehta & Divekar, 2021) have proven a significance influence of Perceived Risk on the adoption of financial innovations such as mobile banking services, mobile payments, and Robo-Advisors services. Therefore, our hypothesis based on the previous literature is as follows:

H₃: Perceived Risk negatively influences individuals' Intention to Adopt Digital Banking

2.2.4. Social Influence (SI)

Social influence (SI) is defined as how an individual perceives the importance that others believe he or she should use the new system (Venkatesh et al., 2003). Venkatesh & Zhang (2010) found that social

influence significantly impacts women's behavioral intention, especially older ones. However, findings on the influence of SI on the adoption of various technologies are mixed, where some found that social influence could positively affect the intention to adopt and use a technology (Zhou et al., 2010; Gharaibeh & Arshad, 2018; Milani, 2019), while others found none (Cheah et al., 2011; Kit et al., 2014)

In this study, social influence is expected to be one of the essential factors affecting the adoption of digital banking in Malaysia. In this digital era, people tend to have a positive attitude towards adopting such technologies, when being recommended by relatives, friends, or strangers through social platforms to use certain technologies. Therefore, the following is hypothesized:

H4: Social influence positively influences individuals' intention to Accept Digital Banking.

2.2.5. Trust (TR)

Trust is defined as the willingness of one party to engage in a specific action with a specific partner, considering the risks and rewards involved (Ruohomaa & Kutvonen, 2005). Trust plays an essential role in encouraging behavioral intention to use new technology. This result is like several studies on adopting an e-wallet (To & Trinh, 2021; Yang, Al Mamun, Mohiuddin, Nawawi, & Zainol, 2021). Trust is a relatively important element in the monetary system because consumers are required to provide private and confidential information to use the system. Therefore, they are usually concerned about security and privacy while using services online. In this study, trust indicates the users' confidence in digital banking, which makes them intend to use its services. Thus, the following is hypothesized:

H5: Trust significant positive influences individual intention to Adopt Digital Banking.

2.2.6. Awareness of Various Financial Products (AW) and Financial Literacy (FL)

When a person is financially literate, he/she does not just understand personal finance-related information, but he/she can apply such information to make financial decisions (Huston, 2010). Possessing sufficient financial literacy allows an individual to make sound financial decisions related to personal finance issues, such as saving, spending, investing, retirement planning, and insurance, in various economic conditions (Lusardi & Mitchell, 2009; van Rooij et al., 2011; Jariwala, 2013; Allgood & Walstad, 2016; Greenberg & Hershfield, 2018; Hoffmann & Otteby, 2018; Hoffmann & Otteby, 2018).

For ordinary individuals, basic financial knowledge such as interest rates, the effect of compounding rates, the time value of money, risk and return concept, and diversification are necessary to achieve their financial well-being. However, sophisticated individuals often become active in investing in various financial products and thus have good knowledge of such products. This study measures respondents' financial literacy with both basic and advanced financial knowledge. Their level of financial literacy is believed to influence their decisions to adopt digital banking. Therefore, it is hypothetical that:

H6: Basic financial literacy significantly influences the adoption of digital banking.

H7: the awareness of various financial products significantly influences the adoption of digital banking.

2.2.7. Misconception about Digital Banking (MIS) and geographical characteristics

Since digital banking still evolves worldwide and some parts like Malaysia are still very new and infant,

many may think that digital banking is just another word for online banking or mobile banking. This misconception may affect the intention to adopt digital banking for those using online or mobile banking services. Moreover, many studies show that when people understand better about a product or technology, they will have more intention to use that product; as a result, vice versa (Morgan, Huang, and Trinh, 2019; Memon, Nair, and Jakhiya, 2021). Therefore, it is hypothetical that:

H₈: Misconception about digital banking significantly influences the adoption of digital banking.

2.2.8. Attitude (ATT)

Attitudes are often referred to as the degree to which a person has a favorable or unfavorable evaluation of the behavior of interest. It entails a consideration of the outcomes of performing the behavior. Thus, a person with a positive attitude towards using technology is likely to use that technology. The following is hypothesized:

H₉: Attitude significantly influences the adoption of digital banking.

2.2.9. Gender (GE)

Research has shown that the gender of users affects the decision of acceptance in information and communication. In the UTAUT model, Venkatesh et al. (2003) have reported that men are more highly affected by the performance expectancy (PE) in intention to adopt and use the system. Meanwhile, women are more highly affected by effort expectancy (EE) and social influence (SI). The findings are like the research done by Terzis & Economides (2011) in Computer Base Assessment (CBA). Regarding perceived usefulness and goal expectancy, men have a higher effect than women as men are more competitive and expect to achieve a better result. Men have a better understanding of using a computer than women. The finding also shows a similar result where ease of use is essential for using CBA for women. However, the study state that their social environment more easily influences men. When people around him recommend or suggest using the CBA system, they will tend to follow. Previous studies also found similar results where men are more easily influenced (Kim, 2010). In terms of trust, the effects of security and personalization on trust were more significant for women than for men in a study on the moderating effect of gender on mobile payment systems (Shao et al., 2019). Thus, the hypothesis for gender is as follows:

H₁₀: Gender significantly influences the adoption of digital banking.

2.2.10. Behavioral Intention to Adopt a Technology (ITA)

Behavioral intention (BI) is defined as a Motivational component that measures how much effort a person is willing to perform a behavior (Ajzen & Fishbein, 2005). According to Bagozzi, Baumgartner, & Yi (1992), every person's strength in the intention-behavior relationship differs from personality traits. BI is the basic principle of the actual use of the technology system. Therefore, it can directly impact technology usage (Venkatesh & Zhang, 2010). This also indicates that the greater the user's intention to adopt new technology, the easier for them to accept the technology.

3. Research Methodology

3.1. Theoretical Framework

The below theoretical framework consists of one dependent variable: Intention to Adopt Digital Banking (ITA), and ten independent variables: Attitude (ATT), Awareness (AW), Financial Literacy (FL), Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Trust (TR), Gender (GE) and Perceived Risk (PR), which will influence the dependent variable, Behavioral Intention to Accept Digital Banking.

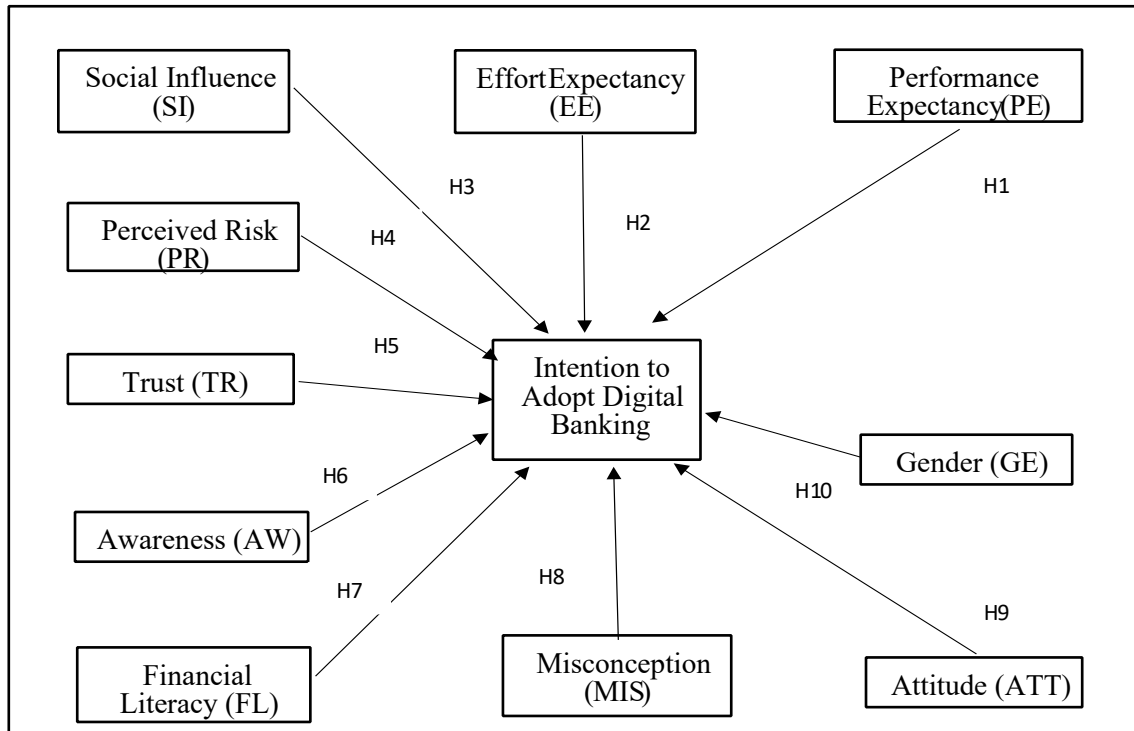


Fig.1: Theoretical Framework of Study

3.2. Sampling method

Based on the study's objective, any 18 and above individuals who can actively use services at a digital bank can be part of the targeted population for this study. Four hundred-thirty respondents participated in a face-to-face and online survey between April 2022 and January 2023. Potential respondents for this survey were informed clearly in the questionnaire about the purpose of the data collection. Respondents' participation is entirely voluntary. Their answers are used for the analysis of this study.

As an exploratory factor analysis, sample to item ratio is used to determine the adequate sample size of this study (Memon et al., 2020). Suhr (2006) recommends a minimum subject-to-item ratio of 5:1. However, higher ratios are generally better. A total of 48 items (questions) will be tested to measure the independent variables in this study. Therefore, 240 responses should be collected to represent the population and formulate a reasonable conclusion. Thus, the obtained sample of 430 respondents is sufficient for this study.

Almost half of the respondents (see Table 1) in the sample are 20 – 29 (49.6%) and own a bachelor's degree (45.4%). There is an equal distribution of gender in the study sample, where 51% are females, and 49% are males. Most respondents have less than RM2,500 (69%) per month, while around 17% have a medium monthly income of RM4850 and above. About 6% of respondents in the sample have a high monthly income above RM10,960. In terms of residential location, most respondents come from

two states, Selangor (50%) and Kuala Lumpur (20%).

Table 1: Demographic Characteristics of the Study Sample of the Study Sample

Demographic Characteristics		Percentage (430)
Age group	18-20	28.48%
	20-29	49.61%
	30-39	7.78%
	40-49	8.97%
	50-59	4.14%
	Above 60	1.02%
Gender	Female	51.15%
	Male	48.85%
Marital Status	Married	17.58%
	Single	82.42%
Highest Education	Bachelor's degree	45.40%
	Certified Professional	0.91%
	Diploma degree	20.42%
	Master's degree	4.82%
	No formal education	0.70%
	Ph.D.	3.47%
	SPM	24.28%

Table 1: Demographic Characteristics of the Study Sample (Cont...)

Demographic Characteristics		Percentage (430)
Income	Less than RM2500	69.22%
	RM 2500 - RM3169	5.78%
	RM3170 - RM3969	3.62%
	RM3970 - RM4849	6.63%
	RM4850 - RM5879	4.17%
	RM5880 - RM7099	1.68%
	RM7100 - RM8699	1.63%
	RM8700 - RM10959	1.68%
	RM10960 - RM15039	1.91%
	RM15040 or more	3.67%
States	Johor	9.62%
	Kedah	1.29%
	Kuala Lumpur	20.29%
	Malacca	0.64%

Negeri Sembilan	4.74%
Pahang	3.83%
Penang	1.53%
Perak	4.10%
Sabah	2.91%
Sarawak	1.14%
Selangor	49.67%
Terengganu	0.24%

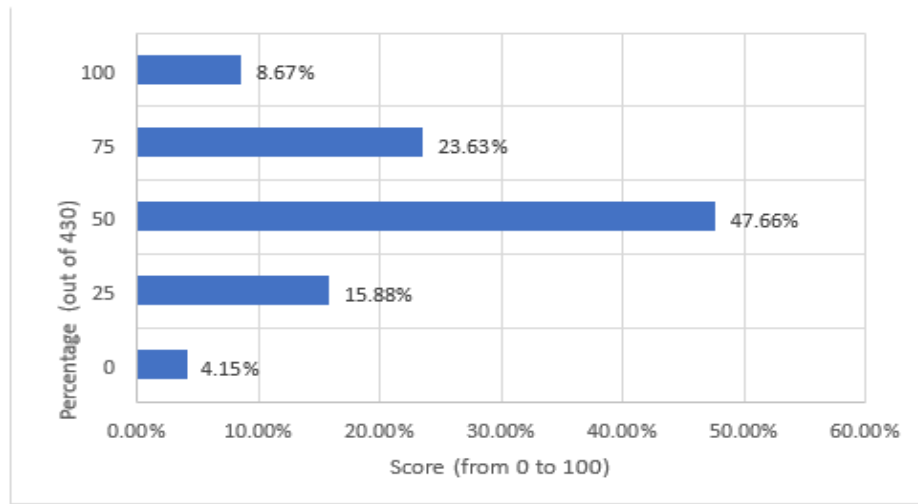


Fig.2: Financial Literacy Scores for the Study Sample

In terms of financial literacy, most respondents (68%) have an average score of 50% and below, implying an average and below average knowledge about four primary finance areas: interest rate, time value of money, risk and return and diversification, as indicated by OECD/INFE (2016).

When asked about how aware a person is of the following financial products: Bond, Equity, Forex, Derivatives, and Crypto Currency, respondents will rate their familiarity on a scale from 1 to 3 for each. The average awareness score is then computed for each respondent. Figure 3 summarizes the awareness of financial products obtained from the study sample. Overall, the awareness level of the five primary financial products could be better, with only around 11% of respondents above the average score. This finding is consistent with the low financial literacy score for most respondents in the sample shown in Figure 3. This finding suggests that many Malaysians must be more aware of financial products.

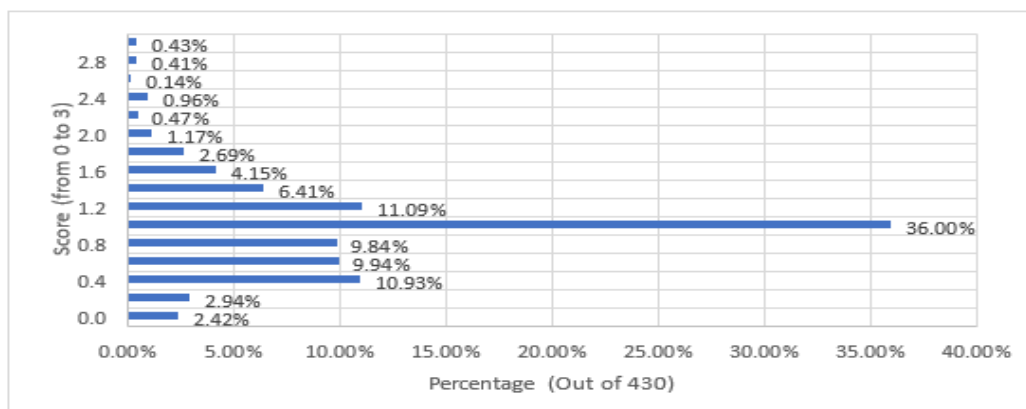


Fig.3: Awareness of Financial Products

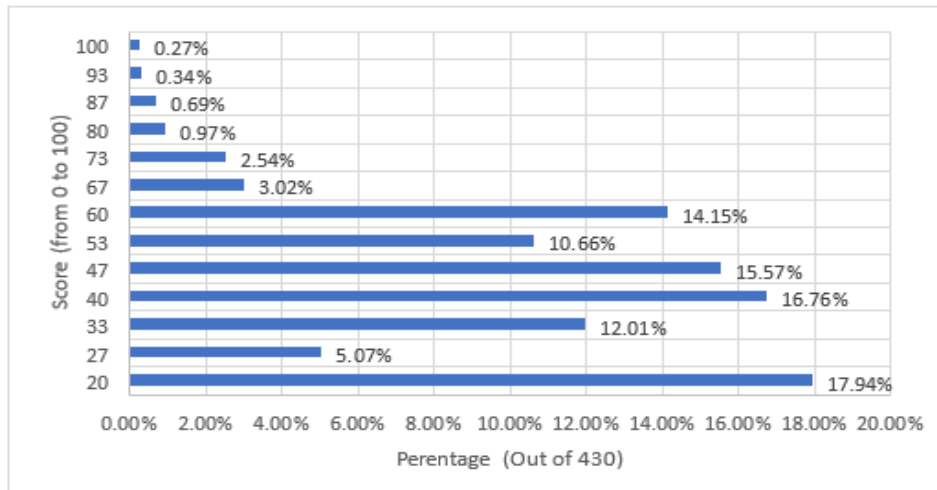


Fig.4: Misconception of Digital Banking

When testing respondents to see if they misunderstand digital banking as mobile banking, online banking, or just the type of banking that can be done via mobile devices, a score from 0 to 100 will be given to each respondent, where 0 refers to no misconception, and 100 refer to 100% misconception. As shown in Figure 4, the degree of misconception for the study sample ranges from 20% to 100%, implying that all respondents must understand digital banking correctly. However, 67.5% of respondents have a score of the misconception between 20 and 50, implying that two third of respondents have some degree of understanding of what digital banking is. In contrast, the rest have little knowledge of it.

3.3. Survey Instruments

A self-administered questionnaire of factors influencing the intention to adopt digital banking was developed for primary data collection. The questionnaire was administered to respondents face-to-face and on various online social communication platforms such as WhatsApp, Facebook Messenger, and Telegram.

The independent variables of this study are Performance Expectancy (PE), Effort Expectancy (EE), Social Influence (SI), Perceived Risk (PR), Awareness of Digital Banking (AW), Financial Literacy (FL), Misconception of Digital Banking (MIS), Trust (TR), and Gender (GE). The dependent variable of this study is the Intention to Adopt Digital Banking (ITA). A closed-ended questionnaire was developed for this study. The survey questionnaire contains four sections. The first section - Section A - includes questions about respondents' demographic information such as age, gender, marital status, income, educational level and field of knowledge and experience. Section B contains questions assessing respondents and financial literacy. Three big financial literacy questions created by Global Financial Literacy Excellence Center (GFLEC) are adapted to measure the financial knowledge of respondents. Section C contains questions related to both online and mobile banking that are used to test respondents' misconceptions of digital banking. Section D contains questions about factors that may affect the adoption of digital banking, i.e., PE, EE, SI, AW, FL, PR, MIS, and TR. Most questions designed for the questionnaire used for this study are adapted from well-established studies: Davis (1989) and Venkatesh, Thong and Xu (2012). Questions in Section D are close-ended multiple-choice questions where respondents need to rate their agreement based on a 5-point Likert scale ranging from (1) strongly agree, (2) agree, (3) neutral, (4) disagree, and (5) strongly disagree.

A pilot study was conducted by distributing 30 survey questionnaires randomly to 18 years old and above individuals for the questionnaire validation purpose. The refined questionnaire was then used to

collect data for this study.

3.4. Method of Analysis

The survey's data is analyzed using Statistical Package for the Social Sciences (SPSS 22) and SmartPLS 4.0. Partial Least Square "PLS" is a structural equation modelling (SEM) technique that can simultaneously test relationships between constructs.

4. Discussion of Findings

4.1. Reliability and Validity Analysis of the Proposed Model

For a structural model to be validated, its measured variables must pass various tests to avoid bias in analysis later. Based on the data collected from 404 respondents, a reliability test was then conducted through SmartPLS. Table II shows the result of the reliability test of this study. A study's acceptable Cronbach's Alpha needs to be at least 0.65 (Hair et al., 2010), where Cronbach's Alpha above 0.80 indicates the data set is excellent and reliable.

According to Hair et al. (2010), the internal consistency reliability is acceptable for all four independent variables. In the proposed model of Intention to Adopt Digital Banking, ten latent variables with reflective measurement models are (1) Performance Usefulness (PU) and Performance Expectancy (PE), (2) Trust (TR), (3) Effort Expectation (EE), (4) Attitude towards Digital Banking (ATT), (5) Perceived Risk (PR), (6) Social Influence (SI), (7) Financial Literacy (FL), (8) Awareness of Basic Financial Products (AW), (9) Misconception about Digital Banking (MIS, and (10) Gender (GEN).

To ensure all indicators reflect their respective latent variables, their outer loadings must be not less than 0.7. Indicators with outer loading of less than 0.7 were removed from the model. The final constructs with their indicators are shown in Table 5. Indicator - PU3 has minor reliability with a value of 0.578 (0.7762), while indicator - ATT1 has the highest reliability with a value of 0.806 (0.8982). In terms of the internal consistency reliability for each construct of the proposed model, values of Cronbach's alpha for seven constructs (ATT, EE, ITA, PE, PR, SI and TR) are all above the required threshold of 0.7 with the minimum value of 0.766 for SI and the maximum value of 0.883 for PR. Thus, it can be said that all the constructs are equally reliable for the proposed model. As Cronbach's alpha is viewed as a conservative measure of reliability, giving relatively low-reliability values, an alternative measure for reliability – composite reliability – is then employed. As shown in Table 5, composite reliability values for all constructs are above the threshold of 0.6, ranging from 0.866 to 0.918, indicating high internal consistency reliability. In short, results obtained for Cronbach's alpha and Composite Reliability tests confirm the internal consistency reliability for the seven constructs, i.e., ATT, EE, ITA, PEP, PR, SI and TR.

Table 2: Result of the Reflective Measurement Model

Latent Variable	Indicator	Convergent Validity			Internal Consistency Reliability		Discriminant Validity
		Loadings	Indicator Reliability	AVE	Cronbach's Alpha	Composite Reliability	
		>0.7	>0.5	>0.5	0.6-0.9	0.6-0.9	HTMT confidence interval does not include 1
Attitude towards Digital Banking (ATT)	ATT1	0.898	0.806	0.768	0.849	0.908	Yes
	ATT2	0.885	0.784				
	ATT3	0.845	0.714				

Effort Expectancy (EE)	EE1	0.845	0.714	0.751	0.834	0.900	Yes
	EE2	0.877	0.768				
	EE3	0.877	0.770				
Intention to Adopt (ITA)	ITU1	0.786	0.618	0.701	0.786	0.876	Yes
	ITU2	0.860	0.740				
	ITU3	0.864	0.746				
Performance Expectancy (PE)	PE2	0.869	0.756	0.649	0.819	0.880	Yes
	PE3	0.822	0.676				
	PU2	0.765	0.585				
	PU3	0.760	0.578				
Perceived Risk (PR)	PR1	0.832	0.693	0.738	0.883	0.918	Yes
	PR2	0.865	0.747				
	PR3	0.884	0.782				
	PR4	0.854	0.730				
Social Influence (SI)	SI1	0.768	0.589	0.683	0.766	0.866	Yes
	SI2	0.846	0.716				
	SI3	0.862	0.743				
Trust (TR)	TR1	0.769	0.591	0.656	0.825	0.884	Yes
	TR2	0.836	0.698				
	TR3	0.808	0.653				

To examine the convergent validity of the seven constructs, values of Average Variance Extracted (AVE) are obtained. As shown in Table 2, AVE values for all constructs are above the threshold of 0.5, ranging from 0.649 to 0.768, suggesting that each construct explains more than 50% of the variance of its indicators. Finally, discriminant validity values for all constructs are obtained to empirically examine how each construct is genuinely distinct from other constructs. Using the bootstrapping procedure with 5,000 samples, bootstrap confidence intervals are obtained, suggesting that the HTMT values significantly differ from 1 (Table 2). In other words, the bootstrap confidence interval results of the HTMT criterion support the discriminant validity of the constructs.

In short, all evaluation criteria for the model have been met; thus, the model is fit for further path coefficient estimation.

4.2. Path Coefficient Analysis

To produce reliable results, a bootstrapping with 5,000 subsamples randomly drawn from the original sample of this study is carried out. Table 3 shows the results of the path coefficients obtained from the bootstrapping test for the proposed structural model. Path coefficients of eight out of ten independent variables (ATT, PEP, EE, SI, FL, AW, MISPER, TR and GEN) are significantly related to the ITA variable, with p-values of less than 0.05 and t-statistics of more than 1.65.

Attitude towards digital banking (ATT) significantly influences respondents to adopt digital banking (0.394) at the 1% level. This finding suggests that respondents with a positive attitude, such as feeling excited and joyful and thinking it is an intelligent choice to use digital banking, are likely to adopt it.

Awareness of primary financial products (AW) such as bonds, equity, foreign currency, cryptocurrency, and derivatives have a significant negative influence (-0.066) on the intention to adopt digital banking (ITA) at the 5% level. This finding suggests that respondents with experience or knowledge of primary financial products must be more convinced about adopting digital banking.

Effort expectancy (EE) significantly influences respondents' intention to adopt digital banking at the 10% significant level. The finding implies that respondents who have no trouble accessing digital banking services 24/7 and with effortlessness are likely to use digital banking services.

Financial literacy (FL) significantly influences respondents' intention to adopt digital banking (0.08) at the 1% level. This result suggests that individuals who are more financially literate appear to be more rational and, thus, likely to have the intention to adopt digital banking. As Malaysia was reported to have a moderate and low level of financial literacy (Ying, Chan & Siang, 2020), these findings also imply the potential problem of the low adoption rate of digital banking in Malaysia.

Gender (GE) has a significant negative influence (-0.074) on the adoption of digital banking at the 5% level, implying that females are more likely to have the intention to adopt digital banking than males in Malaysia.

Misconceptions over digital banking services with online and mobile banking appear to have a significant negative influence (-0.108) on the intention to adopt digital banking at the 1% level.

This finding implies that people who think digital banking is just another name for online or mobile banking may not adopt digital banking services if they already have access to online or mobile banking.

Table 3: Structural Model Obtained from Bootstrap with 5,000 samples.

Coefficient Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values	95% Confidence Interval		Significance (p-value < 0.05)
						2.5%	97.5%	
ATT -> ITA	0.394	0.392	0.056	7.041	0.000	0.279	0.500	YES***
AW -> ITA	-0.066	-0.067	0.030	2.191	0.028	-0.125	-0.008	YES**
EE -> ITA	0.083	0.084	0.049	1.696	0.090	-0.012	0.180	YES*
FL -> ITA	0.080	0.079	0.027	2.916	0.004	0.025	0.133	YES***
GEN -> ITA	-0.074	-0.072	0.030	2.464	0.014	-0.131	-0.014	YES**
MISPER -> ITA	-0.108	-0.107	0.030	3.535	0.000	-0.169	-0.048	YES***
PE -> ITA	0.095	0.093	0.047	2.021	0.043	0.003	0.184	YES***
PR -> ITA	0.038	0.039	0.029	1.295	0.195	-0.017	0.097	NO
SI -> ITA	0.193	0.196	0.051	3.758	0.000	0.097	0.296	YES***
TR -> ITA	0.110	0.110	0.047	2.323	0.020	0.021	0.201	YES**

Note: *, **, and *** are referred to the 10%, 5%, and 1% significant levels, respectively.

Performance expectancy (PE) has a significant positive influence (0.095) on adopting digital banking at the 1% level. This finding implies that if digital banking can help people to improve their financial well-being or to achieve their financial goals faster, they would likely use such services in the future.

Social influence (SI) also has a significant positive impact (0.193) on the intention to adopt digital banking (ITA) at the 1% level. This finding suggests that people will consider using digital banking services in Malaysia if their family and friend recommend such services. This finding is like past studies (Ghalandari, 2012). In addition, most respondents in this study are either students or working adults, and peer groups easily influence behaviours.

Trust has a significant positive influence (0.11) on the intention to adopt digital banking at the 5% level. This finding implies that digital banks that are regulated, reputed, expert, transparent, secure, accurate, and reliable are likely to attract their potential customers.

Perceived risk is found to have no significant positive influence on the adoption of digital banking in Malaysia. This finding suggests that risks, such as loss of personal information or money due to cybercrime, at digital banks are not their primary concern when considering digital banking services. This finding is different from the findings obtained by Baek and King (2011), Slade, Dwivedi, Piercy and Williams (2015), and Bhatia, Chandani, Atiq, Mehta & Divekar (2021).

4.3. Predictive Power and Predictive Relevance of the Proposed Model

PLS Predict output was then produced using a 10-fold process to generate and evaluate predictions from PLS path model estimations (Shmueli et al., 2016). In Table 4, the predictive power and predictive relevance assessment of the proposed model are presented. Regarding predictive power, The R-square value for ITA is somewhat substantial (Hair et al. (2011) & Hair et al. (2013), i.e. 0.69. Q2 values of the endogenous constructs: ITA is above 0, i.e., 0.675, suggesting the model's predictive relevance regarding the endogenous latent variable ITA.

Table 4: Predictive power and predictive relevance assessment

	Predictive Power		Predictive Relevance	
	R-squared	Status	Q ² (=1-SSE/SSO)	Status
ITA	0.69	Fairly strong	0.675	Strong

5. Conclusion

This study explores factors affecting individuals' intention to adopt digital banking services in Malaysia. Using a self-administered questionnaire of factors influencing intention to adopt digital banking services was developed for primary data collection. A structural model was developed with one dependent variable and ten independent variables. All constructs of the model passed Convergent Validity, Internal Consistency Reliability, and Discriminant Validity tests. Path coefficients produced from the bootstrapping procedure with 5,000 samples provide important implications:

- Individuals who are more financially literate appear to be more rational and likely to have the intention to adopt digital banking.
- Individuals with positive attitudes, such as feeling excited and joyful and thinking it is an intelligent choice to use digital banking, are likely to adopt digital banking.
- An individual with experience or knowledge of primary financial products is skeptical about adopting digital banking.
- Individuals with no trouble accessing digital banking services 24/7 and with effortless are likely to use digital banking services.
- Females are more likely to have the intention to adopt digital banking than males in Malaysia.
- Individuals who think digital banking is just another name for online banking or mobile banking may not adopt digital banking services if they already have access to it.

- Individuals who think digital banks are regulated, reputable, expert, transparent, secure, accurate, and reliable will likely attract potential customers.
- risk, such as loss of personal information or money due to borrowers' default or cybercrime, at digital banks are not their primary concern when considering to use of digital banking services.
- People who improve their financial well-being and achieve their financial goals faster would likely use such services.
- People will indeed consider using digital banking services in Malaysia if their family and friend recommend such services to them.

The results of this study are essential to the current five licensed digital banks and regulators to have strategic policies for the sustainable growth of digital banking in Malaysia. This study has first-hand empirical findings on factors affecting the intention to adopt digital banks in Malaysia.

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