
Sharia Fintech Service Adoption Among Cooperative and Non-Cooperative Users in Jakarta and West Java: An Empirical Tam Study

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Abstract:

This study examines the factors influencing the adoption of Sharia FinTech among cooperative and non-cooperative users that can help them provide better and more efficient services. Moreover, this research uses the Technology Acceptance Model (TAM) method that has been modified using quantitative analysis by distributing online questionnaires with a total of 154 respondents in the DKI Jakarta and West Java provinces. Data processing and hypothesis testing were conducted using the Structural Equation Model (SEM) which showed that variables PU, PUE, TRU, BI, and PR have a significant impact on ATT. Meanwhile, BI, PR, and UI have been proven to influence TRU, PUE has been proven to influence PU, and ATT has been proven to influence INT. Additionally, GS and UI do not affect ATT, and PR does not affect TRU for users' adoption of Sharia FinTech services. This study contributes to the literature on Sharia FinTech service adoption by providing a more comprehensive view of user attitude determinants by combining trust in FinTech services with TAM.

Keywords : Sharia Fintech Service, Technology Acceptance Model, Adoption

1. Introduction

In the era of globalization, the advancement of Information Technology Applications (IT) has experienced significant development. One of them is in the financial sector, where the emergence of a technology-based financial service innovation, commonly known as Financial Technology (FinTech) (Gai et al., 2019) the rise of sustainable investment has fueled the progress of FinTech, leading to technological innovations in areas like mobile networks, big data, trust management, embedded mobile systems, and data analytics techniques. (Varsha & Kishor, 2020). This is because the concept of FinTech integrates technology into digital financial service systems. Such activities include financing, asset management, payments, and other FinTech services (Mehrban et al. 2020) This is supported by data from the American consulting company Accenture, which shows that global FinTech investment increased to around \$140.9 billion, 12 times higher than in 2010-2016 (Gabor & Brooks, 2019). This increase in investment has led to a rise in the number of FinTech companies in various countries, including Indonesia. According to reports from the United Overseas Bank (UOB),

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PwC, and the Singapore FinTech Association (SFA) in Indonesia, the number of FinTech companies has increased.

The opportunity for Sharia fintech development is wide open (Isa and Suryomurti 2023), especially since Indonesia ranked 3rd in global Islamic fintech in 2022 (Dinar Standard 2022). This is because Indonesia has the largest Muslim population globally, with around 87.2% of the population being Muslim (Kemenag 2020) Therefore, it can be concluded that the largest consumer base in Indonesia consists of Muslims. Moreover, Indonesia was ranked fourth in the Global Islamic Indicator in 2020-2021(Thomson Reuters 2021).

Additionally, Shariah fintech has transformed cooperative financial services in Indonesia in recent years. Platforms such as the Association of Neo Cooperatives Indonesia (ANKI), Digital Cooperative Ash Shidiq Jakarta, Sahabat Syariah, Amana Fintech, and Kitabisa, among others, aim to unite individuals and small businesses to pool resources and access financial services that were previously inaccessible, thereby fostering business growth. (Alt et al., 2018). This is supported by data from the Central Statistics Agency (BPS, 2023) , which shows a 9.8% increase in net profit for cooperatives, reaching Rp. 7,882.7 billion from 2021 to 2022, with a total of approximately 189,701 cooperatives. Additionally, the Jakarta Capital Region (DKI Jakarta) and West Java are among the regions with the highest number of FinTech users (OJK, 2023).

However, the government has enacted regulations addressing cooperatives and FinTech, as stipulated in Presidential Regulation No. 7 of 2021 and Financial Services Authority Regulation No. 13/POJK.02/2018. Nevertheless, on the other hand, the widespread implementation of FinTech solutions across various sectors has resulted in significant challenges or risks in adoption and planning due to overlapping fields, complex integrated systems, and various demands (Hu et al. 2019). This includes facing security and privacy challenges, especially due to the IT applications used to provide necessary services, concerning confidentiality, integrity, and authorization (Meng et al. 2019; Suryono, Budi, and Purwandari 2020; Gai et al. 2017). Moreover, there is a lack of research discussing Shariah fintech services among cooperative users. Yet, financial services are directly related to personal wealth and well-being, impacting high-risk control levels and motivation or satisfaction to ensure sustainable usage (Zavolokina et al., 2016), especially since FinTech consumers are predominantly young generations (Chang et al. 2016). Stated in their research that satisfaction generally explains loyalty. Overall satisfaction positively influences customer loyalty in many product and service categories involving telecommunications services.

Therefore, this research investigates the impact of Shariah FinTech services from the demand side. By examining the factors that influence FinTech adoption among cooperative users from a static perspective, the study aims to help these users offer improved and more efficient services. This can provide a better understanding of the challenges faced by Shariah FinTech services (Priem, Li, and Carr 2012; Richard L. Priem and Morgan Swink 2012; Syamlan and Mukhlisin 2020). Moreover, this research utilizes the modified Technology Acceptance Model (TAM) method. TAM generally functions to analyze the acceptance of information technology. Similar in studies conducted by Alzubi et al., (2018), and Zhao et al., (2018), focusing on the intention to use technology.

2. Theoretical Background

Shariah Fintech

In Shariah, fintech has become a force in restoring the economic condition. Bank Indonesia's statement outlines four priority steps to accelerate economic recovery, one of which involves fintech. Fintech can be defined as various new tools that use information technology to expand the scope of financial services and enhance service quality or efficiency in various domains (Nakashima 2018; Gai, Qiu, and Sun 2018) including cooperatives. As explained in Al-Baqarah verse 185 which means:

"Allah intends for you ease and does not intend for you hardship. And [He wants] for you to complete the period and to glorify Allah for that [to] which He has guided you, and perhaps you will be grateful." (Quran, Al-Baqarah [2]:185)

Furthermore, Indonesia has the largest Muslim population in the world. Naturally, the role of Shariah fintech becomes a horizon of hope for the economic condition, especially in cooperatives. However, in Indonesia, there is still a lack of well-educated literacy in Shariah fintech (Zuchroh, 2022). and even fewer cooperatives have adopted FinTech. Despite this, in 2022, there was an increase in cooperative turnover by about 9.8% or Rp. 7,882.7 billion, with the active number of cooperatives continuing to increase to around 189,701 (BPS 2023). Thus, it can be concluded that cooperatives in Indonesia still rely on traditional financial services. Arner et al., (2015) Explain the difference between traditional financial services and FinTech, emphasizing that FinTech is more than just a merger of information technology and financial services. FinTech applies technology to traditional financial services, broadening their scope with a model focused on data-driven processes, facilities, equipment, applications, and services. (Du et al. 2019).

Technology Acceptance Model

The original TAM (Technology Acceptance Model) was designed to address the shortcomings of the Theory of Reasoned Action (TRA). It was proposed in 1986 (Davis 1986). Rooted in behavioral science, TAM incorporates elements of expectancy theory and self-efficacy theory to study individuals' intentions to use technology (Robbins, 1964). It identifies perceived usefulness and perceived ease of use as key factors influencing attitudes and behaviors towards adopting new technology, which significantly impacts technology adoption (Venkatesh and Bala 2008) TAM explains consumers' willingness to adopt computer technology and can be enhanced and refined based on analytical requirements, making it one of the most extensively used models in information technology research (Hermes and Lensink 1973; Isaac et al. 2018) , It is considered a robust and effective model, particularly for FinTech services (Venkatesh 2000) , TAM demonstrates strong adaptability in this context. While TAM is commonly applied across various fields such as mobile payments and e-commerce, the unique aspects of FinTech services—such as privacy and security challenges and government incentives—create notable differences between TAM and traditional e-commerce IT adoption in practice.

Perceived Usefulness

Perceived usefulness is a key factor in the adoption of information systems, defined by how much customers believe this new technology will improve their work efficiency (Davis 1986). In this study, perceived usefulness indicates that users will opt to use the service if they are

confident that the FinTech application will have a positive impact. Numerous empirical studies on information technology adoption over the past decade have shown that perceived usefulness positively influences user intentions. For instance, studies by Kim, (2013) and Mather et al., (2002) found a significant and positive influence on perceived usefulness. Further research by (Tang and Hanh Nguyen 2013) used system quality to reflect perceived usefulness. Carlin et al., (2017) analyzed factors influencing FinTech adoption among Millennials, finding that life expectancy and financial knowledge acquisition significantly affect adoption intentions. Therefore, the developed hypothesis is:

H1: Perceived Usefulness (PU) significantly influences Attitude (ATT) toward adopting Sharia Fintech Service.

Perceived Ease of Use

Perceived ease of use refers to the level of effort required to use a new technology, suggesting that customers find FinTech services easy to use and are interested in learning more about them. These services improve customer satisfaction for cooperatives (Doll and Torzadeh 1998). Perceived usefulness significantly impacts users' attitudes and their willingness to adopt FinTech, especially when using complex information systems for financial transactions on mobile devices. This aligns with previous research by Barnes & Vidgen, (2014), Isaac et al., (2018), S. H. Kim, (2014) and Piriyaikul et al., (2015). Consequently, the following hypotheses are formulated based on the aforementioned analysis:

H2: Perceived Ease of Use (PEU) significantly influences Attitude (ATT) toward Adopting Sharia Fintech Services.

H3: Perceived Ease of Use (PEU) significantly influences Perceived Usefulness (PU) toward Adopting Sharia Fintech Services.

Attitude

Behavioral intention is the level of desire of an individual to engage in a specific behavior, and attitude refers to the user's perception and personal tendency about something (Lifen Zhao et al. 2010). Therefore, a positive attitude will influence the adoption of new technology (FinTech) in cooperatives (Afendi, Azizan, and Darami 2014). This is consistent with the research conducted by Hsu et al., (2011) and McKnight & Chervany, (2002). Therefore, the following hypotheses can be built:

H4: Attitude (ATT) significantly influences Intention (INT) toward Adopting Sharia Fintech Services.

Trust

Trust has long been a central topic in applied research and serves as the foundation for relationships (Morgan and Hunt 1994). It signifies the connections consumers have with prospects and reflects their actions (Usman, 2015). Sarwar et al., (2012) identified several factors influencing customer loyalty, particularly in the context of FinTech. Trust is crucial in online business transactions due to the uncertainty and potential errors stemming from non-human elements (Piriyaikul et al. 2015). A view supported by Kesharwani & Bisht, (2012) study on how user beliefs shape behavior, especially in FinTech with its inherent risks. Researchers have also noted the close relationship between trust, brand image, and risk perceptions, where customer familiarity with cooperative brands and their perceptions of service risks significantly impact trust.

Numerous studies, such as those by Gefen et al. (2003), Tang and Chi (2005), and Tang and Nguyen (2013), have highlighted the pivotal role of user trust in adoption decisions within the FinTech domain. Essentially, greater trust in service providers leads to increased willingness to use services and facilitates behavioral motivation (Mehmet 2016). Hanafizadeh et al., (2014) uncovered an indirect effect between trust and FinTech service adoption. Consequently, the following hypotheses are proposed:

H5: Trust (TRU) significantly influences Attitude (ATT) toward Adopting Sharia Fintech Services.

Brand Image

Brand image impacts higher colleague enhancement (Sulistiyowati et al., 2020). A significant amount of FinTech studies indicates that the brand has a significant influence on user experience. Their perceptions of quality (Riyadh et al., 2010), value, and satisfaction (Petter, DeLone, and McLean 2008). In the context of Fintech applications, user perception of the brand has been conceptualized and considered a prerequisite for trust in a company (Chandra, Srivastava, and Theng 2010). Even a good visual brand can increase user trust by effectively reducing risks (Zarrad H and Debabi M 2015; Samuel and Lianto 2014). Because a brand image is a guarantee of products and services that allow users to clearly define the orientation of business services and build strong user relationships (Lee and Chung 2009), it can even enhance customer loyalty, attitudes, higher sales, and better reputation (Beverland 2007; Siamagka et al. 2015). Thus, the hypotheses that can be formulated are:

H6: Brand image (BI) significantly influences user attitude (ATT) toward adopting Sharia Fintech services

Perceived Risk

In this article, users discuss the financial and privacy security risks they face when choosing Fintech services (L. Zhang et al. 2014). Because Financial risk impacts consumers' concerns or fears about product returns or other issues in negligence, financial fraud, or even cyber incidents (Gai et al. 2016; Sharma and Kumar Panigrahi 2012). Privacy protection is generally considered one of the most significant aspects of financial security, and safeguarding user data privacy is a crucial task in devising privacy protection strategies (Sánchez et al. 2012). As shown by research conducted by Liao et al., (2011), two important steps to ensure electronic transaction security is understanding privacy issues and creating trust mechanisms.

While previous research has been useful in exploring the adoption of FinTech platforms from various perspectives, a comprehensive understanding of individual FinTech platform adoption is needed from the standpoint that combines technology adoption and features of financial service consumption (Xie et al., 2021) This encourages FinTech to enhance operations in various aspects (Duan and Xu 2012), particularly in business operations. Because business operations using FinTech can predict financial risks (H. Wang, Mylopoulos, and Liao 2002; Chen and Weiss 2014). Nussbaumer et al., (2012) in their research showed that the transparency level of IT and risk can impact several business operations in financial advisor meetings from a trusted perspective. Therefore, the following hypotheses are developed:

H8: Perceived risk (RP) significantly influences user attitude (ATT) toward adopting Sharia Fintech services.

H9: Perceived risk (RP) significantly influences user trust (TRU) in Sharia Fintech services adoption.

Government Support

The government can boost trust and confidence in products and services by being more transparent about how technology is used in financial innovation and by investing in infrastructure like communication networks to make FinTech services more accessible. This strategy is effective because the government is seen as credible. Kiwanuka, (2015) found that government support has a positive effect on technology adoption and continued intent. The research results also inspire the government to make appropriate policies. Relevant antecedents in the TAM model, Marakarkandy et al., (2017) examine factors influencing internet-based business adoption and emphasize the importance of government support in fostering trust for online banking product adoption. Thus, based on the reviewed literature, the following hypotheses can be proposed:

H10: Government support (GS) significantly influences user attitude (ATT) toward adopting Sharia Fintech services.

H11: Government support (GS) significantly influences User Trust (TRU) in adopting Sharia Fintech services.

User Innovativeness

In this article, user innovativeness is described as the extent to which individuals embrace innovations early on. It reflects people's inclination to experiment with new products, technologies, or services. Highly innovative individuals are adept at handling uncertainty and are enthusiastic about adopting innovations. Essentially, they are more open to embracing technological advancements and are less concerned about potential risks. Adeiza et al., (2017) regard innovation as an essential part of human nature, indicating users' interest in new fields. In a different study on user adoption behavior of mobile payments, C. Kim et al., (2010) argued that most people lack expertise in various types of mobile services, and personal innovation aids users' intention to use, which has also been confirmed by its effectiveness. Therefore, the following hypotheses are developed:

H12: User innovation (UI) has a significant influence on user attitude (ATT) toward adopting Sharia Fintech services.

H13: User innovation (UI) has a significant influence on user trust (TRU) in adopting Sharia Fintech services.

Conceptual Framework

Therefore, Figure 1 illustrates the model proposed in this paper, which is built upon existing research. Furthermore, the research framework has been developed by adapting items to align with the context of FinTech services research.

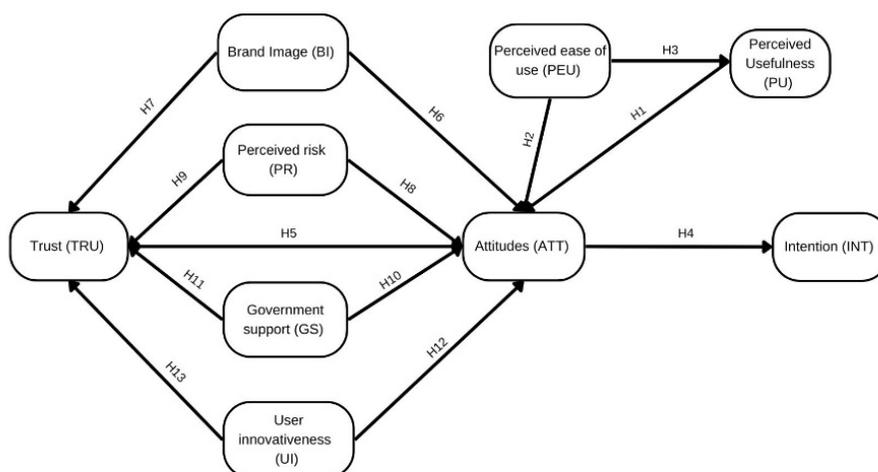


Figure 1. Conceptual Framework

3. Methodology

This study aims to identify the key factors that influence the adoption of FinTech services and to examine user behavioral intentions through empirical research. Consequently, cooperative users from the DKI Jakarta and West Java regions were chosen as survey participants, given the high concentration of FinTech users in these areas. (OJK 2023). The survey subjects were customers selected using non-probability sampling techniques, with the type of sample being Incidental sampling (sample determination based on needs that match the research criteria). The questionnaire was prepared through Google Forms and distributed online in the DKI Jakarta and West Java regions, measured using a five-point Likert scale. The first part consisted of basic information, and the second part was the Fintech services survey. A total of 154 responses were collected in this study.

In this study, sample data was analyzed statistically using SmartPLS 3.0. Descriptive statistics from 154 questionnaires, which examined respondents' demographic characteristics—including gender, age, education level, monthly disposable income, and use of FinTech services or products—are presented in Table 1. In terms of age distribution, individuals aged 18-25 years made up the largest group at 46.8%, as this demographic is often the quickest to adopt new technologies and lifestyles, making the sample selection appropriate. Regarding usage frequency, daily frequent users accounted for 44.2%, reflecting the current high popularity of Sharia FinTech services. Studying the factors influencing their adoption is essential for the successful implementation of Sharia FinTech strategies in cooperatives.

Table 1. Sample Characteristics

Demographic Variable and Category		Frequency	Percentage
Gender	Male	52	33,80%
	Female	102	66,20%
Domicile	DKI Jakarta	82	53,20%
	Jawa Barat	72	46,80%
Age	18-25	72	46,80%
	26-35	60	39%

	36-45	15	9,70%
	46-65	5	2%
	56-65	2	1,30%
	Student	49	31,80%
Employe	Civil Service/Institution Staff	27	17,50%
	Employe	35	22,70%
	Businessman	29	18,80%
	Other	14	9,10%
	S2	13	8,40%
Education	S1	92	59,70%
	Diploma	29	18,80%
	Senior High School	20	13%
Cooperative Members	Yes	103	66,90%
	No	51	33,10%
Income	<1.000.000	14	9,10%
	1.000.000–3.000.000	44	28,60%
	>3.000.000	96	62,30%
Fintech Service Usage	Never	16	10,40%
	Occasionally	13	8,40%
	Usually	57	37%
	Frequently in everyday	68	44,20%

As illustrated in Table 2, this study expands and adjusts based on the characteristics of the FinTech services examined. It utilizes nine latent variables as external factors influencing the study, with each latent variable having two to six measurement variables. A five-point Likert scale is employed to measure each component. A structural equation model is used for data processing and analysis in this study. The analysis method used in this study is the Structural Equation Model (SEM), a method developed to analyze conceptual relationships, especially when dealing with latent constructs in a model The SEM (Hair et al., 2011). The analysis method is referred to as an approach for processing data with limited samples and is suitable when the theoretical basis is limited and does not require data normality assumptions (Aguirre-urreta 2015). PLS is a technique for estimating SEM parameters that don't necessitate a robust theoretical foundation for validating and explaining research. It is particularly suitable for exploratory research and model testing, as noted by Poolthong & Mandhachitara, (2009). Consequently, this study employs SmartPLS 3.0 to estimate SEM parameters.

Table 2. Measurement Instruments

Latent Variables	Measurement Items	Source
Perceived Usefulness (PU)	Using Sharia Fintech can meet my service needs.	Huh et al., (2009)
	Sharia Fintech services can save time.	dan Lockett &
	Sharia Fintech services can improve efficiency.	Littler, (1997)
	Overall, Sharia Fintech services are beneficial to me.	

Perceived Ease of Use (PEU)	Sharia Fintech services are very easy to use. I think the operational interface of Sharia Fintech is user-friendly and easy to understand. It is very easy to have the equipment to use Sharia Fintech services (mobile phone, APP, WIFI, etc.)	Cheng et al., (2006) dan YS Wang et al., (2003)
Trust (TRU)	I trust that Sharia Fintech services keep my personal information secure. Overall, I trust that Sharia Fintech's services are reliable.	Chong et al., (2010) dan Sánchez et al., (2012)
Brand Image (BI)	The cooperative I use can provide good services and products. I think I prefer to receive services provided by well-known brands. The cooperative I use has a good reputation.	Ha, (2004)
Perceived Risk (PR)	I am confident that money can easily be stolen using Sharia Fintech services. I am confident that personal privacy will be disclosed using Sharia Fintech services. Overall, I feel that Sharia Fintech services are risky.	Marakarkandy et al.,(2017)
Government Support (GS)	I am confident that the government supports and promotes the use of Sharia Fintech services. I believe the government has introduced laws and regulations that are beneficial to Sharia Fintech services.. I believe the government is actively preparing all kinds of infrastructure such as telecommunication network infrastructure, which has a positive role in promoting Sharia Fintech services.	Marakarkandy et al.,(2017)
User Innovatiness (UI)	When I hear about a new product, I look for ways to try it out. Among my peers, I am usually the first to try new products.	T. Zhang et al., (2018)
Attitude (ATT)	I believe using Sharia Fintech services is a good idea. Using Sharia Fintech services is an enjoyable experience. I am interested in Sharia Fintech services.	Grabner-Kräuter & Faullant, (2008)
Intention (INT)	If I have used Sharia Fintech services, I am willing to continue using them. I want to use Sharia Fintech services soon. I will recommend Sharia Fintech services to my friends.	Marakarkandy et al., (2017) dan Patel & Patel, (2018)

4. Empirical Findings/Result

Scale Validity and Reliability

Confirmatory factor analysis is employed to assess the model, which includes evaluating internal consistency reliability, convergent validity, and discriminant validity. Reliability refers to the stability and consistency of measurement results, indicating the reliability of questionnaire items (Hair et al., 2011) in this research, composite reliability (CR) and

Cronbach's alpha are utilized to assess internal consistency. Following Fornell and Larcker's suggestion, the CR value for the sample should exceed 0.7 (J. F. Hair et al. 2018; Joe F. Hair, Ringle, and Sarstedt 2011). Consequently, all latent variables in this study demonstrate CR values exceeding the critical threshold, indicating strong internal consistency, as depicted in Table 3.

Table 3. Reliability and Validity Measures

Constructs	Item	Outer Loading	AVE	CR	Cronbach's Alpha
PU	PU.1	0,884	0,700	0,931	0,901
	PU.2	0,895			
	PU.3	0,860			
	PU.4	0,872			
PEU	PEU.1	0,705	0,666	0,854	0,736
	PEU.2	0,892			
	PEU.3	0,887			
BI	BI.1	0,721	0,679	0,862	0,756
	BI.2	0,866			
	BI.3	0,904			
PR	PR.1	0,865	0,895	0,852	0,941
	PR.2	0,942			
	PR.3	0,919			
GS	GS.1	0,90	0,838	0,94	0,903
	GS.2	0,945			
	GS.3	0,90			
UI	UI.1	1,000	1,000	1,000	1,000
TRU	TRU.1	0,949	0,894	0,944	0,882
	TRU.2	0,942			
ATT	ATT.1	0,898	0,864	0,950	0,921
	ATT.2	0,924			
	ATT.3	0,965			
INT	INT.1	0,87	0,612	0,824	0,731
	INT.2	0,727			
	INT.3	0,741			

Validity pertains to how well a model aligns with survey data, encompassing convergent validity and discriminant validity. Convergent validity gauges the correlation level among multiple indicators for a variable, assessed through the average extracted variance (AVE) from latent variables, CR, and the appropriate loading of corresponding measurable variables (Garson 2018). It is stipulated that the AVE of the sample should be greater than 0.5, and the loading of measurable variables should be greater than 0.7. Consequently, all data points confirm the convergent validity of all constructs. Discriminant validity, on the other hand,

ensures that each variable's measure is distinct from others, indicated by the absence of correlations between variables. This is upheld when the AVE exceeds the squared interscale correlations in the model. As depicted in Table 4, the AVE surpasses the squared interscale correlations in all instances, signifying strong discriminant validity for each variable.

Table 4. Discriminant validity of constructs.

Construct	ATT	BI	GS	INT	PR	PU	PUE	TRU	UI	Root AVE
ATT	0,929	-	-	-	-	-	-	-	-	0,929
BI	0,886	0,824	-	-	-	-	-	-	-	0,824
GS	0,404	0,591	0,916	-	-	-	-	-	-	0,916
INT	0,782	0,883	0,735	0,782	-	-	-	-	-	0,782
PR	0,287	0,405	0,830	0,597	0,946	-	-	-	-	0,946
PU	0,394	0,618	0,896	0,770	0,801	0,878	-	-	-	0,878
PUE	0,895	0,930	0,647	0,914	0,482	0,680	0,816	-	-	0,816
TRU	0,369	0,575	0,854	0,722	0,765	0,904	0,686	0,946	-	0,946
UI	0,857	0,869	0,393	0,870	0,268	0,445	0,842	0,361	1,000	1,000

Analysis of Variance (R²) is used to determine how much influence independent variables have on the dependent variable or the goodness of the model (Lin et al. 2019). Here are the results of the variable test.

Table 5. Value of R²

	R Square
Attitude (ATT)	0,935
Intention (INT)	0,611
Perceived Usefulness (PU)	0,462
Trust (TRU)	0,762

$$\begin{aligned}
 Q^2 &= 1 - (1-R_1^2) (1-R_2^2) (1-R_3^2) (1-R_4^2) \\
 &= 1 - (1-0,874225) (1-0,373321) (1-0,213536) (1-0,580644) \\
 &= 0,974
 \end{aligned}$$

This means that the independent variables (X) consisting of Brand Image, Perceived Risk, Government Support, User Innovation, and Perceived Ease of Use can explain 97.4% or a moderate amount of trust, perceived usefulness, attitude, intention, and the rest is influenced by other variables not examined in this research model (Chin W. Wynne 1998).

Structural Equation Model: Hypotheses Testing

Structural Equation Modeling (SEM) is a statistical technique used to examine relationships between variables by analyzing covariance matrices of those variables. It is a valuable tool for multivariate data analysis. Following the assessment of validity and reliability, this section proceeds with an empirical investigation of the Fintech service adoption model using sample data and SEM to test hypotheses. The assessment includes examining P-values and T-statistic values, along with the original sample data. A P-value below 0.01 or 1% signifies a significant relationship, while a P-value above this threshold indicates an insignificant impact (Vinzi et al. 2011). The original sample data also presents path coefficients, where a positive coefficient

signifies a positive relationship, while a negative coefficient indicates a negative relationship or a scenario where higher values of the exogenous variable lead to higher values of the endogenous variable, and vice versa (Vinzi et al. 2011).

Table 6. Result of Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
PU → ATT	0,236	0,252	0,139	1,996	0,045
PUE → ATT	1,035	1,052	0,158	6,558	0,000
PUE → PU	0,680	0,682	0,085	7,963	0,000
ATT → INT	0,782	0,79	0,031	25,187	0,000
TRU → ATT	0,415	0,401	0,112	3,714	0,000
BI → ATT	0,275	0,278	0,115	2,388	0,009
BI → TRU	0,363	0,328	0,168	2,158	0,016
PR → ATT	0,215	0,204	0,062	3,457	0,000
PR → TRU	0,238	0,229	0,151	1,579	0,058
GS → ATT	0,021	0,005	0,097	0,222	0,412
GS → TRU	0,531	0,552	0,184	2,883	0,002
UI → ATT	0,048	0,068	0,099	0,484	0,314
UI → TRU	0,228	0,201	0,137	1,967	0,048

As shown in the table above, the results indicate that PU (O = 0.236, P-Value = 0.045, t = 1.996), PEU (O = 1.035, P-Value = 0.000, t = 6.558), TRU (O = 0.415 P-Value = 0.000, t = 3.714), BI (O = 0.275, P-Value = 0.009, t = 2.388), PR (O = 0.215, P-Value = 0.000, t = 3.457) Hypotheses H1, H2, H5, H6, and H8 are accepted as they exhibit t-values exceeding 1.96, indicating a significant impact on ATT based on the threshold value of t for hypothesis testing. BI (O = 0.363, P-Value = 0.016, t = 6.558), GS (O = 0.531, P-Value = 0.002, t = 2.883), UI (O = 0.228, P-Value = 0.048, t = 1.967) Hypotheses H7, H11, and H13 are accepted as their t-values, which are greater than 1.96, indicating a significant impact on TRU. The t-value for PEU to PU also exceeds 1.96. (O = 0.680, P-Value = 0.000, t = 6.558) which has a significant impact, so hypothesis H3 is accepted. Since ATT has a value (O = 0.782, P-Value = 0.000, t = 25.187) and has a significant influence on INT, where the t-value of ATT for INT is greater than 1.96 indicating that hypothesis H4 is accepted. However, GS (O = 0.021 P-Value = 0.412, t = 0.222) and UI (O = 0.048 P-Value = 0.314, t = 0.484) do not have a significant impact on ATT, seen from the PEU and UI values for ATT being less than 1.96, so hypotheses H9 and H12 are not accepted. Similarly, PR (O = 0.238 P-Value = 0.058, t = 1.579) does not have a significant impact on TRU because the PR value for TRU is less than 1.96, so hypothesis H10 is not accepted.

5. Discussion

This study investigates the potential reasons behind why cooperative and non-cooperative users adopt and use Shariah Fintech services, as well as how these services impact the interaction and behavior between consumers and cooperative institutions. This research aligns with the findings of Sikdar & Makkad, (2015) , who identified that PU, trust, and UI significantly influence INT in the adoption of Shariah Fintech services. Additionally,

Marakarkandy et al., (2017) found that GS is a crucial predictive factor for the adoption of this service.

However, the results of this study differ from the research conducted by Kesharwani & Bisht, (2012) which showed that UI, GS, and PR were not proven to have a significant impact. Additionally, the results of the BI and ATT variables are similar to the study conducted by J. Zhang et al., (2013) which showed significant results

This study develops a user adoption model for Shariah Fintech services within cooperatives, grounded in the Technology Acceptance Model (TAM). It examines the role of trust (TRU) and its supporting components and uses empirical data for validation. The hypothesis testing results indicate that advancements in the internet and technology significantly impact Shariah Fintech services. Key factors such as risk, privacy, usefulness, perceived ease of use, user innovation, and government support are increasingly crucial in the interaction between users and cooperatives. Consequently, cooperatives must tailor their Shariah Fintech service strategies to align with user preferences and the factors influencing service adoption. The research reveals that:

Firstly, brand image (BI), user innovation (UI), and government support (GS) can influence public trust in Shariah Fintech services. This is because there is an increasing trust in Shariah values among the people of DKI Jakarta and West Java. Brand image (BI) in Shariah Fintech reflects respected Shariah values such as justice, sustainability, and the elimination of interest (riba), as explained in Surah Al-Baqarah verses 278-280. Additionally, user innovation prioritizes convenience, security, and user experience, thus providing a positive push towards adopting Shariah Fintech services, especially for cooperative and non-cooperative users. Meanwhile, government support (GS) can provide legitimacy to Shariah Fintech services. Clear and consistent government support through supportive regulations, incentives, and adequate infrastructure creates a conducive environment for the growth and adoption of Shariah Fintech, thereby increasing public trust in its security, consumer protection, and Shariah compliance. Integrity and consistency in providing services in line with Shariah values can build and maintain trust (Pardiansyah, Sobari, and Usman 2022).

Secondly, perceived risk (PR) can affect user attitudes through their trust in Fintech services. However, this study found no significant relationship between perceived risk (PR) and trust. Instead, trust actively encourages users to engage with Shariah Fintech services. When users perceive high levels of risk, their trust in the service tends to diminish. However, if users have strong trust, they are more likely to use Shariah Fintech services. Therefore, to increase user interest in using Shariah Fintech services, cooperatives need to take steps to reduce perceived risks by users, thereby strengthening trust in the products and services

Furthermore, this study also found that 5 variables influence individuals' attitudes toward adopting Shariah Fintech services among cooperative users in DKI Jakarta and West Java, such as PU, PEU, TRU, BI, and PR. This is because perceived risk in the context of Shariah Fintech can be related to uncertainty regarding Shariah aspects, transaction security, and information privacy. If people perceive high risks related to Shariah uncertainty or data security, this can affect their attitudes toward adoption. Meanwhile, GS is because the government can provide legitimacy to Shariah Fintech services. If the government supports and regulates these services, people may feel more confident and convinced that these services

meet Shariah standards and applicable regulations. Public trust in Shariah Fintech may depend on how much they believe that the service operates in line with Shariah principles. Integrity and consistency in providing services in line with Shariah values can be built and maintained (Pardiansyah, Sobari, and Usman 2022).

Moreover, these variables will motivate Muslim communities to intend to use Shariah Fintech services among Cooperative Users. This is evidenced by the variable attitude (ATT) having a significant influence on intention (INT).

6. Conclusions

This study examines the adoption of Shariah Fintech services among users of cooperatives and non-cooperatives in West Java and DKI Jakarta. The study also uses the TAM model. The results reveal that:

- a. Variables Brand Image, Government Support, and User Innovativeness have a significant influence on trust in adopting Shariah Fintech services.
- b. Variables Brand Image, Perceived Risk, Trust, Perceived Ease of Use, and Perceived Usefulness have a significant influence on behavior in adopting Shariah Fintech services.
- c. Attitude variable has a significant influence on intention to adopt Shariah Fintech services
- d. Perceived Ease of Use variable has a significant influence on perceived usefulness in adopting Shariah Fintech services.

Furthermore, the model indicates that variables Brand Image, Perceived Risk, Government Support, User Innovativeness, and Perceived Ease of Use explain the proportional level or goodness of fit of the model with a moderate classification of the factors determining the adoption of Shariah Fintech services among cooperative and non-cooperative users in West Java and DKI Jakarta, and the rest is determined by other variables.

In conclusion, consumers who adopt new technologies or services are influenced by government support, user innovativeness, and brand image. They consider the benefits and potential risks, which shape their adoption attitudes. This study, therefore, offers valuable consumer insights and an empirical framework to help cooperatives implement new services that comply with Shariah principles and focus on user needs.

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