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Adoption of Fintech Services for Sharia Bank Users in Indonesia: An Extended TAM Approach

Reza Pahlevi[1], Zulpahmi[2], Ummu Salma Al-Azizah[3], Anni Aisyah Hasibuan[4]

Abstract

This study proposes a technology acceptance model (TAM) in combination with perceived risk, brand image, sharia compliance, and government support as factors that determine trust to analyze how users adopt fintech services. The research method uses a quantitative approach using non-probability sampling technique. A structured questionnaire was distributed to active customers of Islamic banks in Indonesia, and 357 respondents who met the standards participated. A structural equation model (SEM) was used in the data analysis to test the hypotheses regarding all latent variables and their relationships. The results of the study show that usefulness, ease of use, and brand image of fintech services significantly influence users' attitudes toward fintech adoption. However, trust, perceived risk, and government support do not significantly influence users' attitudes toward adopting fintech. Moreover, attitude and shariah compliance have a significant effect on users' intention to adopt fintech services. This study adds to the existing literature on fintech service adoption by providing a comprehensive overview of the determinants of user attitudes by combining the concepts of trust in fintech services with TAM.

Keywords: *TAM; Adoption; fintech service*

INTRODUCTION

One of the technological developments in the financial sector is fintech (financial technology), one of the latest innovations in the digital age. Fintech is a term used to describe companies that offer innovative financial technologies.

[1] Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta, Indonesia
[2] Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta, Indonesia
[3] Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta, Indonesia
[4] Universitas Muhammadiyah Prof. Dr. Hamka, Jakarta, Indonesia
Email: rezaphlvi99@gmail.com

In Indonesia, according to OJK (2022) the total assets owned by fintech types of financing are around 5,512 billion rupiah, with 95 established operating companies and seven sharia companies. Banks, as competitors of fintech, only offer their three main financial services to consumers, namely: savings products, loans, and financial services. Some fintech companies focus on providing a preferable user experience to customers as a potential market. As financial services companies, traditional banks recognize the importance of a positive user experience. Some have increased their market share and competitiveness by collaborating with or acquiring fintech companies. For example, banks are collaborating with fintechs on lending.

The Islamic banking sector has grown in recent years, especially in Indonesia. The government is supporting this development by enacting a law on Islamic banking, which is expected to stimulate the national economy. Islamic banking is a Shariah-based financial institution that must be able to adapt to the various market conditions that are constantly changing. According to Bouwman et al. (2019), the bank's business model and infrastructure must be based on digitalization. If Islamic banks fail to adapt to fintechs, they could lose their customers in the long run. Islamic banks must take effective measures to ensure the survival of Islamic banking in such a case.

Banking efficiency and improving user experience are the goals of fintechs in the banking sector. Existing research, on the supply side for banking, is about fintech strategies and risks. Fermay et al. (2018) studied the P2P fintech and bank collaboration model in Indonesia. Chang et al. (2016), analyzed how banks are transforming their business activities and competing with fintech companies themselves in the context of fintechs. There is a difference in users, with the majority of fintech users being millennials and older people being the main customers of banks. Therefore, we need to study the impact of these differences on fintech adoption. Studying the factors that influence bank customers' adoption of fintechs can help banks improve their services and build their relationships with customers. This may lead to a new perception and deeper understanding of Islamic finance, especially in the adoption of fintech services (Gangwar, 2014). From another perspective, there has been a significant change: The millennial generation tends to be less financially well-off than the previous generation. However, over time, Millennials' financial capabilities have gradually improved,

and they have become the most important customers. Therefore, a study of the factors influencing bank users' adoption of fintech services can help Islamic banking meet the future needs of the younger generation.

Meanwhile, the Islamic banking sector faces several challenges in adopting fintech solutions. One of the challenges faced by Islamic banks is the need to ensure that fintech products and services are compliant with Shariah principles. This may require a review and innovation of the existing regulatory framework to ensure that modern technology is compatible with Shariah-compliant transactions, including transparency and disclosure. Additionally, Islamic banks may face financial risks associated with large transactions, competition from fintech companies, and concerns about data privacy and cybersecurity (Ebrahim *et al.*, 2020). In the study of Mahalle et al (2021), by educating customers regarding the business model of fintech itself, this will help promote the fintech rapidly. Al-Azizah et al. (2022) found that musyarakah and mudharabah financing increased profits in Islamic banks in Indonesia. In summary, integrating fintech services into banks has a positive impact in all aspects, and of course this is not easy considering the various challenges faced.

Davis first developed the technology acceptance model (TAM) to provide an explanation of the determinants of technology acceptance. In general, this concept can explain user behavior across different technology systems and theoretically based user populations (Davis, 1993). TAM is based on two fundamental concepts: perceived usefulness and perceived ease of use. The TAM was developed based on the Theory of Reasoned Action (TRA), originally proposed by Fishbein and Ajzen to provide an explanation of people's attitudes and personal beliefs. as well as the situational factors surrounding them that influence their behavior (Szajna, 1996).

The use of TAM has become a popular used models in technology adoption research due to its ability to explain an individual's intention to accept technology. However, most studies that apply TAM have found limitations in the model, with the most commonly reported issue being bias in the TAM process (Tarhini *et al.*, 2015, p.68). Venkatesh & Davis (2000) then revised the previous model, TAM 2, by adding 2 main factors: (1) social influence and (2) cognitive instrumental. The results of several studies have shown that TAM 2 ability to explain factors is much better than TAM. Several variables in TAM 2 are categorized into this group: Subjective norm, voluntariness, experience and image (Tarhini *et al.*, 2015, p.69).

This research will use TAM as a theoretical base by adding Sharia compliance (SC) as an extension of the model. The reason for adding SC is to assess the use of technology by Sharia bank customers and as a differentiating factor from conventional. It is expected that the SC variable in TAM can improve predictive power.

Technology adoption in finance has been extensively studied previously (Ingham & Thompson, 1993; Wentzel *et al.,* 2013; Hu *et al.,* 2019), with many variations in technology adoption but not yet able to explain in detail and there is still a lack of research investigating the additional effects of other variables such as perceived risk, brand image, sharia compliance, and government support, especially in the context of Indonesia (Purnamasari *et al.,* 2020; Usman *et al.,* 2022; Pardiansyah *et al.,* 2022). Considering the latest developments in the literature that still exist, this study proposes to test a model consisting of nine variables for technology adoption in finance. In addition, this study focuses on data collected in the context of Indonesia, which is believed to be of particular concern given the Indonesian government's emphasis on integrating technology into finance and the development of the sharia economy. Gaining more knowledge about the importance of specific additional factors that influence the level of acceptance of financial technology adoption by Islamic bank users will provide a better understanding of the factors that predict fintech adoption in general but also make practical recommendations in the context of Islamic financial institutions in Indonesia. The objectives of this study are to: (1) assess users' willingness to adopt fintech services in Islamic banking, (2) identify critical factors that influence consumer behavior towards technology acceptance, (3) assess the relationship between fintech service adoption and its determinants.

LITERATURE REVIEW

Fintech

The word fintech is an abbreviation for financial technology, which refers to a company or a representative of a company that combines financial services with inventive and modern technology (Dorfleitner *et al.,* 2017, p.1). In the journal "the evolution of fintech", Arner et al. (2015) explain that the integration of finance and technology is an ongoing development and growth process with various innovations such as internet banking, digital payment system, crowdfunding,

P2P lending, market aggregator, online identification, and others.

Fintech generally aims to attract customers with more user-friendly, efficient, and transparent products and services (Mackenzie, 2015). Fintech companies are subject to various legal and regulatory requirements due to their very different business models and the variety of products and services they offer (Dorfleitner *et al.*, 2017, p.2).

In the Islamic context, fintech has a major impact on the development of Islamic finance (GIFR, 2021) and promotes the SDG program (Hudaefi, 2020; Trimulato *et al.*, 2022). The difference between Islamic fintechs and conventional ones lies in the legal basis and business orientation. Islamic fintechs merge digital financial solutions with adherence to Shariah law, allowing Muslims to easily access savings, investments, insurance, and loans that align with their religious principles (The Economist, 2020).

Hypothesis Development

Perceived Ease of Use

In TAM, perceived ease of use is a factor often used in the process of adopting technology systems; it is described as the grade of effort required to use a new technology with minimal effort (Davis, 1989). In this study, "perceived ease of use" refers to consumers' perceived ease of using fintech services and their willingness to use them. Fintech companies could improve their services and enhance the user experience to reach the individual needs of bank customers, which can help address the weaknesses of traditional banks. In the context of fintech, several studies have found a relationship between attitude and perceived ease of use when adopting new technologies. Purnamasari et al. (2020) stated that perceived ease of use has a significant impact on user attitudes toward fintech technologies for MSMEs in Indonesia. According to Baber (2021), there is a positive correlation between how easy a user perceives a crowdfunding platform to be and how useful they find it, which affects their willingness to use it. Based on previous research, we therefore hypothesized the following:

H_1 : Perceived Ease of Use has a positive relationship with attitude towards fintech adoption

H_2 : Perceived Ease of Use has a positive relationship with perceived usefulness in fintech adoption

Perceived Usefulness

Perceived usefulness is another key factor in TAM, described as an individual's belief that using the latest technology system can increase the efficiency of their work activities (Davis, 1989). In this study, the term "perceived usefulness" refers to users who choose to use fintech services because they believe that the service has a positive impact (Lee, 2017). Research related to perceived usefulness has been widely studied in various contexts. Usman et al. (2020) found that perceived usefulness had a significant positive effect on user attitudes in the case study of Islamic philanthropy. Nurfadilah & Samidi (2021), in their study on the effect of the pandemic crisis on users' intentions to use Islamic fintech services, found that perceived usefulness was positively correlated with users' attitude. For this reason, we design the following hypotheses:

H_3 :Perceived Usefulness has a positive relationship with attitude towards fintech adoption

Attitude

Attitude refers to a person's subjective evaluation and individual preference regarding a thing. Attitude was later removed from TAM because it was believed that attitude was not significantly related to technology use (Thompson *et al.*, 1991). However, according to the literature, attitudes have a social function. Attitudes are contagious, malleable, and volatile because people influence each other by confirming or rejecting them through interactions and shared experiences. By better understanding which aspects of attitude have a greater impact on the process of technology acceptance, we can support organizational efforts to implement technology (Yang & Yoo, 2003). Based on previous research, we formulate the following hypotheses:

H_4 :Attitude has a positive relationship with the Intention of fintech adoption

Trust

Along with perceived risk, trust is one of the two biggest challenges in technology (Aladwani, 2001). Trust means that one is willing to be exposed to the actions of another person because one assumes that they will act in a trustworthy manner, or regardless of the possibility of being monitored and controlled (Mayer *et al.,* 1995). Trust has long been the focus of studies on adoption issues and is often used as a key basis for attracting users, along with perceived usefulness and perceived ease of use. The role of trust in fintech adoption is critical due to the large and diverse data generated by fintechs. Hu et al. (2019) found in their study that trust influences the adoption of fintech services. Meanwhile, in the study of Pardiansyah et al. (2022) the level of trust has a positive but non-significant impact on the intention to use sharia-based fintech.

H_5 :Trust has a positive relationship with Attitude toward fintech adoption

Sharia Compliance

Compliance with Shariah principles is an absolute requirement that must be implemented by any entity that applies Shariah principles. The implementation of all these Shariah principles is to express the characteristics and a form of integrity and credibility of the company itself, especially with regard to Shariah finance. If a company does not comply with Shariah, it is likely to influence the decisions of people in choosing the services or products offered. Based on Usman et al's research. (2021) analyzed the role of sharia compliance in Islamic banks, and the result is that sharia compliance has a significant effect on customer satisfaction. Much previous research related to sharia compliance has been carried out (Aji *et al.*, 2020; Ali *et al.*, 2018; Garrouch, 2021). Baber (2021) found that sharia compliance directly affects customer intentions in using the crowdfunding platform.

H_6 :Sharia Compliance has a positive relationship with Intention toward fintech adoption

Perceived Risk

"Risk" is a term used by experts to refer to a situation in which a person making a decision has prior knowledge about the possible outcomes and probabilities of various options. Consumer researchers use the concept of perceived risk, which is

more closely related to the idea of partial ignorance. Perceived risk is measured by indicators of uncertainty and adverse consequences (Dowling, 1986). In this study, perceived risk is defined as user's perceived experience of using fintech services in terms of financial and privacy risks. According to several researchers, perceived risk is the most important factor that negatively affects the adoption of technology (Hanafizadeh & Khedmatgozar, 2012; Kesharwani & Bisht, 2012; Nguyen & Huynh, 2018). In their study, Ali et al. (2021) examine the factors that determine the adoption of fintech in Islamic finance, and found that perceived risk negatively affects user trust. This statement is consistent with that of Hu et al. (2019). They find that perceived risk negatively affects user confidence in the interest of adopting fintech services in banks, but is positively correlated with the attitude of bank customers.

H_7 : Perceived Risk has a positive relationship with attitudes toward fintech adoption

H_8 : Perceived Risk has a negative relationship with trust toward fintech adoption

Government Support

Government support encompasses the degree to which the government invests in technological infrastructure and establishes regulations and frameworks that facilitate the adoption of fintech. Government support is one of the essential factors for adopting new technologies. Therefore, a lack of government support will limit the adoption of new technologies (Mandari *et al.*, 2017). If citizens feel that the government adequately supports them in adopting fintech services, their adoption of the new technology is likely to increase.

H_9 : Government Support has a positive relationship with attitudes toward fintech adoption

H_{10} : Government Support has a positive relationship with trust in fintech adoption

Brand Image

Brand image refers to consumers' use of brands to express the symbolic meaning of their consumption and personality (Sasmita & Suki, 2015). Consumers

are more likely to try new products from a brand if they are familiar with its brand image (Diallo *et al.,* 2013). In the study conducted by Chi (2018), brand image is included in the brand equity dimension along with brand quality, brand association, and brand loyalty. The results show that all dimensions have a significant impact on Chinese consumers' perceptions of apparel e-commerce adoption. Based on that, we put forward the following hypothesis:

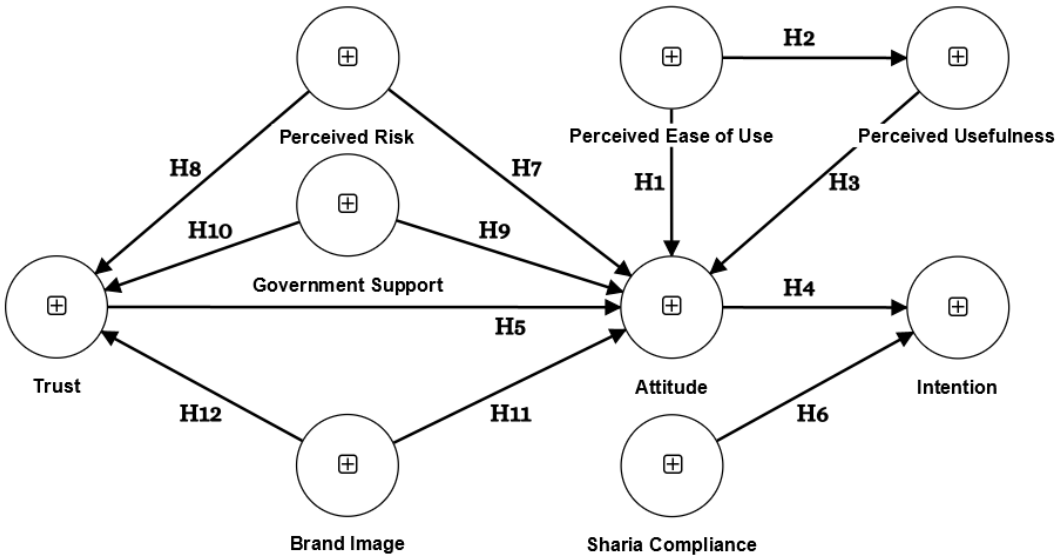
H_{11} : Brand Image has a positive relationship with attitudes toward fintech adoption

H_{12} : Brand Image has a positive relationship with trust toward fintech adoption

RESEARCH METHOD

The methodology in this study uses a quantitative approach, which involves a systematic and objective approach to collecting and analyzing data. Data collection is done by distributing online questionnaires to active users of Islamic banks in Indonesia. The users of Islamic banks already have accounts with Islamic banks and those concerned with Islamic sharia laws and regulations. Due to limitations in accessing the population, a non-probability sampling technique was used to select the respondents and to estimate sample size using the "10-times rule" introduced by Hair et al. (2011) which assumes the sample size must be 10 times larger than the maximum estimated connections in the model. The nine variables we used were adopted and modified from previous studies. Perceived ease of use and Perceived usefulness were taken and modified from Davis (1989) and Adams et al. (1992); Perceived risk, government support, attitude, and intention were adopted from Marakarkandy et al. (2017), Grabner et al. (2008), and Patel et al. (2018); Trust was adopted from Chong *et al.,* (2010); Shariah Compliance was adopted from al-Ajmi et al. (2009); Brand image was adapted from HaHY (2004). The questionnaire was split into two sections: the demographic section and a section for surveying the variables using a 5-poin Likert scale—The amount of data collected in this study was 402 respondents. After cleaning the data for invalid data and random filling, 357 valid respondents were included in the analysis, resulting in an effective response rate of 88.8%.

Figure 1
Research Framework



RESULT AND DISCUSSION

Demographic Profile of Respondents

Descriptive statistical analysis was performed on data from 357 respondents to examine their demographic characteristics, such as gender, education, age, income, and fintech usage habits. These results are presented in Table 1. Most respondents were female, about 68%, and the remaining 32% were male. The age range of most respondents is between 18 and 25 years old, which shows that customers generally accept the technology and lifestyle within this age range—however, 66% of respondents still rarely or never use fintech services. Understanding the factors that affect the adoption of fintech services is important for banks to successfully put fintech strategies into practice.

Table 1

Respondent Profile

Demographic Variable and Category		Frequency	Percentage (%)
Gender	Male	113	31,7
	Female	244	68,3
Age	18-25	287	80,4
	26-35	47	13,2
	36-45	7	2
	46-55	16	4,5
Education	Highschool	224	62,7
	Bachelor/ Diploma	117	32,8
	Masters	16	4,5
Income	IDR 0 – 3 million	261	73,1
	IDR 3 million – 6 million	55	15,4
	IDR >6 million	41	11,5
Fintech Service Usage	Never Use	78	21,8
	Sometimes	159	44,5
	Always	27	7,6
	Often	93	26,1

Source: Data processed, 2022

Measurement

This study used Partial Least Square (PLS), a component or variant-based structural equation modelling approach (SEM) using SmartPLS 3.0 software. SEM is a numerical method for examining the association between many variables using multiple regression analysis and covariance matrix (Hair *et al.,* 2021). SEM can identify causal relationships between independent and dependent variables. In this study, the model was evaluated using confirmatory factor analysis, which included tests for internal consistency reliability, convergent validity, and discriminant validity. Internal consistency of the data was also assessed using composite reliability (CR) and Cronbach's alpha. According to Hair et al. (2019), all item values for CR and Cronbach's alpha must be above 0.7, as shown in Table

2. However, the value of the brand image variable is lower; according to Hair et al. (2010), the reliability level is quite reliable and acceptable (Hansjosten, 2015). The loading factor value for all items above 0.7 is acceptable (Hair *et al.,* 2019). Table 3 shows that the Fornell-Lacker criteria for testing the validity of the divergent data were met because the correlation between the constructs was lower than the square root of AVE for each construct (Fornell and Larcker, 1981).

Table 2
Measurement Model

Constructs	Items	Survey Questions	FL	α	CR	AVE
Attitude (Grabner *et al.,* 2008)	ATT_1	Using fintech services is a pleasant experience.	0,899	0,751	0,889	0,800
	ATT_2	The services provided by fintech are interesting to me.	0,890			
Brand Image (Ha HY, 2004)	BI_1	I tend to choose services offered by well-known brands.	0,754	0,506	0,798	0,666
	BI_2	Islamic banks have a good reputation.	0,873			
Government Support (Marakarkandy *et al.,* 2017)	GS_1	The government supports and seeks to increase the use of fintech services.	0,876	0,827	0,897	0,743
	GS_2	The government has made favorable regulations for fintech services.	0,840			
	GS_3	The government is active in preparing infrastructure, such as telecommunications networks, which play a positive role in introducing fintech services.	0,870			

Intention (Patel *et al.*, 2018; Marakarkandy *et al.*, 2017)	INT_1	If I use a fintech service, I will continue to use it.	0,822	0,799	0,882	0,713
	INT_2	I want to use fintech services immediately.	0,880			
	INT_3	I can recommend fintech services to friends.	0,830			
Perceived Ease of Use (Davis, 1989; Adams *et al.*, 1992)	PEU_1	Easy to use fintech services	0,847	0,764	0,865	0,681
	PEU_2	The interface in the fintech application is user-friendly and easy to understand.	0,871			
	PEU_3	Easily access fintech services anywhere (smartphones, laptops, etc.).	0,753			
Perceived Risk (Grabner *et al.*, 2008)	PR_1	I believe that my money is safe in fintech services.	0,902	0,757	0,892	0,805
	PR_2	I believe that my personal information is safe in fintech services.	0,892			
Perceived Usefulness (Davis, 1989; Adams *et al.*, 1992)	PU_1	Using fintech can find the service I need.	0,869	0,889	0,923	0,749
	PU_2	Fintech services are a time-saving solution.	0,872			
	PU_3	Fintech services are efficiency solutions.	0,855			
	PU_4	Overall, fintech services are helpful for me.	0,866			
Sharia Compliance (al-Ajmi *et al.*, 2009)	SC_1	Islamic fintech is more in line with sharia rules.	0,868	0,765	0,864	0,680
	SC_2	Islamic fintech services will comply with sharia laws and regulations.	0,807			
	SC_3	Islamic fintech services will be free from usury and prohibited transactions.	0,797			

Trust (Chong *et al.*, 2010)	TRU_1	I entrust my personal information to fintech services as safe.	0,866	0,832	0,899	0,748
	TRU_2	Islamic banks provide trusted products and services.	0,887			
	TRU_3	Overall, fintech services are trustworthy.	0,842			

Source: Data processed, 2022

Table 3

Fornell-Lacker Criterion

	ATT	*BI*	*GS*	*INT*	*PEU*	*PR*	*PU*	*SC*	*TRU*
ATT	0,895								
BI	0,474	0,816							
GS	0,570	0,490	0,862						
INT	0,713	0,466	0,578	0,844					
PEU	0,613	0,483	0,620	0,611	0,825				
PR	0,510	0,517	0,569	0,564	0,564	0,897			
PU	0,654	0,470	0,634	0,602	0,703	0,518	0,866		
SC	0,593	0,399	0,536	0,572	0,489	0,508	0,470	0,825	
TRU	0,530	0,500	0,602	0,553	0,606	0,765	0,536	0,549	0,865

Source: Data processed, 2022

Estimates

Following the evaluation of the data's validity and reliability, this section reports the findings of an empirical study on the adoption of fintech services, based on an analysis of the sample data. The hypothesis is then tested using the sample data with a structural equation model. The standardized path coefficient (β), *t*-value, and *p*-value obtained with SmartPLS 3.0 using the SEM model are also used to test the hypothesis presented in this paper. When $t >$ is 1.96, the

coefficient test is generally significant if the *p*-value < is 0.05. If *t* > is 2.58, then the coefficient test is significant if the *p*-value < 0.01. When *t* > is 3.1, the coefficient test is significant when the *p*-value < is 0.001 (Hu *et al.*, 2019). The results of the hypothesis tests are shown in Table 4 below.

Table 4
Path Coefficients

Hypothesis	*Path Relationship*	*β*	*T Statistics*	*P Values*	*Remarks*
H1	PEU -> ATT	0,173	2,358	0,018	Supported
H2	PEU -> PU	0,703	23,635	0,000	Supported
H3	PU -> ATT	0,338	4,809	0,000	Supported
H4	ATT -> INT	0,578	10,015	0,000	Supported
H5	TRU -> ATT	0,077	1,133	0,257	Rejected
H6	SC -> INT	0,229	3,809	0,000	Supported
H7	PR -> ATT	0,056	0,890	0,374	Rejected
H8	PR -> TRU	0,601	12,645	0,000	Supported
H9	GS -> ATT	0,117	1,777	0,076	Rejected
H10	GS -> TRU	0,218	4,319	0,000	Supported
H11	BI -> ATT	0,107	2,127	0,033	Supported
H12	BI -> TRU	0,079	1,933	0,053	Rejected

Source: Data processed, 2022

As shown in the table, the results indicate that perceived ease of use (β = 0.173, t = 2.358), perceived usefulness (β = 0.338, t = 4.809), and brand image (β = 0.107, t= 2.127) have a significant positive influence on attitude. As explained earlier, the minimum t-value for the hypothesis test is 1.96. In this case, the t-value is greater than 1.96, so hypotheses H1, H3, and H11 are accepted. Trust (β = 0.077, t = 1.133), perceived risk (β = 0.056, t = 0.89), and government support (β = 0.117, t = 1.777) have no significant effect on attitude because their t-value is less than 1.96, so hypotheses H5, H7, and H9 are rejected. Perceived risk (β = 0.601, t = 12.645) and government support (β = 0.218, t = 4.319) have a significant effect on trust, as their t-values PR and GS are greater than 1.96, so the H8 and H10

are accepted. Meanwhile, brand image (β = 0.079, t = 1.933) has no significant influence on trust, and hypothesis H12 is rejected. Perceived ease of use (β = 0.703, t = 23.635) on perceived usefulness has a significant positive effect with a t-value greater than 1.96, after which hypothesis H2 is accepted. Attitude (β = 0.578, t = 10.015) and Sharia compliance (β = 0.229, t = 3.809) have a significant positive relationship as their t value is greater than 1.96, hypotheses H4 and H6 are accepted.

Discussion

The purpose of this study is to find out the factors that may affect the adoption and use of fintech services by users of Islamic banks, and to examine the impact of these services on consumer behavior and the behavior of the banking institutions themselves.

This study analyzes empirical data to validate a technology design for user acceptance of fintech services based on TAM, primarily considering the roles of trust, attitudes, and determinants. The results of this hypothesis test suggest that a customer's attitude can influence user demand for fintech services. Usefulness, ease of use, risk, privacy, brand image, government support and Shariah compliance are significant factors in customer-bank interactions. To effectively implement fintech services, Islamic banks should consider the most influential factors to their customers and develop a strategy based on these preferences. In this paper, it was discovered through empirical research that:

First, perceived usefulness, ease of use, and brand image have a significant impact on users' attitudes toward adopting fintech services. The significant effect of these three variables on attitude supports the research of Chi (2018); Purnamasari et al. (2020); Usman et al. (2020); and Baber (2021). Meanwhile, perceived risk and government support have no significant influence on it. This shows that usefulness, usability, and brand image are crucial in improving users' attitude toward adopting financial services. In this case, the government should make more contributions and efforts for the development of fintech by Islamic financial institutions to increase public confidence in the products and services offered.

Second, perceived risk and government support have a significant effect on users' confidence in adopting fintech services, while brand image has no

significant effect. The research by Ali et al. (2021) and Hu et al. (2019) is in line with this finding, which indicates that users' trust is negatively impacted by perceived risk. Of the two variables that affect trust, the level of user trust could not influence the attitude toward adopting fintech services.

Third, Shariah attitudes and compliance have a significant positive influence on users' intention to use fintech services, which is in line with previous studies (Baber, 2021; Hu *et al.,* 2019; Usman *et al.,* 2022; Nurfadilah & Samidi, 2021). This reflects that users of Islamic banks in Indonesia desire Sharia-based fintech services and their intentions depend on their attitudes towards the services offered.

CONCLUSION

In summary, the factors of ease of use, usability, and Shariah compliance influence the user's decision to use a new technology or service (users tend to adopt and use new technology or services that are user-friendly, easy to use, and comply with Islamic principles). Then, only the potential risk factors, brand image, and government support are considered, which ultimately affect the attitude toward adoption. The results of this study can be used by financial institutions to evaluate and consider the acceptance of new services by Shariah banking users. The adoption of fintech in Islamic banks making financial transactions easier for customers and providing them with greater access to banking services such as financing, payments, money transfers, and the purchase and sale of stocks and securities. This can be realized by increasing customer awareness of Islamic financial products and promoting financial inclusion in the region thereby enabling them to reduce costs and expand market share (Hassan *et al.,* 2022).

This research has its limitations, especially due to the fact that a large number of respondents belong to the younger generation and are students. When reviewing the measurements of our research model, some of the values did not meet the minimum recommended standards, due to the limited number of indicators used for certain variables. It is hoped that future researchers will be more comprehensive and include a wider range of respondents, as well as be able to improve the measurement indicators for more valid variables.

REFERENCES

Adams, D. A., Nelson, R. R., & Todd, P. A. (1992). Perceived usefulness, ease of use, and usage of information technology: A replication. *MIS quarterly*, 227-247. https://doi.org/10.2307/249577

Aji, H. M., Berakon, I., & Riza, A. F. (2020). The effects of subjective norm and knowledge about riba on intention to use e-money in Indonesia. *Journal of Islamic Marketing*, *12*(6), 1180-1196. https://doi.org/10.1108/JIMA-10-2019-0203

Al-Ajmi, J., Hussain, H. A., & Al-Saleh, N. (2009). Clients of conventional and Islamic banks in Bahrain: How they choose which bank to patronize. *International Journal of Social Economics, 36*(11), 1086-1112. https://doi.org/10.1108/03068290910992642

Azizah, U., Zulpahmi, Z., Septiani, C., Hanifah, P., & Ghaliyah, A. (2022, August). Financing, Profitability, and Profit Loss Sharing: Evidence from Sharia Business Units in Indonesia. In Proceedings of the 3rd International Conference of Business, Accounting, and Economics, ICBAE 2022, 10-11 August 2022, Purwokerto, Central Java, Indonesia. http://dx.doi.org/10.4108/eai.10-8-2022.2320884

Aladwani, A. M. (2001). Online banking: a field study of drivers, development challenges, and expectations. *International journal of information management*, *21*(3), 213-225. https://doi.org/10.1016/S0268-4012(01)00011-1

Ali, M., Raza, S. A., Khamis, B., Puah, C. H., & Amin, H. (2021). How perceived risk, benefit and trust determine user Fintech adoption: a new dimension for Islamic finance. *Foresight*. *23*(4), 403-420. https://doi.org/10.1108/FS-09-2020-0095

Ali, W., Muthaly, S., & Dada, M. (2018). Adoption of Shariah compliant peer-to-business financing platforms by SMEs: A conceptual strategic framework for fintechs in Bahrain. *International Journal of Innovative Technology and Exploring Engineering*, *8*(2), 407-412. https://www.ijitee.org/wp-content/uploads/papers/v8i2s2/ES2128017519.pdf

Arner, D. W., Barberis, J., & Buckley, R. P. (2015). The evolution of Fintech: A new post-crisisparadigm.*Geo.J.Int'lL.,47*,1271.https://heinonline.org/HOL/LandingPage?handle=hein.journals/geojintl47&div=41&id=&page=

Baber, H. (2021). Examining the intentions to use crowdfunding platform-an extended technology acceptance model. *International Journal of Services, Economics and Management*, 12(2), 149-163. https://doi.org/10.1504/IJSEM.2021.117226

Bouwman, H., Nikou, S., & de Reuver, M. (2019). Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs?. *Telecommunications Policy*, *43*(9), 101828. https://doi.org/10.1016/j.telpol.2019.101828

Chang, Y., Wong, S. F., Lee, H., & Jeong, S. P. (2016, August). What motivates Chinese consumers to adopt FinTech services: A regulatory focus theory. In *Proceedings of the 18th annual international conference on electronic commerce: e-commerce in smart connected world* (pp. 1-3). https://doi.org/10.1145/2971603.2971643

Chi, T. (2018). Understanding Chinese consumer adoption of apparel mobile commerce: An extended TAM approach. *Journal of Retailing and Consumer Services*, *44*, 274-284. https://doi.org/10.1016/j.jretconser.2018.07.019

Chong, A. Y. L., Ooi, K. B., Lin, B., & Tan, B. I. (2010). Online banking adoption: an empirical analysis. *International Journal of bank marketing*, *28*(4), 267-287. https://doi.org/10.1108/02652321011054963

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340. https://doi.org/10.2307/249008

Davis, F. D. (1993). User acceptance of information technology: system characteristics, user perceptions and behavioral impacts. *International journal of man-machine studies*, *38*(3), 475-487. https://doi.org/10.1006/imms.1993.1022

Diallo, M. F., Chandon, J. L., Cliquet, G., & Philippe, J. (2013). Factors influencing consumer behaviour towards store brands: evidence from the French market. *International Journal of Retail & Distribution Management*, 41(6), 422-441. https://doi.org/10.1108/09590551311330816

DinarStandard. (2021). *Global Islamic Fintech Report 2021.* Retrieved from https://www.salaamgateway.com/reports/global-islamic-fintech-report-2021/

Dorfleitner, G., Hornuf, L., Schmitt, M., & Weber, M. (2017). Definition of FinTech and description of the FinTech industry. In *FinTech in Germany* (pp. 5-10). Springer, Cham. https://doi.org/10.1007/978-3-319-54666-7_2

Dowling, G. R. (1986). Perceived risk: the concept and its measurement. *Psychology & Marketing*, *3*(3), 193-210. https://doi.org/10.1002/mar.4220030307

Ebrahim, R., Kumaraswamy, S., & Abdulla, Y. (2021). FinTech in banks: opportunities and challenges. Innovative strategies for implementing fintech in banking, 100-109. DOI: 10.4018/978-1-7998-3257-7.ch006

Fermay, A. H., Santosa, B., Kertopati, A. Y., & Eprianto, I. M. (2018, June). The development of collaborative model between fintech and bank in Indonesia. In *Proceedings of the 2nd International Conference on E-commerce, E-Business and E-Government* (pp. 1-6). https://doi.org/10.1145/3234781.3234783

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, *18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Gangwar, H., Date, H., & Raoot, A.D. (2014). "Review on IT adoption: insights from recent technologies", *Journal of Enterprise Information Management*, *27*(4), 488-502. https://doi.org/10.1108/JEIM-08-2012-0047

Garrouch, K. F. (2021). Explaining the comparative perception of e-payment: role of e-shopping value, e-payment benefits and Islamic compliance. *Journal of Islamic Marketing*, *13*(7), 1574-1588. https://doi.org/10.1108/JIMA-08-2020-0240

Grabner-Kräuter, S., & Faullant, R. (2008). Consumer acceptance of internet banking: the influence of internet trust. *International Journal of bank marketing*, 26(7),483-504. https://doi.org/10.1108/02652320810913855

Ha, HY. (2004). Factors influencing consumer perceptions of brand trust online. *Journal of product & brand management*, *13*(5), 329-342. https://doi.org/10.1108/10610420410554412

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis, Seventh Edition*. Prentice Hall, Upper Saddle River, New Jersey.

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S. (2021). An Introduction to Structural Equation Modeling. In: Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. Classroom Companion: Business. Springer, Cham. https://doi.org/10.1007/978-3-030-80519-7_1

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing theory and Practice, 19(2), 139-152. https://doi.org/10.2753/MTP1069-6679190202

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, *31*(1), 2-24. https://doi.org/10.1108/EBR-11-2018-0203

Hanafizadeh, P., & Khedmatgozar, H. R. (2012). The mediating role of the dimensions of the perceived risk in the effect of customers' awareness on the adoption of Internet banking in Iran. *Electronic Commerce Research*, *12*(2), 151-175. https://doi.org/10.1007/s10660-012-9090-z

Hansjosten, H. (2015). *Scientific accuracy of the methodology*. Leonardo 3.4.5. https://leonardo345.com/wp-content/uploads/2019/05/Leonardo_203_4_5__20statistical_20report_202015_20-1.pdf

Hassan, M.K., Al-Mohamed, S., Rabbani, M.R., Jreisat, A. (2022). An Assessment of Level of Adoption of Fintech in Islamic Banks in the MENA Region. In: Hassan, M.K., Rabbani, M.R., Rashid, M. (eds) FinTech in Islamic Financial Institutions. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-14941-2_11

Hu, Z., Ding, S., Li, S., Chen, L., & Yang, S. (2019). Adoption intention of fintech services for bank users: An empirical examination with an extended technology acceptance model. *Symmetry*, *11*(3), 340. https://doi.org/10.3390/sym11030340

Hudaefi, F. A. (2020). How does Islamic fintech promote the SDGs? Qualitative evidence from Indonesia. *Qualitative Research in Financial Markets*, *12*(4), 353-366. https://doi.org/10.1108/QRFM-05-2019-0058

Ingham, H., & Thompson, S. (1993). The adoption of new technology in financial services: the case of building societies. Economics of Innovation and New Technology, 2(4), 263-274. https://doi.org/10.1080/10438599300000007

Kesharwani, A., & Bisht, S. S. (2012). The impact of trust and perceived risk on internet banking adoption in India: An extension of technology acceptance model. *International journal of bank marketing*, *30*(4), 303-322. https://doi.org/10.1108/02652321211236923

Lee, S. (2017). Evaluation of mobile application in user's perspective: case of P2P lending Apps in FinTech industry. *KSII Transactions on Internet and Information Systems (TIIS)*, *11*(2), 1105-1117. https://doi.org/10.3837/tiis.2017.02.027

Mackenzie, A. (2015). The fintech revolution. *London Business School Review*, *26*(3), 50-53. https://doi.org/10.1111/2057-1615.12059

Mahalle, A., Yong, J., & Tao, X. (2021). Regulatory Challenges and Mitigation for Account Services Offered by FinTech. 2021 IEEE 24th International Conference on Computer Supported Cooperative Work in Design (CSCWD). https://doi.org/10.1109/cscwd49262.2021.9437631

Marakarkandy, B., Yajnik, N., & Dasgupta, C. (2017). Enabling internet banking adoption: An empirical examination with an augmented technology acceptance model (TAM). *Journal of Enterprise Information Management*, *30*(2), 263-294. https://doi.org/10.1108/JEIM-10-2015-0094

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of management review*, *20*(3), 709-734. https://doi.org/10.5465/amr.1995.9508080335

Nguyen, T. D., & Huynh, P. A. (2018). The roles of perceived risk and trust on e–payment adoption. In *International econometric conference of Vietnam* (pp. 926-940). Springer, Cham. https://doi.org/10.1007/978-3-319-73150-6_68

Nurfadilah, D., & Samidi, S. (2021). HOW THE COVID-19 CRISIS IS AFFECTING CUSTOMERS'INTENTION TO USE ISLAMIC FINTECH SERVICES: EVIDENCE FROM INDONESIA. *Journal of Islamic Monetary Economics and Finance*, *7*, 83-114. https://doi.org/10.21098/jimf.v7i0.1318

Otoritas Jasa Keuangan (OJK). (2022). *Statistik Fintech Lending Periode Desember 2022.* https://ojk.go.id/id/kanal/iknb/data-dan-statistik/fintech/Pages/Statistik-Fintech-Lending-Periode-Desember-2022.aspx

Pardiansyah, E., Sobari, N., & Usman, H. (2022). The Determinants of Intention to Adopt Islamic Financial Technology in Indonesia. Equilibrium: Jurnal Ekonomi Syariah, 10(2), 347-380. http://dx.doi.org/10.21043/equilibrium.v10i2.16539

Patel, K. J., & Patel, H. J. (2018). Adoption of internet banking services in Gujarat: An extension of TAM with perceived security and social influence. *International Journal of Bank Marketing*, *36*(1), 147-169. https://doi.org/10.1108/IJBM-08-2016-0104

Purnamasari, P., Pramono, I. P., Haryatiningsih, R., Ismail, S. A., & Shafie, R. (2020). Technology acceptance model of financial technology in micro, small, and medium enterprises (MSME) in Indonesia. *The Journal of Asian Finance, Economics and Business*, *7*(10), 981-988. https://doi.org/10.13106/jafeb.2020.vol7.no10.981

Sasmita, J., & Suki, N. M. (2015). Young consumers' insights on brand equity: Effects of brand association, brand loyalty, brand awareness, and brand image. *International journal of retail & distribution management*, 43(3), 276-292. https://doi.org/10.1108/IJRDM-02-2014-0024

Szajna, B. (1996). Empirical evaluation of the revised technology acceptance model. *Management science*, *42*(1), 85-92. https://doi.org/10.1287/mnsc.42.1.85

Tarhini, A., Arachchilage, N. A., Masa'deh, R., & Abbasi, M. S. (2015). A Critical Review of Theories and Models of Technology Adoption and Acceptance in Information System Research. International Journal of Technology Diffusion (IJTD), 6(4), 58-77. http://doi.org/10.4018/IJTD.2015100104

The Economist Intelligence Unit Ltd. (2020). *Islamic fintech: Reaching the next generation of Muslims*, accessed from: https://impact.economist.com/perspectives/sites/default/files/eiu-diedc_article_2_26th_april_2020_0.pdf/ August 1, 2022.

Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). Personal computing: Toward a conceptual model of utilization. *MIS quarterly*, 125-143. https://doi.org/10.2307/249443

Trimulato, T., Nafis, M. C., & Amalia, E. (2022). The Role Sharia Fintech Support Sustanaible Development Goals Program (SDGs). *Jurnal Ilmiah Ekonomi Islam*, *8*(1), 251-259. http://dx.doi.org/10.29040/jiei.v8i1.3911

Usman, H., Mulia, D., Chairy, C., & Widowati, N. (2022). Integrating trust, religiosity and image into technology acceptance model: the case of the Islamic philanthropy in Indonesia. *Journal of Islamic Marketing*, *13*(2), 381-409. https://doi.org/10.1108/JIMA-01-2020-0020

Usman, H., Projo, N. W. K., Chairy, C., & Haque, M. G. (2021). The exploration role of Sharia compliance in technology acceptance model for e-banking (case: Islamic bank in Indonesia). *Journal of Islamic Marketing*, *13*(5), 1089-1110. https://doi.org/10.1108/JIMA-08-2020-0230

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management Science, 46(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926

Wentzel, J. P., Diatha, K. S., & Yadavalli, V. S. S. (2013). An application of the extended Technology Acceptance Model in understanding technology-enabled financial service adoption in South Africa. Development Southern Africa, 30(4-5), 659-673. https://doi.org/10.1080/0376835X.2013.830963

Yang, H. D., & Yoo, Y. (2003). It's all about attitude: revisiting the technology acceptance model. *Decision support systems*, *38*(1), 19-31. https://doi.org/10.1016/S0167-9236(03)00062-9