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# Decision making on the use of a shariah-based e-wallet by Indonesian consumers

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CHRONICLE	A B S T R A C T
Article history: Received: April 12, 2023 Received in revised format: May 24, 2023 Accepted: July 24, 2023 Available online: July 24, 2023 Keywords: Decision E-wallet Sharia Technology Acceptance Model Theory Planned Behavior Perceived enjoyment Perceived trust Subjective norms	This study integrates the Technology Acceptance Model (TAM) with the Theory of Planned Be- havior (TPB) to analyze consumers' decisions to use a Shariah-based e-wallet in Indonesia. With convenience sampling, a hundred samples were calculated by using SEM-PLS analysis. It found that only perceived trust and intention influenced consumers' decisions to use a Shariah-based e- wallet, while perceived ease of use, usefulness, enjoyment, attitude, subjective norm, and per- ceived behavioral control did not. Perceived ease of use and usefulness influenced consumers' intentions but not the decision to use Sharia-based e-wallets. Thus, intention does not necessarily describe actual behavior. Consumers feel that the Sharia-based e-wallet is not as easy and useful as other e-wallets they mostly use, like Go-pay, Shopee-pay, and OVO. Other implications and some recommendations are discussed further in this study.
Subjective norms	© 2023 by the authors: licensee Growing Science. Canada.

# 1. Introduction

The Islamic economy is one of the driving forces of Indonesia's economy. Despite being the largest Muslim population country in the world, Indonesia's Islamic economy remains in the fourth position (after Malaysia, Saudi Arabia, and United Emirate Arab) based on the State of Global Islamic Economy Report 2022 (Dinar Standard & Salam Gateway, 2022; Heriyanto & Ruhman, 2022; Puspaningtyas, 2022). However, Indonesia can become the global Islamic economy and finance center. According to the Financial Services Authority (OJK), as of December 2022, Indonesia's total Islamic financial assets (excluding Islamic stocks) reached IDR 2,375 trillion or USD 151.03 billion, with a market share of 10.69 percent (Dwijayanti, 2023; Herman, 2023). In detail, the market share of Islamic banking assets is 7.09 percent, the Islamic non-bank financial industry is 4.73 percent, and the Islamic capital market is 18.27 percent (Herman, 2023). Moreover, Indonesia is one of the largest consumers of Halal products, encompassing 11,34 percent of global Halal product spending. Globally, Indonesia's Halal food sector is in the second position, and the Halal cosmetics sector is in the fourth (Dinar Standard & Salam Gateway, 2022; Heriyanto & Ruhman, 2022).

To record the value of global trade in Indonesia's halal products, the government and stakeholders took the initiative to launch a halal product codification data system and take various steps to improve halal product certification, one of which is digitalization. The prospect of the Islamic financial sector is also promising with the merger of three state-owned bank subsidiaries into Bank Syariah Indonesia. The emergence of Islamic P2P fintech companies has taken part in startups' equity funding over a couple of years, which has increased the national economic recovery due to the Covid-19 pandemic. Sharia-based digital payment's emergence supports Indonesia's Islamic finance and economic growth. It facilitates halal products, halal e-commerce, and sharia-

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based business transactions, payments, and distribution of donations like *zakat, infaq, sadaqah, waqf* (ZISWAF), or other religious and social funds mobilization in digital platforms (Puspaningtyas, 2022).

In April 2020, LinkAja, a national service provider in electronic payment platforms, launched LinkAja Syariah, the first Sharia-based e-wallet. It facilitates various transaction needs by Muslims, which has cooperated with around 1,000 mosques and 242 ZISWAF agencies, facilitates the distribution of donations, payment for *qurban* (animal sacrifices), online *Hajj* and *Umrah* pilgrimage registration, Islamic schools tuition fees, top-up balances through Islamic banks, etcetera, expanding digital payment with a cashless application for a wider customer base following the Islamic principles (Parama, 2020). Ongoing developments in Islamic financial technology potentially make Indonesia a home for the Islamic digital finance sector (Puspaningtyas, 2022).

LinkAja Syariah was chosen as the best digital payment service provider for The Asset Triple-A Islamic Finance Award 2022 (Id.linkedin.com, 2022; Linkaja.id, 2022). However, the Populix 2022 survey on consumer preferences toward banking and e-wallet found that of 1,000 respondents aged 18 to 55 in five cities of Jakarta, Bandung, Surabaya, Semarang, and Medan, 88% of them chose GoPay as the most used e-wallet, followed by Dana (83%), OVO (79%), Shopee-pay (76%), and LinkAja (30%) is in fifth place (Populix, 2022; Siswadi & Silaban, 2022). LinkAja Syariah is not in the top 10 lists, implying that despite being the country with the largest Muslim population in the world (87,2% of the population or 229.62 million Muslims), most have not relied on Sharia-based e-wallets for daily Use. Thus, this research intends to analyze what factors influence Indonesia's Muslim consumers' decision to use a Sharia-based e-wallet by using the Technology Acceptance Model (TAM) combined with the Theory of Planned Behavior (TPB), perceived enjoyment, and trust, proposing suitable marketing strategies for the service provider.

# 1.1 Technology Acceptance Model (TAM)

Many studies have used the Technology Acceptance Model (TAM), first developed by Davis (1989), to analyze consumers' intention and decision to use technology, which is influenced by perceived ease of Use and usefulness. In the next study, Davis et al. (1989) combined TAM with the Theory of Reasoned Action (TRA) by Fishbein & Ajzen (1975), resulting in the convergence of attitude and subjective norm within the model (Lai, 2017). As literature evolves, this model has been extended. Nysveen (2005) integrated TAM and the Theory of Planned Behavior (TPB) by Ajzen (1985, 1987, 1991) by adding perceived behavioral control with multi-attributes and non-utilitarian motives like enjoyment and other socially influential factors that determine consumers' intention and decision to use technology (Alalwan et al., 2018; Cheema et al., 2013; Pereira & Tam, 2021; Praveena & Thomas, 2014; To & Trinh, 2021; Won et al., 2023; Zhou & Feng, 2017). Moreover, some studies also highlight the influence of perceived trust on consumer intention and decision to use technology (Alalwan et al., 2011; Nor & Won, 2022; Salloum & Al-Emran, 2018; Sarika et al., 2016; Senali et al., 2022; Suleman et al., 2019; Usman et al., 2022). Given the various factors, this study focuses on analyzing the influence of perceived ease of Use, perceived usefulness, perceived enjoyment, perceived trust, attitude, subjective norm, and perceived behavioral control on consumer decision to use a Sharia-based e-wallet.

#### 1.2 Perceived Ease of Use and Perceived Usefulness

Perceived ease of Use strongly influences consumers' acceptance of technology (Davis, 1989; Davis et al., 1989), which refers to how much effort or difficulties they must face when using the technology. As such, if consumers perceive the technology as easy to use, thus, it has more advantages than similar technology, so they likely will use it. Empirical evidence has converged into the prominent role of perceived ease of Use in determining perceived usefulness, consumers' intentions, and decisions to use technology (Alam et al., 2022; Cheong et al., 2004; Juniwati, 2014; C. Kim et al., 2010; Mulia et al., 2021; T. N. Nguyen et al., 2016; Nor & Won, 2022; Senali et al., 2022; Suleman et al., 2019, 2023; Usman et al., 2022; Wu & Wang, 2005; Yendamuri et al., 2021; Zhang et al., 2023)

Perceived usefulness is the degree to which consumers believe the technology they use will enhance their activities or job performance (Davis, 1989; Davis et al., 1989). Various studies confirmed the positive influence of perceived usefulness on consumers' intention and decision to use mobile payment services. Consumers intend to use digital payment due to its advantages over other payment methods such as cash, cards, sms, or internet banking (Arvidsson, 2014; Dahlberg et al., 2003; Hossain et al., 2020; Lai, 2017; Mallat, 2007; Mulia et al., 2021; T. N. Nguyen et al., 2016; Nor & Won, 2022; Nugroho, 2016; Senali et al., 2022; Suleman et al., 2023, 2019; Usman et al., 2022).

### 1.3 Perceived enjoyment

Perceived enjoyment is an intrinsic motivation to do something interesting or enjoyable (T. N. Nguyen et al., 2016; Ryan & Deci, 2001). According to Venkatesh et al. (2002), intrinsic motivation is a major factor influencing behavioral intention and the decision to use technology, which supports the earlier argument that consumers use technology because of the rewards associated with them. Davis et al. (1992) defined perceived enjoyment as the extent to which the activity of using a particular technology is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated (Heijden, 2004). Some studies reveal that perceived enjoyment is significantly related to the intention and decision to use

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mobile chat and payment services (Alalwan et al., 2018; Cheema et al., 2013; H. Nysveen, 2005; Herbjørn Nysveen et al., 2005; Pereira & Tam, 2021; Praveena & Thomas, 2014; To & Trinh, 2021; Won et al., 2023; Zhou & Feng, 2017).

### 1.4 Perceived Trust

Perceived trust represents customers' confidence in the service's reliability (Garbarino & Johnson, 1999; Giovanis & Athanasopoulou, 2014; Morgan & Hunt, 1994). Some previous studies (Dahlberg et al., 2003; T. N. Nguyen et al., 2016) found that consumers are more willing to use mobile services provided by trustworthy providers. If the service is clear, accurate, and complete, customers will perceive that the provider is not pursuing an opportunistic relationship, which will gain and increase consumers' trust (Alalwan et al., 2018; ALraja & Aref, 2015; Dahlberg et al., 2003; Dewan & Chen, 2005; Lu et al., 2011; Mulia et al., 2021; Nor & Won, 2022; Salloum & Al-Emran, 2018; Sarika et al., 2016; Senali et al., 2022; Suleman et al., 2019; Usman et al., 2022).

#### 1.5 Attitude

Attitude refers to the degree to which a person has a favorable or unfavorable evaluation of behavior. Perceived ease of Use and usefulness influence a person's attitude directly (Al-Hattami, 2023; Davis et al., 1989; Suki & Suki, 2011). Perceived enjoyment also influences attitude (J.-H. Kim et al., 2021; Van der Heijden, 2003). Perceived trust also positively influences attitude (Indarsin & Ali, 2017; Marza et al., 2019; Xie et al., 2022). The clearer the attitude concerning the behavior, the stronger the person's intention and decision to perform the behavior under consideration (Abd. Rahim & Junos, 2012; Muniaty Aisyah, 2017; Ajzen, 1991, 2002, 2006, 2018, 2019; Ajzen & Fishbein, 2005; Altin Gumussoy et al., 2020; Fishbein & Ajzen, 1975; Juniwati, 2014; Lai, 2017; Mahyarni, 2013; T. M. A. Nguyen et al., 2022; Pinedaa et al., 2022; Song et al., 2021; Suleman et al., 2019; Yahyazadehfar et al., 2020; Yussaivi et al., 2021).

#### 1.6 Subjective Norms

Subjective norm refers to the perceived social pressure to perform or not to perform a behavior (Ajzen, 1991). Subjective norm deals with consumers' motivation and behavior, which is constructed to incorporate the expectations of the approval or disapproval of others important to them (i.e., family, parents, spouse, siblings, friends, colleagues, teachers, religious leader, etcetera). If consumers believe those important to them think it is essential to perform such behavior, they will have a higher intention and decision to do so. Yang et al. (2012) conclude that influence from friends, colleagues, and others is a critical factor affecting mobile payment adoption. It is striking that normative pressure positively affects intentions or decisions to use mobile services, including chat, text message, contact, and payment (T. N. Nguyen et al., 2016; H. Nysveen, 2005; Herbjørn Nysveen et al., 2005). Thus, the influence of significant others as subjective norms will encourage consumers' intention and decision to behave accordingly (Abd. Rahim & Junos, 2012; Muniaty Aisyah, 2017; Muniaty Aisyah et al., 2019; Ajzen, 1991, 2002, 2006, 2018, 2019; AL-Nawafleh et al., 2019; Altin Gumussoy et al., 2018, 2020; Chen, 2008; Fishbein & Ajzen, 1975; Juniwati, 2014; Lai, 2017; Mahyarni, 2013; Mutahar et al., 2017; T. M. A. Nguyen et al., 2022; Pinedaa et al., 2022).

## 1.7 Perceived Behavioral Control

Perceived behavioral control describes perceptions of the extent to which the behavior is controlled (Ajzen, 1991). The link between perceived behavioral control and consumers' intention or decision suggests that they are more likely to engage in behavior they can control. When they feel they cannot control themselves, it will prevent them from carrying out the behavior. Thus, it reflects the act's ease or difficulty (Ajzen, 2006; Nguyen et al., 2016). If consumers perceive the resources and opportunities available, they are more likely to perform a behavior. Given that mobile payment service requires mobile devices, wireless networks, and skills, it is argued that perceived behavioral control is a key determinant of behavioral intention and decision. Empirically, perceived behavioral control can account for considerable variance in consumers' behavioral intentions and decisions (Abd. Rahim & Junos, 2012; Muniaty Aisyah, 2017; Muniaty Aisyah et al., 2019; Ajzen, 1991, 2002, 2019; Destiana & Tairas, 2021; J. B. Kim, 2012; Patil, 2016; Safeena et al., 2013; Venkatesh, 2000; F. Wang & Hariandja, 2016; H. Wang et al., 2022). Other studies also present a noticeable finding that perceived behavioral control significantly influences consumers' intention and decision to use mobile payment services (Charoensereechai et al., 2022; Lai, 2017; T. N. Nguyen et al., 2016; H. Nysveen, 2005; Herbjørn Nysveen et al., 2005).

#### 1.8 Intention and Decision

The intention is the extent to which people have formulated a plan to do or not to do some attitude in the future. It represents consumers who have the possibility, will, plan, or are willing to buy or use products or services in the future, which will drive the actual behavior (Ajzen & Fishbein, 2005; Fishbein & Ajzen, 1975; Juniwati, 2014; Lai, 2017; Mahyarni, 2013; Schiffman & Kanuk, 2007). It also relates to the consumer's plan to buy or use a certain product or service in a certain period (Howard, 1994). Knowing consumer intention is important for marketers and economists to analyze consumer demand that reflects actual behavior (Ajzen & Fishbein, 2005; Fishbein & Ajzen, 1975; Lai, 2017; Mahyarni, 2013). Many researchers have successfully used TAM to analyze consumers' intentions and decisions to use technology. In terms of consumers' acceptance of an online application, the intention is a situation in which consumers want and intend to do the online transaction with the

application, which relates to the service provider performance (Charoensereechai et al., 2022; Helmi et al., 2022; Juniwati, 2014; Kumar & Yukita, 2021; Lai, 2017; Mulia et al., 2021; Pavlou, 2003, 2001; Pavlou & Gefen, 2004; Praveena & Thomas, 2014; Senali et al., 2022; To & Trinh, 2021; Usman et al., 2022; Wu & Wang, 2005).

A decision is an actual behavior resulting from the intention to perform a specific behavior, which will rationally behave based on all available information (Ajzen, 1991, 2018; Fishbein & Ajzen, 1975). However, the intention to do something does not necessarily mean someone will do it. Intention does not automatically execute an actual behavior. Someone can go back to the phase of uncertainty. Thus, a decision comes after someone is certain to choose one option from several alternatives (Hampshire & Hart, 1958; Simamora, 2022). One will decide after considerable evaluation the necessity to perform a specific behavior. The consideration concerns whether or not the behavior will occur (Ajzen, 1991, 2018; Fishbein & Ajzen, 1975; Simamora, 2022; Wong, 2018).

# 2. Method

This study collected primary data with the instrument of questionnaires directly from respondents through WhatsApp from January to March 2023. It used the Likert scale model that was conducted by measuring five categories of responses that require the respondent to determine the degree of approval or disapproval of each variable, with a weight of 5 (strongly agree), 4 (agree), 3 (neutral), 2 (disagree) and 1 (strongly disagree) (Aybek & Toraman, 2022). This study used a probability sampling technique with convenience sampling (Stratton, 2021). The respondents are LinkAja Syariah users in Indonesia, especially those living in Jakarta, Depok, and South Tangerang regions. The sample size was calculated based on the Roscoe method, using the estimation of a 95% confidence level, which obtained a minimum of 96.04 samples (Harisandi, 2022). This study used 100 samples after data screening.

#### Table 1

Respondents' characteristics

Characteristics	%	Characteristics	%
1. Religion:		2. Gender:	
Islam	100	Male	43
Others	0	Female	57
3. Status:		4. Aged	
Single	42	<18	0
Married no children	25	18 - <27	17
Married have children	33	27 – 42	62
		>42 - 56	21
		>56	0
5. Education:		6. Job:	
Master/ Doctoral	8	Private employee	24
Bachelor	35	State-owned enterprise employee	28
Senior high	39	Entrepreneur	14
funior high	18	Students	19
		Housewife	12
		Other	3
7. Income/ month		8. Expenditure/ month	
< IDR 2,6 million	27	< IDR 2,6 million	29
> IDR 2,6 – 5,2 million	52	> IDR 2,6 – 5,2 million	55
> IDR 5,2 – 7,8 million	21	> IDR 5,2 – 7,8 million	16
9. Frequency using Shariah e-wallet		10. Sharia e-wallets mostly use for	
Less than once a month	0	Monthly payments	37
Once - Twice a month	68	Online shopping	11
Third to 5 times a month	29	Online transportation	26
Six to 10 times a month	3	Donation	19
More than 10 times a month	0	Other	7
11. Reason for having Sharia e-wallet		12. Will continue to use Sharia e-wallet	
Religious reason	89	Yes	73
Non-religious reason	11	No	5
		Do not know	22
13. Use other e-wallets		14. Most used e-wallet	
Yes	91	Go-pay	37
No	9	Shopee-pay	23
		OVO	21
		LinkAja Syariah	16
		Others	3

The SEM-PLS analysis was used to analyze the hypothesis model. It can predict relationships among variables, explain the constructs and emphasize the values. SEM-PLS can analyze models with multiple independent and dependent variables (complex models) and manage the multicollinearity among variables. Although the data distribution is not normal, missing, or small sample size, the result will remain robust. It can create independent latent variables directly based on the cross-products,

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This study intends to analyze consumers' decision to use a Sharia-based e-wallet. The hypotheses are whether perceived ease of Use, usefulness, enjoyment, trust, attitude, subjective norm, and perceived behavioral control influence customers' decision to use a Sharia-based e-wallet. With SEM-PLS, this study will also analyze whether the indicators within variables construct the proposed model (Fig. 1).

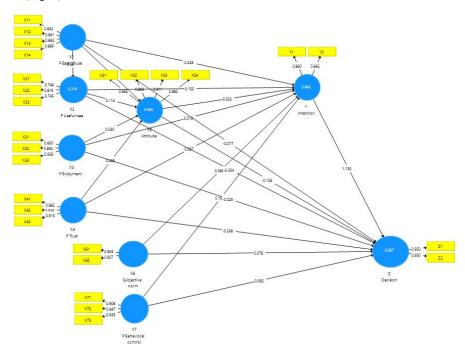


Fig. 1. The Proposed Partial Least Square Model

# 3. Findings

All respondents have already used the Shariah e-wallet (LinkAja Syariah) over six months. Table 1 shows that most of them use it once to twice a month, mostly for monthly payments. All are Muslims, aged 18 to 56 years old. Most are married (58%), have a bachelor's degree (35%), or senior high school graduates (39%). Their average income is from IDR 2.6 million to 7,8 million per month (around USD\$ 185 to 550), representing the middle economic class according to the World Bank (Kusnandar, 2022). Almost all of them have other e-wallets besides LinkAja Syariah. They use it for religious reasons to avoid or decrease *riba* transactions that are prohibit in Islam. Most of them are willing to continue to use it.

Several statistical tests were used to measure the proposed model. The first step was to test the convergent validity. The value of the loading factor in the latent variable and the composite reliability must be equal to or greater than 0.7, while a level of 0.6 of Cronbach alpha is allowed for the robustness scale. The average variance extracted (AVE) must be equal to or greater than 0,5 (Hair et al., 2010). The next step is to measure the discriminant validity to determine whether the construct has an adequate discriminant which can be done by comparing the cross-loading factor on the intended construct that must be greater than other constructs (Hair et al., 2010).

The convergent validity test (Table 2) shows that all indicators and variables are valid. All loading factors and composite reliability values exceed 0,7, while Cronbach's alpha exceeds 0,6. All latent variables are also valid with AVE values exceeding 0.5. The discriminant validity test of cross-loadings (Table 3) also shows that every construct is valid. All cross-loading of every construct is greater than others, and the value of square root AVE (Table 4) is greater than the latent variable correlation of one construct to others. The Fornell-Larcker Criterion (Table 5) is greater than other constructs (Ab Hamid et al., 2017; Fornell & Wernerfelt, 1988).

The  $R^2$  of Attitude ( $R1^2$ ) is 0.845 or 84.5% is explained by perceived ease of Use (X1), perceived usefulness (X2), perceived enjoyment (X3), and perceived trust (X4). In comparison, 15.5% are explained by other variables outside the model. The  $R^2$  of Intention to use ( $R2^2$ ) is 0.842 or 84.2%, which is explained by perceived ease of Use (X1), perceived usefulness (X2), perceived enjoyment (X3), and perceived trust (X4), attitude (X5), subjective norm (X6), and perceived behavioral control (X7). In comparison, 15.8% are explained by other variables outside the model. The  $R^2$  of Decision to use ( $R3^2$ ) is 0.867 or 86.7%, which is explained by perceived usefulness (X2), perceived ease of Use (X1), perceived ease of Use (X1), and perceived ease of Use (X1), perceived usefulness (X2), attitude (X5), subjective norm (X6), and perceived behavioral control (X7). In comparison, 15.8% are explained by other variables outside the model. The  $R^2$  of Decision to use ( $R3^2$ ) is 0.867 or 86.7%, which is explained by perceived ease of Use (X1), perceived enjoyment (X3), and

perceived trust (X4), attitude (X5), subjective norm (X6), perceived behavioral control (X7), and intention (Y). In comparison, 13.3% are explained by other variables outside the model. The Q<sup>2</sup> predictive relevance (Q<sup>2</sup> = 1- [(1-R1<sup>2</sup>) (1-R2<sup>2</sup>) (1-R3<sup>2</sup>)]) is 0.979, which is greater than zero. Thus, the exogenous variables are suitable as the predictor of the endogenous variable. After calculating the commonalities mean (0.786) and the R<sup>2</sup> mean (0.851), the Goodness of Fit model (Gof= $\sqrt{Com}$  mean x R<sup>2</sup> mean) is 0.818 (greater than 0.36). Thus, the model has a big goodness of fit.

Table 2						Table	3								
Convergent of V	/alidit	y				Discrin	ninant	of Val	idity						
Constructs		Loading	Cronbach's	Composite	AVE					Cro	ss Load	ing			
		Factor	Alpha	Reliability			X1	X2	X3	X4	X5	X6	X7	Y	Z
X1 Perceived	X21	0.832				X11	0.832	0.516	0.350	0.621	0.727	0.617	0.604	0.563	0.466
Ease of Use	X22	0.891	0.894	0.926	0.759	X12	0.891	0.510	0.380	0.774	0.775	0.786	0.710	0.709	0.602
	X23	0.892	0.894	0.920	0.759	X13	0.892	0.481	0.413		0.760	0.729	0.666		0.499
	X24	0.869				X14	0.869	0.449	0.309	0731	0.761	0.746	0.675	0.674	
X2 Perceived	X11	0.746				X21	0.531	0.746		0.502	0.548	0.505	0.546		0.370
Usefulness	X12	0.819	0.660	0.841	0.594	X22	0.417	0.819	0.286		0.482	0.444	0.533	0.610	0.581
	X13	0.745				X23	0.336	0.745	0.218	_	0.401	0.387	0.381	0.438	
X3 Perceived	X31	0.830				X31	0.407	0.455	0.830	0.364	0.398	0.405	0.389	0.405	0.339
Enjoyment	X32	0.892	0.859	0.914	0.780	X32	0.348	0.327	0.892	0.331	0.373	0.326	0.286	0.326	0.234
	X33	0.926				X33	0.338	0.363	0.926	0.307	0.361	0.343	0.303	0.344	0.307
X4 Perceived	X41	0.882				X41	0.648	0.438	0.377	0.882	0.714	0.703	0.664	0.731	0.636
Trust	X42	0.926	0.893	0.934	0.824	X42	0.782	0.573	0.335	0.926	0.831	0.830	0.797	0.781	0.672
	X43	0.915				X43	0.756	0.543	0.329	0.915	0.812	0.802	0.758	0.789	0.631
X5 Attitude	X51	0.862				X51	0.802	0.615	0.360	0.759	0.862	0.791	0.791	0.750	0.654
	X52	0.895	0.910	0.937	0.788	X52	0.772	0.571	0.331	0.727	0.895	0.797	0.765	0.759	0.680
	X53	0.911	0.910	0.937	0.700	X53	0.782	0.559	0.370	0.802	0.911	0.783	0.795	0.793	0.679
	X54	0.882				X54	0.728	0.474	0.461	0.789	0.882	0.778	0.750	0.827	0.724
X6 Subjective	X61	0.905	0.782	0.902	0.821	X61	0.798	0.522	0.384	0.826	0.815	0.905	0.766	0.753	0.643
Norm	X62	0.907	0.782	0.902	0.821	X62	0.705	0.531	0.359	0.732	0.792	0.907	0.733	0.738	0.675
X7 Perceived	X71	0.908				X71	0.667	0.536	0.285	0.715	0.776	0.711	0.908	0.756	0.705
Behavioral	X72	0.947	0.922	0.951	0.865	X72	0.694	0.625	0.367	0.789	0.802	0.788	0.947	0.813	0.724
Control	X73	0.935				X73	0.769	0.623	0.392	0.773	0.858	0.809	0.935	0.784	0.705
Y Intention	Y1	0.860	0.650	0.951	0.741	Y1	0.545	0.698	0.324	0.675	0.694	0.668	0.673	0.860	0.811
	Y2	0.862	0.650	0.851	0.741	Y2	0.716	0.456	0.382	0.779	0.823	0.748	0.778	0.862	0.772
Z Decision	Z1	0.950	0.892	0.949	0.903	Z1	0.562	0.616	0.304	0.641	0.704	0.673	0.683	0.872	0.950
	Z2	0.950	0.892	0.949	0.903	Z2	0.614	0.493	0.336	0.712	0.762	0.709	0.771	0.876	0.950

# Table 4

Discriminant of Validity: Latent Variable Correlation

√AVE	Latent Variable Correlation	X1	X2	X3	X4	X5	X6	X7	Y	Z
0.871	X1 Perceived Ease of Use	1.000								
0.770	X2 Perceived Usefulness	0.561	1.000							
0.883	X3 Perceived Enjoyment	0.416	0.439	1.000						
0.908	X4 Perceived Trust	0.804	0.573	0.381	1.000					
0.888	X5 Attitude	0.868	0.624	0.430	0.867	1.000				
0.906	X6 Subjective norm	0.829	0.581	0.410	0.859	0.887	1.000			
0.930	X7 Perceived Behavioral Control	0.763	0.640	0.374	0.816	0.873	0.827	1.000		
0.861	Y Intention	0.733	0.670	0.410	0.845	0.882	0.823	0.845	1.000	
0.950	Z Decision	0.619	0.584	0.337	0.712	0.771	0.727	0.765	0.920	1.000

## Table 5

Discriminant of Validity: Fornell-Larcker Criterion

Discriminant of valuaty. Forner	I-Laickei Citt	CHOIL							
Fornell-Larcker Criterion	X1	X2	X3	X4	X5	X6	X7	Y	Z
X1 Perceived Ease of Use	0.871								
X2 Perceived Usefulness	0.561	0.771							
X3 Perceived Enjoyment	0.416	0.439	0.883						
X4 Perceived Trust	0.804	0.573	0.381	0.908					
X5 Attitude	0.868	0.624	0.430	0.867	0.888				
X6 Subjective norm	0.829	0.581	0.410	0.859	0.887	0,906			
X7 Perceived Behavioral Control	0.763	0.640	0.374	0.816	0.873	0.827	0,930		
Y Intention	0.733	0.670	0.410	0.845	0.882	0.823	0.843	0,861	
Z Decision	0.619	0.584	0.337	0.712	0.771	0.727	0.765	0.920	0.950

It is significantly influenced if the p-value is equal to or lesser than 0,05 (Hussein, 2015). The path coefficient of direct effects (Table 5) showed that all variables, except perceived enjoyment (X3) and subjective norms (X6), influenced consumers' intention to use Sharia-based e-wallets (Y). However, only perceived trust (X4) and intention (Y) influenced consumers' decision to use Sharia-based e-wallets (Y). Intention (t-stat. 8.567) is the strongest predictor of consumers' decision to use a Sharia-based e-wallet, followed by perceived trust (t-stat. 2.087).

# Table 6 Path Coefficient – Direct Effects

	Original Sample	Sample Mean	Standard Deviation	T statistics	P value
X1 P Ease of Use $\rightarrow$ X2 P Usefulness	0.561	0.571	0.067	8.333	0.000*
X1 P Ease of Use $\rightarrow$ X5 Attitude	0.441	0.432	0.089	4.945	0.000*
X1 P Ease of Use $\rightarrow$ Y Intention	-0.226	-0.219	0.099	2.271	0.024*
X1 P Ease of Use $\rightarrow$ Z Decision	-0.017	-0.016	0.080	0.210	0.834
X2 P Usefulness → X5 Attitude	0.114	0.113	0.049	2.307	0.021*
X2 P Usefulness $\rightarrow$ Y Intention	0.155	0.145	0.063	2.481	0.013*
X2 P Usefulness $\rightarrow$ Z Decision	-0.504	0.052	0.064	0.845	0.398
X3 P Enjoyment $\rightarrow$ X5 Attitude	0.030	0.036	0.042	0.738	0.461
X3 P Enjoyment $\rightarrow$ Y Intention	0.013	0.016	0.049	0.259	0.796
X3 P Enjoyment $\rightarrow$ Z Decision	-0.025	-0.025	0.045	0.556	0.578
X4 P Trust $\rightarrow$ X5 Attitude	0.436	0.443	0.093	4.708	0.000*
X4 P Trust $\rightarrow$ Y Intention	0.287	0.291	0.131	2.190	0.029*
X4 P Trust $\rightarrow$ Z Decision	-0.238	-0.234	0.114	2.087	0.037*
X5 Attitude $\rightarrow$ Y Intention	0.523	0.526	0.147	3.566	0.000*
X5 Attitude $\rightarrow$ Z Decision	-0.126	-0.134	0.172	0.733	0.464
X6 Subjective norm $\rightarrow$ Y Intention	0.068	0.052	0.106	0.642	0.521
X6 Subjective norm $\rightarrow$ Z Decision	0.076	0.072	0.110	0.680	0.491
X7 P Behavioral control $\rightarrow$ Y Intention	0.163	0.173	0.084	1.943	0.050*
X7 P Behavioral control $\rightarrow$ Z Decision	0.095	0.094	0.112	0.845	0.399
Y Intention $\rightarrow$ Z Decision	1.150	1.157	0.134	8.567	0.000*

\*Significant at alpha 5%

# Table 7

Indirect Effects

	Original	Sample Mean	Standard Deviation	T statistics	P value
VIDE XVIDI CI XVI AU't 1	Sample			2 1 2 7	0.022
X1 P Ease $\rightarrow$ X2 P Usefulness $\rightarrow$ X5 Attitude	0.064	0.065	0.030	2.137	0.033
X1 P Ease $\rightarrow$ X2 P Usefulness $\rightarrow$ Y Intention	0.087	0.083	0.038	2.302	0.022*
X1 P Ease $\rightarrow$ X2 P Usefulness $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention	0.033	0.034	0.019	1.800	0.072
X1 P Ease $\rightarrow$ Y Intention $\rightarrow$ Z Decision	-0.260	-0.250	-0.115	2.258	0.024*
X1 P Ease $\rightarrow$ X2 P Usefulness $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.038	0.039	0.022	1.175	0.087
X2 P Usefulness $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention	0.059	0.060	0.032	1.882	0.060
X2 P Usefulness $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.179	0.168	0.075	2.369	0.018*
X2 P Usefulness $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.068	0.069	0.038	1.805	0.072
X3 P Enjoyment $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention	0.016	0.020	0.023	0.677	0.499
X3 P Enjoyment $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.015	0.017	0.057	0.257	0.797
X3 P Enjoyment $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.018	0.022	0.027	0.672	0.502
X4 P Trust $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention	0.228	0.235	0.088	2.598	0.010*
X4 P Trust $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.330	0.337	0.162	2.042	0.042*
X4 P Trust $\rightarrow$ X5 Attitude $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.262	0.272	0.108	2.417	0.016*
X5 Attitude $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.602	0.606	0.179	3.356	0.001*
X6 Subjective norm $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.079	0.059	0.124	0.635	0.526
X7 P Behavioral control $\rightarrow$ Y Intention $\rightarrow$ Z Decision	0.188	0.200	0.103	1.829	0.068

\*Significant at alpha 5%

The indirect effects showed that as an intervening variable, perceived usefulness mediated the indirect effect between perceived ease of Use toward attitudes and intention. As an intervening variable, attitude only mediated the indirect effect between perceived trust toward the intention. As an intervening variable, intention mediated the indirect effect between perceived ease of Use toward the decision, perceived usefulness toward the decision, and perceived trust toward the decision.

#### 4. Conclusion, Implication, And Recommendation

This study concluded that perceived ease of Use (X1) and perceived usefulness (X2) influence consumers' intention (Y) but not their decision to use Sharia-based e-wallets (Z). It implies that their intention did not necessarily describe their actual behavior. Consumers felt that the Sharia-based e-wallet was not as easy and useful as other e-wallets they mostly use, like Go-pay, Shopee-pay, and OVO (Hampshire & Hart, 1958; Simamora, 2022). Thus, the provider must make the application user-friendly, simple, quick to transact, responsive to prevent or reduce errors, and more useful.

This study also concluded that perceived enjoyment (X3) did not influence consumers' intention and decision to use Shariabased e-wallets (Y). It implies that consumers do not find Sharia-based e-wallets entertaining or enjoyable. In line with these findings, according to Davis et al. (1992), Igbaria et al. (1996), and Heijden (2003, 2004), the effect of perceived enjoyment is consistently weaker than the original perceived ease of Use and perceived usefulness. Several exceptions have been reported in some literature (Atkinson & Kydd, 1997; Moon & Kim, 2001; Heijden, 2004; Venkatesh, 1999), which found that the technology appears less accepted because it is less enjoyable. The world wide web or systems used in the home and leisure environment, games, and game-based training versions of work-related information systems suggest a boundary condition on perceived ease of Use and usefulness due to the less enjoyment perception. The consumer behavior literature demonstrates that what specifically determines the intention to consume depends on the utilitarian or hedonic nature of the product (Babin et al., 1994; Holt, 1995; Heijden, 2004; Venkatraman & MacInnis, 1985). In his study, Heijden (2004) noted that a parallel argument about what shapes consumers' intention to use depends on the utilitarian of the information system or its hedonic nature. It shows how a system's utilitarian or hedonic nature affects the TAM more than the perceived ease of Use and use-fulness. Because the nature of mobile payment systems is not focused on the utilitarian or hedonic nature, such as Fitness apps (Beldad & Hegner, 2018) or Telehealth systems (Chang et al., 2015), the perceived enjoyment will not contribute to consumers' intention and decision to use the Sharia-based e-wallet.

This study also concluded that subjective norms (X6) did not influence consumers' intention and decision to use Sharia-based e-wallets (Y). It implies that significant others or people considered important by the consumer (i.e., family, parents, spouse, siblings, friends, colleagues, teachers, religious leader, etcetera) did not motivate them to use the Sharia-based e-wallet. It is in line with the study of Krueger et al. (2000) in Ham et al. (2015), which showed that subjective norm is not correlated with people's intention and actual behavior related to their personal business. The inconsistency of subjective norms' influence arises when there is already a strong desire inside the person to perform a certain behavior. Armitage & Conner (2001) criticized the narrow conceptualization of subjective norms, resulting in a weak correlation between normative beliefs and intention. In this context, Rivis & Sheeran (2003) argued that there is a confirmed correlation between descriptive norms and social norms toward intention, which implies the possible predictive power of descriptive norms and social norms within the intention. Descriptive norms refer to other people's activities or actual behaviors, while social norms should be the indicators of subjective norms (Ham et al., 2015). Moreover, according to Ajzen (1991), one of the most frequently mentioned weak points in the TPB model is the relationship between subjective norm and intention. The intention is strongly influenced by personal factors, such as attitudes and perceived behavioral control, rather than subjective norms motivated by others.

This study found that only perceived trust and intention directly influence consumers' decisions to use the Sharia-based ewallet. It implies that consumers are very concerned about its trustworthiness. Thus, the provider must consistently strengthen its system security. To remain a core player, the Sharia-based e-wallet provider must be concerned about exploring consumer needs with innovation and new investments to make the application more useful. Being the first player is not enough. Consistent meeting consumer needs through pleasant experiences will encourage consumers to continue using the service, maintain the best reputation, and gain more trust and consumer loyalty.

Muslim consumers in Indonesia are becoming more conscious of their obligation to Islamic rules. When Muslim choose to avoid *riba* or pork prohibited in Islam by choosing Sharia-based or Halal products and services, it reflects their act of worship or religious behavior (M. Aisyah, 2017; Muniaty Aisyah, 2014, 2015, 2017, 2018, 2016; Muniaty Aisyah et al., 2019; Muniaty Aisyah & Umiyati, 2018; Mishbakhudin & Aisyah, 2021; Suzanawaty et al., 2021). Previous studies found that Muslim consumers' religious behavior significantly influences their intention or decision to consume or use halal products, like food and beverages, cosmetics or personal care products, medicine (Muniaty Aisyah, 2014), and services like Islamic finance and Islamic college (Muniaty Aisyah & Umiyati, 2018; Suzanawaty et al., 2021) as their obligation to act accordingly to Islamic rules. However, most customers in Indonesia still depend on conventional products and services for their daily Use due to their better offers and service quality, like banking (Aisyah, 2018) or e-wallet. Thus, for future studies, it is recommended to add religiosity as an independent, intervening, or moderating variable. In much previous research, religiosity is an important variable that influences, mediates, and moderates Muslim decisions to use Sharia-based products or services.

To win consumer preference, the provider of Sharia-based e-wallet needs to focus on the main factors that will increase its unique financial technology service (Citro et al., 2022). As a Sharia-based e-wallet, it has unique values for the users. It offers various Sharia-based services that facilitate halal products, halal e-commerce, and halal business transactions, payment for *qurban* (animal sacrifices), online *Hajj* and *Umrah* pilgrimage registration, Islamic schools tuition fees, top-up balances through Islamic banks, facilitating Islamic investment and insurance, cooperates with mosques and agencies for ZISWAF (donation) distribution, etcetera. It has been certified by the Indonesian Council of Ulama, assuring free from the risk of *riba* or usury transactions, which Islam prohibits (Parama, 2020; Puspaningtyas, 2022). Moreover, like Gopay, as the most-used e-wallet for the past five years, to win the market, the Sharia-based e-wallet provider needs to ensure that its services are secure, easy, and convenient for consumers to transact, it can be used for daily needs payments with more features and merchants collaboration. Importantly, the provider must consistently deliver good performance to meet consumers' needs, which can not be achieved in a short period (Citro et al., 2022).

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