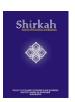


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Research Paper

Determinants of Online Zakat Intention amongst Muslim Millennials: An Integration of Technology Acceptance Model and Theory of Planned **Behavior**

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ABSTRACT

Today's modern civilization has resulted in the crucial role of technology in human life, including financial matter. Integrating Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB), this study sheds some light on the determinants of Muslim millennials' intention in performing zakat payment using Financial Technology (Fintech). An online questionnaire survey was conducted to gather the required data from a group of Indonesian Muslim millennials. Employing purposive sampling technique, the sample consisted of 200 respondents. The data were analyzed with the assistance of Structural Equation Model -Partial Least Square (SEM-PLS). The results demonstrated that perceived ease of use and perceived usefulness positively and significantly affected the respondents' attitudes. Moreover, attitudes, subjective norms, and perceived behavioral control significantly affected the intention of using Fintech to perform zakat payment. The results further revealed that there was no direct influence between perceived ease of use and perceived usefulness on the respondents' intention of using Fintech to perform zakat payment. However, it had an indirect effect by the mediation of attitude variable. As a theoretical implication, this study contributes to the literature enhancement in the discourse of TAM and TPB models in zakat context. Practically, it assists zakat management institutions recognize the Muslim millennial community and develop digital zakat payment platforms.

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Introduction

In the recent years, innovation in Information and Communication Technology (ICT) such as Financial Technology (henceforth Fintech) has significantly affected the global financial sector (Hudaefi, 2020). Leong and Sung (2018) define Fintech as the use of technology platforms to enhance the financial system's effectiveness. FinTech also plays a crucial role as a financial intermediary in people's daily activities around worldwide (Milian et al., 2019). Niswah et al. (2019) pointed out that Fintech is one of the economic sectors with the most considerable growth. Globally, Fintech investment reached \$ 135.7 billion in 2019, a rapid increase compared to 2008, which only reached \$ 930 million (Saksonova & Kuzmina-Merlino, 2017), albeit in mid-2020, it experienced a decline of only \$ 25.6 billion (KPMG, 2020). Likewise, Indonesia has shown significant rapid development (Safitri, 2020), which according to e-Conomy SEA 2019 is worth \$ 40 billion in 2019 and remains growing at an average rate of around 49% (Google et al., 2019).

Fintech is demanded in the economy and business and in social activities, one of which is zakat (Yahaya & Ahmad, 2019). Zakat institutions can employ Fintech to provide convenience and comfort for Muslims in fulfilling their obligations in paying zakat (Usman et al., 2020). As a country with the largest Muslim population and one of the most generous countries globally (Charities Aid Foundation, 2019), Indonesia has enormous zakat potential. The results of study conducted by the Zakat Mapping Potential Indicator (IPPZ) showed that the potential for zakat in 2019 reaches IDR 233.8 trillion, of which IDR 139.07 trillion comes from the income zakat sector, which is reflected by the contribution of millennial generation. However, this potential has not been optimally realized because the zakat collection has only reached IDR 8.1 Trillion in 2018, or 3.46% of its potential (Puskas BAZNAS, 2020).

The Muslim millennial generation provides opportunities for zakat institutions to recognize the potential of zakat from their income. Besides, the millennial generation is also the largest contributor to the use of technology and dominates the use of Fintech in Indonesia (PwC Indonesia, 2019). For this reason, optimizing the use of Fintech as a platform to perform zakat payment is a crucial issue that must be discussed (Hudaefi et al., 2020), because it can answer one of the challenges of zakat in Indonesia, i.e. the less than optimal use of technology in managing zakat (KNEKS, 2018). However, Usman et al. (2020) stated that there are still a small number of Muslims who use Fintech platforms offered by zakat institutions; hence, further research is highly necessary to examine the acceptance of technology, especially Fintech platforms to perform zakat payment among Muslim millennial communities.

Research related to technology acceptance normally employs the Technology Acceptance Model (TAM) proposed by Davis (1989) and the theory to predict behavioral intention refers to the Theory of Planned Behavior (TPB) initiated by Ajzen (1991). The literature shows that TAM is employed in a variety of different technologies and is tested in various aspects and sectors, such as internet banking (Safeena et al., 2013; Yadav et al., 2015), mobile banking (Giovanis et al., 2019), mobile shopping (Ghazali et al., 2018), crowdfunding waqf model (Thaker et al., 2018), e-commerce (Awa et al., 2015), online food delivery (Troise et al., 2020), and use of gym equipment (Tweneboah-Koduah et al., 2019). The application of TAM in assessing intention in the context of zakat remains more paucity of evidence. Previous research only examined the expansion of TAM in the context of philanthropy in general (Usman et al., 2020), Fintech services (Chuang et al., 2016), and the use of Islamic Fintech (Darmansyah et al., 2020). Moreover, Niswah et al. (2019) and Chen et al. (2019) explored intention in using Fintech for donations.

Thus, the present study aims to explore the determinants of Muslim millennials' intention in performing zakat payment using Fintech. This study integrates TAM and TPB to predict the intention of Muslims millennials to perform zakat payment. The novelty of this research lies in the use of Fintech in zakat payment by applying TAM and TPB, which is based on the author's knowledge, studies using this method in the context of zakat remain unexplored. This study is expected to increase Indonesia's zakat collection and provide policy recommendations to the government and zakat management organizations.

Further parts of this article discuss the literature review by including relevant theories, explaining the conceptual framework, and developing hypotheses. The following section demonstrates the research methodology. The third part presents the results of empirical research and discussion, and the next section provides conclusions, policy recommendations, and the limitations of this study leading to suggestions for further research.

Hypotheses Development

Perceived Ease of Use and Attitude

In the concept of TAM, attitude is primarily determined by perceived ease of use (Davis, 1989). To promote users' willingness to utilize new technology, potential users must believe that it is easy to use (Chuang et al., 2016; Davis, 1989). In the context of Fintech acceptance, Chuang et al. (2016) argue that if consumers believe that Fintech is easy to use, their attitude towards Fintech will also be high. Likewise, within the context in this study, if the use of Fintech platforms to perform zakat payment is considered easy, the better the perception of the Muslim millennial community towards the use of Fintech.

Previous empirical studies have confirmed the positive relationship between perceived ease of use and attitude. Usman et al. (2020), in their research, proved that perceived ease of use was the primary variable affecting users' attitudes towards the

application of Fintech in Islamic philanthropy. The similar result was also shown by Chuang et al. (2016), who analyzed Fintech adoption acceptance, and Giovanis et al. (2019) who studied mobile banking adoption in Greece. Other studies that support the previous research, such as Elhajjar and Ouaida (2020), Arora and Sahney (2018), and Yang and Su (2017) also showed that perceived ease of use had a positive and significant effect on attitudes. Hence, based on the above theory and empirical research results, the following hypothesis is postulated.

H1: Perceived ease of use has a positive effect on the attitude of using Fintech to perform zakat payment.

Perceived Usefulness and Attitude

Perceived usefulness is a determinant construct in TAM (Venkatesh & Davis, 2000). Chuang et al. (2016) stated that the use of Fintech allows people to have freedom in terms of transactions, payments, and other digital finance activities. In the context of zakat payments using Fintech, *muzaki* (a person who pay zakat) can save time and costs because there is no need to go to the venue of zakat institutions (Rachman & Salam, 2018). User perceptions of the existence of benefits or uses contribute significantly to their willingness to utilize certain technologies (Hanafizadeh et al., 2014). Thus, the greater the perceived usefulness is, the greater the positive attitude will be (Elhajjar & Ouaida, 2020). This is supported by the results of previous research studies conducted by Chuang et al., 2016; Elhajjar & Ouaida, 2020; Giovanis et al., 2019; Troise et al., 2020; Usman et al., 2020; Yadav et al., 2015.

In the context of Fintech acceptance, Usman et al. (2020) pointed out that perceived usefulness had a positive and significant effect on attitudes towards the use of Fintech for philanthropy. The similar result was also revealed by Chuang et al. (2016). Whereas in another context, i.e. the acceptance of mobile banking, Elhajjar and Ouaida (2020) and Giovanis et al. (2019) confirmed that attitudes were influenced by perceived usefulness. Thus, the hypothesis below is proposed.

H2: Perceived usefulness has a positive effect on the attitude of using Fintech to perform zakat payment.

Perceived Ease of Use and The Intention of Using Fintech to Perform Zakat Payment According to Venkatesh and Davis (2000), individuals use certain technologies because of their ease of use. Davis (1989) states that perceived ease of use can contribute to behavioral intentions directly or indirectly. The more comfortable a technology is to use, the higher its intention will be (Davis, 1989). Thus, the perceived ease of use has a positive influence on intention. In the context of this research, it can be said that when the Muslim millennials feel that Fintech is easy to use to perform zakat payment, then the intention to pay zakat through Fintech will be even higher.

The results of previous empirical studies have confirmed a positive relationship between perceived ease of use and intention, such as Shaikh et al. (2020), Thaker et al. (2018), Yadav et al. (2015), Giovanis et al. (2019) and Safeena et al. (2013). In their research, Shaikh et al. (2020) found that acceptance of Islamic FinTech services was determined by perceived ease of use. In a similar direction, Thaker et al. (2018) confirmed a positive relationship between ease of use and intention to use the crowdfunding waqf model (CWM). Yadav et al. (2015), Giovanis et al. (2019), and Safeena et al. (2013) also found the similar results that perceived ease of use was positively related to the intention to use the internet banking. Based on the theory and previous research results above, the hypothesis below is formulated.

H3: Perceived ease of use has a positive effect on the intention to use Fintech to perform zakat payment.

Perceived Usefulness and The Intention of Using Fintech to Perform Zakat Payment

The TAM model (Davis, 1989) shows a direct influence of perceived usefulness on behavioral intentions. This is because the intention to use certain technologies is closely related to the expected results (Venkatesh & Davis, 2000). In this research context, when the Muslim millennials or Fintech users think that Fintech is very useful for paying zakat because it saves time and is practical, they will surely use it. This is supported by empirical studies (Alalwan et al., 2016; Arora & Sahney, 2018; Elhajjar & Ouaida, 2020; Giovanis et al., 2019; Niswah et al., 2019; Safeena et al., 2013; Shaikh et al., 2020; Yadav et al., 2015) who found that perceived usefulness was consistently a strong determinant of intention to use Fintech.

All the above research results confirm that perceived usefulness is a predictor of behavioral intention. Niswah et al. (2019), who combined TAM and TPB to study the application of Fintech for donations among the Muslim community, revealed that perceived usefulness influenced donating behavior by using Fintech. The findings of Elhajjar and Ouaida (2020) and Alalwan et al. (2016) also showed that customers' intention to use mobile banking was influenced by perceived usefulness. In addition, Arora and Sahney (2018) disclosed that perceived usefulness positively affected consumer intentions to do showrooming. Based on these studies' results, the hypothesis below is tested.

H4: Perceived usefulness has a positive effect on the intention to use Fintech to perform zakat payment

Attitude and The Intention of Using Fintech to Perform Zakat Payment

TAM (Davis, 1989) and TPB (Ajzen, 1991) state that attitudes influence intentions. When individuals have a positive attitude towards a specific technology, they will be more likely to use it. In this research context, when the Muslim millennials has a positive

attitude towards the use of Fintech as a platform to pay zakat, their intention to use Fintech will be even higher. This claim is supported by the findings of previous research that attitudes positively influenced the use of Fintech (Chuang et al., 2016; Usman et al., 2020). Another evidence showed that the intention to use mobile banking or internet banking was influenced by attitudes (Elhajjar & Ouaida, 2020; Giovanis et al., 2019; Safeena et al., 2013; Yadav et al., 2015).

Other studies (Arora & Sahney, 2018; Troise et al., 2020) also found the similar results that attitudes affected the intention to use particular technologies or systems. More recently, Usman et al. (2020) revealed that attitudes positively affected the intention to use Fintech in philanthropy. Based on the previous theory and research results, the following hypothesis is drawn.

H5: Attitude has a positive effect on the intention to use Fintech to perform zakat payment Subjective Norm and The Intention of Using Fintech to Perform Zakat Payment Subjective norms refer to people's perceptions so that people who are important to them think they should or should not carry out the behavior or accept specific technology (Ajzen, 1991; Venkatesh et al., 2003). The more individuals perceive important referents that they should be involved in the behavior, the higher their motivation to perform the behavior (Ajzen, 1991; Arora & Sahney, 2018). In the context of this research, when someone's family and closest friends support paying zakat through the Fintech platforms, the intention to pay zakat through Fintech will be even greater.

Several previous studies confirmed that subjective norms are constructs that determine intention. Usman et al. (2020) and Niswah et al. (2019) revealed that subjective norms positively affected the intention to use Fintech. The same results were also confirmed by Elhajjar and Ouaida (2020), Giovanis et al. (2019), Safeena et al. (2013), and Yadav et al. (2015), revealing that subjective norms had a significant effect on the intention to use mobile banking and internet banking. By considering these studies, the statement below is hypothesized.

H6: Subjective norms have a positive effect on the intention to use Fintech to perform zakat payment

Perceived Behavioral Control and The Intention of Using Fintech to Perform Zakat Payment According to the TPB model (Ajzen, 1991), perceived behavioral control could influence behavioral intentions. When individuals have sufficient resources and knowledge related to a specific behavior, the intention to carry out that behavior will be even greater. In the context of this research, when the Muslim millennial community has the confidence, knowledge, and resources which are needed to pay zakat through Fintech, the intention to use the Fintech as a zakat payment platform will be even higher.

Various studies have confirmed that perceived behavioral control is a determining factor for using certain technologies. For instance, Niswah et al. (2019) found that perceived behavioral control positively and significantly affects donation intentions through Fintech. Chen et al. (2019) discovered that the intention to donate was influenced by perceived behavioral control. In a similar direction, Ghazali et al. (2018) revealed that perceived behavioral control had the most potent positive effect on consumer adoption intentions. Other studies also found the similar results (Giovanis et al., 2019; Safeena et al., 2013; Troise et al., 2020; Yadav et al., 2015) that perceived behavioral control affected intention in positive and significant mood. Thus, the following hypothesis is empirically tested.

H7: Perceived behavioral control has a positive effect on the intention to use Fintech to perform zakat payment

Based on the above-mentioned explanation, the following figure is the conceptual framework of the present study.

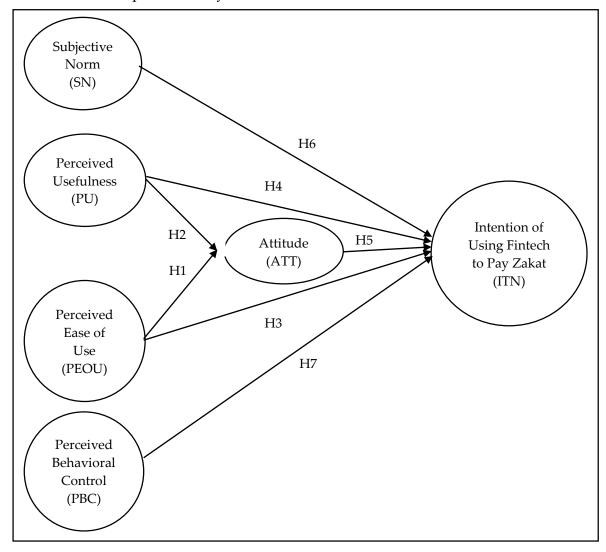


Figure 1. Conceptual Framework of the Study

Method

Rationale of the Method

This study employed a quantitative approach by distributing online questionnaires. The approach is appropriate in the context of this study because quantitative-based research describes the intentions behavior through measures, so that these measures directly represent the empirical state. Besides, the purpose of the quantitative approach is to observe situations or events that affect people, especially in this research context is the intention amongst Muslim millennials to participate in online zakat payment using Fintech.

Sample Selection and Data Sources

The respondents of this study were Indonesian Muslim millennials who were purposively selected with a quota sampling approach using the following criteria: (1) Muslims included in the millennial generation, namely people born in 1980 to 2000 (aged 20-40 years); (2) they were mandatory for zakat, which have reached the *nishab* and *haul*, for the *nishab* for zakat, the income is IDR 5.24 million or the equivalent of 520 kilograms of rice; (3) they make use of Fintech platforms as payment, clearing, settlement, and crowdfunding such as LinkAja, OVO, DANA, GoPay, KitaBisa, etc. A total of 200 respondents participated in this study.

Instrumentation and Data Collection

The data were collected within four weeks from November to December 2020 and resulted in 204 questionnaires, but only 200 responses were considered completed. A five-point Likert scale measures the items from strongly disagree to strongly agree. The questionnaire used was based on theory and adopted from previous researches that matched the research topic. The questionnaire was divided into two parts. The first part consists of general statements relating to respondents' demographic data, i.e. gender, age, education, occupation, and monthly income. The second part consists of questions from six variables, i.e. perceived ease of use (four items), perceived usefulness (four items), attitude (four items), subjective norm (four items), perceived behavioral control (three items), and intention of using Fintech to perform zakat payment (three items). A total of 22 questions were employed to scrutinize the determinants of Muslim millennial intentions to perform zakat payment using Fintech platforms.

Data Analysis

This study utilized Structural Equation Model - Partial Least Square (SEM-PLS) to test the proposed hypotheses. Many researchers recommend using SEM-PLS as an excellent statistical tool for path modeling to solve complex multivariate models (Hair et al., 2017). They also confirmed that the SEM-PLS approach is a flexible, more powerful, and superior statistical tool for predicting and testing a theory (Henseler et al., 2015). To

seek the answers of the hypotheses testing in this study, the author carried out two testing stages using SmartPLS software, i.e. testing the measurement model (outer model) and the structural model (inner model).

Results

Respondents' Characteristics

As presented in table 1, this study involved 200 Indonesian Muslim millennials as the respondents, consisting of women (51.5%) and men (48.5%). Most of the respondents were in the age range of 20-30 years (74.5%), while the rest was in the range of 31-40 years (25.5%). For the latest education level, most of the respondents were university degree (66%), followed by postgraduate degree (25.5%), high school/equivalent (5.5%), and diplomas (3%). As many as 59 respondents (29.5%) worked as private employees, followed by other occupations (26%), civil servants (21%), self-employed (17%), and professionals (6.5%).

Furthermore, it was revealed that more than half of the respondents (83.5%) had a monthly income of IDR 5.000.000-9.000.000, which indicates that the respondents receive a sufficient salary to meet the requirements to pay zakat on income. All respondents in this study are daily internet users and can operate Fintech, especially payment, clearing, settlement, and crowdfunding. The Fintech platforms used by most respondents were OVO (31%), followed by Gopay (24.5%), LinkAja (18%), Shopeepay (9.5%), DANA (8.5%), Kitabisa (4.5%), Paytren (3.5%), and Online Mandiri (0.5%).

Table 1. Respondents' Characteristics

Characteristic		Frequency	Percentage (%)
C 1	Female	97	48.5%
Gender	Male	103	51.5%
	20-25	73	36.5%
A	26-30	76	38%
Age	31-35	26	13%
	36-40	25	12.5%
	High school or below	11	5.5%
Education	College degree	6	3%
Education	University degree	132	66%
	Postgraduate degree	51	25.5
	Civil servant	42	21%
Occupation	Private employee	59	29,5%
	Self employed	34	17%

Sri Yayu Ninglasari: Determinants of Online Zakat Intention amongst Muslim Millennials: An Integration of Technology Acceptance Model and Theory of Planned Behavior

Characteristic		Frequency	Percentage (%)
	Professional	13	6,5%
	Other	52	26%
Manthle	IDR 5-9	167	83,5%
Monthly Income (million)	IDR 10-14	20	10%
	IDR 15-19	7	3,5%
	More than IDR 19	6	3%

Measurement Model Evaluation

This study employed convergent and discriminant validity tests to analyze the measurement model. Reliability and validity test is normally used to determine the effect of the indicators that have been formed in the model on the latent variables constructed (Hair et al., 2017). In the convergent validity test, this study used outer loading, composite reliability (CR), average variance extracted (AVE), and Cronbach's alpha. The results are presented in table 2.

Table 2. Convergent validity, Construct Reliability, and Validity Result

Constructs	Items	Outer Loading	CR	AVE	α
Perceived Ease of Use			0.907	0.847	0.909
	PEOU1	0.826			
	PEOU 2	0.871			
	PEOU 3	0.882			
	PEOU 4	0.789			
Perceived Use	fulness		0.878	0.643	0.817
	PU1	0.772			
	PU2	0.825			
	PU3	0.823			
	PU4	0.786			
Attitude			0.901	0.696	0.855
	ATT1	0.858			
	ATT 2	0.855			
	ATT 3	0.812			
	ATT 4	0.811			
Subjective Norm			0.895	0.592	0.774
	SN1	0.711			
	SN2	0.741			

Constructs	Items	Outer Loading	CR	AVE	α
	SN3	0.822			
	SN4	0.797			
Perceived Beh	navioral Control		0.912	0.741	0.824
	PBC1	0.859			
	PBC2	0.907			
	PBC3	0.813			
Intention of Using Fintech to Perform Zakat Payment			0.943	0.847	0.909
	INT1	0.919			
	INT2	0.932			
,	INT3	0.909			

According to Hair et al. (2017) and Nunkoo et al. (2013), the AVE value must be higher than 0.50 to support convergent validity. Meanwhile, CR and Cronbach's alpha must be higher than 0.70 (Ghozali, 2015). Likewise, the outer loading result must be higher than 0.70. However, the outer loading value of 0.50-0.60 is considered good enough. Based on table 2, all constructs in this study support convergent validity because they have outer loading, CR, and Cronbach's alpha more than 0.70 and AVE more than 0.50.

Table 3. Discriminant Validity Result

	Intention	Subjective Norm	Perceived Usefulness	Perceived Ease of	Perceived Behavioral	Attitude
		1101111	C SCI diffics	Use	Control	
Intention	0.920					
Subjective Norm	0.535	0.769				
Perceived Usefulness	0.502	0.328	0.802			
Perceived Ease of Use	0.545	0.408	0.606	0.843		
Perceived Behavioral Control	0.727	0.461	0.528	0.522	0.861	
Attitude	0.600	0.662	0.617	0.590	0.516	0.834

This study also passed discriminant validity through the Fornell-lacker criterion, as shown in table 3 that the AVE square root of each construct is higher than the other

quadratic correlations in the model. This result shows that all the constructs used in this study are different from one another. Thus, the measurement model used in this study can be considered as valid.

Structural Model Evaluation

The structural model analysis is carried out to ensure that the model outlined in the study is robust. Structural model testing is conducted by seeing the R² value, which explains the proportion of variations in the endogenous (dependent) variable which is explained by all exogenous (independent) variables. Based on the analysis results, as shown in table 4, the R² of the attitude variable is 0.454, which means that 45.4% of attitude can be explained by perceived ease of use and perceived usefulness and the 54.6% by other variables outside the study. Moreover, the intention to use Fintech has an R² of 0.615, which indicates that 61.5% of endogenous variables (the intention to use Fintech to perform zakat payment) can be explained by exogenous variables (perceived ease of use, perceived usefulness, attitudes, subjective norms, and perceived behavioral control). Simultaneously, the remaining 38.5% is explained by other variables that were not tested in this study.

Table 4. R Square Analysis Result

	R Square	R Square Adjusted
Intention of Using Fintech to	0.615	0.605
Perfoem Zakat Payment		
Attitude	0.454	0.449

Furthermore, this study uses the path coefficient through the bootstrapping analysis procedure to determine the relationship between variables and test the proposed hypotheses. Based on the hypotheses testing results demonstrated in table 5, perceived ease of use has a positive and significant effect on attitudes (β = 0.342; p <0.05), so that H1 is supported. Perceived usefulness has a positive and significant effect on attitudes (β = 0.410; p <0.05), which means that H2 is supported. On the other hand, perceived ease of use and perceived usefulness had a negative and insignificant effect on the intention of using Fintech to pay zakat (β = 0.014; p> 0.05) and (β = 0.115; p> 0.05), for that reason H3 and H4 are not supported. In addition, attitudes have a positive and significant effect on the intention to use Fintech to perform zakat payment (β = 0.171; p <0.05) so that H5 is supported. Subjective norms also have a positive and significant effect on the intention to use Fintech to perform zakat payment (β = 0.136; p <0.05), as a result H6 is supported. Last but not least, perceived behavioral control has a positive and significant effect on the intention to use Fintech to perform zakat payment (β = 0.508; p <0.05), so that H7 is supported. Based on these compelling results, the present study has

Not Supported

Supported

Supported

Supported

PU → ITN

 $SN \rightarrow ITN$

PBC → ITN

 $ATT \rightarrow ITN$

0.115

0.171

0.136

0.508

an excellent structural and measurement model. The results show that five out of seven proposed hypotheses were supported.

Original **T-Statistics Hypothesis Pathway P-Values** Result Sample (O) (IO/STDEVI) PEOU→ ATT 0.342 4.223 0.000 Supported PU → ATT 0.410 6.145 0.000 Supported Not Supported PEOU → ITN 0.014 1.531 0.126

0.188

2.023

2.033

5.632

0.851

0.044

0.043

0.000

Table 5. Hypothesis Testing Results

Notes: PEOU = Perceived Ease of Use; PU = Perceived Usefulness; ATT = Attitude; SN = Subjective Norm; PBC = Perceived Behavioral Control; and ITN = Intention of Using Fintech to Perform Zakat Payment

Discussion

H1

H2

H3

H4

H5

H6

H7

The present study sheds some light on the effect of perceived ease of use, perceived usefulness, attitudes, subjective norms, and perceived behavioral control on the intention of using Fintech to perform zakat payment. SEM-PLS test results reveal a positive and significant influence between perceived ease of use and attitudes; so, the statement of H1, which states that perceived ease of use has a positive effect on attitudes, is supported. This result implies that the easier it is to use the Fintech platform to perform zakat payment, the better the Indonesian Muslim millennials' perceptions towards Fintech platforms. In addition, they will readily accept the use of Fintech when its applications such as OVO, Gopay, LinkAja, Shopeepay, Paytren, and others are easy to learn, understand, and use primarily to perform zakat payment.

Positive perceptions of using Fintech to perform zakat payment are also supported by the fact that Muslim millennial communities are internet users, and their daily routines are devoted to the use of technology, including accessing Fintech services anytime and anywhere. This statement is supported by a number of previous studies such as the one conducted by Usman et al. (2020), which found that perceived ease of use was the primary variable affecting user attitudes towards the application of Fintech in Islamic philanthropy. The similar results were also found by Chuang et al. (2016), Giovanis et al. (2019), Elhajjar and Ouaida (2020), Arora and Sahney (2018), and Yang and Su (2017).

Perceived usefulness has a positive and significant effect on attitudes. This is evidenced by supporting the H2 statement, which states that perceived usefulness positively affects attitudes. The acceptance of this hypothesis confirms that perceived usefulness is a determining variable for attitudes. When the Muslim millennials as Fintech users believes that Fintech is useful to perform zakat payment, they will have a positive attitude. Moreover, using Fintech is practical; it can be performed quickly within short period of time. It will be significantly fruitful for *muzaki* to channel their zakat funds without visiting zakat institutions. The result of this study supports previous empirical studies (Chuang et al., 2016; Elhajjar & Ouaida, 2020; Giovanis et al., 2019; Troise et al., 2020; Usman et al., 2020; Yadav et al., 2015) who also found that perceived usefulness was consistently a strong determinant of attitudes.

Contrary to the findings of the previous studies, i.e. Shaikh et al. (2020), Thaker et al. (2018), Yadav et al. (2015), Giovanis et al. (2019), and Safeena et al. (2013), the results of data analysis did not support H3, which stated that perceived ease of use had no positive effect on the intention using Fintech to perform zakat payment. This result can be due to the intervening variable attitude so that when there is an ease in using Fintech, the Muslim millennials will have a positive perception at the first time, and continued to be an intention to use the Fintech. This result means that the ease of operating Fintech does not necessarily make them interested in using Fintech, especially to perform zakat payment. For this reason, this study is in line with the empirical study conducted by Tweneboah-Koduah et al. (2019), who found that usage intention was not influenced by perceived ease of use.

In line with H3, H4's statement, which states that perceived usefulness has a positive effect on the intention to use Fintech to perform zakat payment, is not supported in this study. The reason might rely on the fact that perceived usefulness is not a direct determinant of intention to use Fintech. The increased performance of paying zakat using Fintech will only result in positive attitudes, not in the intention to use it. The higher the value of benefits felt by the Muslim millennials, the better the attitude towards using Fintech. As a result, it will indirectly (through attitude) increase their intention. For this reason, this study contradicts previous research results conducted by Niswah et al. (2019), Elhajjar and Ouaida (2020), Alalwan et al. (2016), and Arora and Sahney (2018). However, this study is in line with Troise et al. (2020), where the perceived usefulness does not affect the intention to use technology.

Based on the significance test results, H5 is supported, in which attitude has a positive and significant effect on the intention to use Fintech to perform zakat payment. This means that when the Muslim millennials has a positive attitude towards using Fintech as a platform to pay zakat, then the intention to use Fintech will be even higher. For this reason, the results of this study are in line with previous empirical research conducted by Chuang et al. (2016), Usman et al. (2020), Elhajjar and Ouaida (2020), Giovanis et al. (2019), Safeena et al. (2013), and Yadav et al. (2015). A positive attitude

towards Fintech applications that can be used to pay zakat is supported by the ease, promptness, and benefits. Thus, the Muslim millennials tend to use the Fintech application to pay zakat because it is considered more practical and faster. Of course, this positive attitude can open up great opportunities for zakat management institutions to collect zakat funds from public, especially millennials who are relatively familiar to internet and technology usage in their daily lives.

Subjective norms have a positive effect on the intention to use Fintech to perform zakat payment. This statement is supported by the result of data analysis in this study through the H6. H6 acceptance is based on the support provided by family and closest friends from the Muslim millennials to use Fintech, especially as a means of paying zakat. This result is in the form of direct examples from family and closest friends who prefer to pay zakat using Fintech rather than cash, and there is no prohibition from religious perspective to pay zakat by means of Fintech platforms. Thus, when *muzaki's* family and closest friends support the attitude of paying zakat using Fintech platforms, the intention to perform zakat payment by the assistance of Fintech will be higher. The results of this study are in line with previous research conducted by Usman et al. (2020), Niswah et al. (2019), Elhajjar and Ouaida (2020), Giovanis et al. (2019), Safeena et al. (2013), and Yadav et al. (2015).

In the concept of TPB, perceived behavioral control has a significant role in influencing the intention to perform certain behaviors. This study succeeded in proving this claim by supporting H7 that perceived behavioral control has a positive effect on using Fintech to perform zakat payment. This means that when the Muslim millennials possesses confidence, knowledge, and resources which are needed to pay zakat through Fintech, the intention to use Fintech as a zakat payment platform will be even greater. The resources in question include having adequate internet access, having a smartphone, Fintech applications, and sufficient funds to pay zakat following the provisions. For this reason, this study supports previous studies conducted by Niswah et al. (2019), Chen et al. (2019), Ghazali et al. (2018), Giovanis et al. (2019), Safeena et al. (2013), Troise et al. (2020), and Yadav et al. (2015) which found that perceived behavioral control influenced intention positively and significantly.

With the recognition of five of the seven proposed hypotheses, this study's results add to the literature enhancement related to the confirmation of TAM and TPB models carried out on various research topics by adding the latest coverage, i.e. in Fintech acceptance to pay zakat. The results are further useful for developing Fintech platforms and zakat management in Indonesia, which is having excellent potential. With the rapid development of technology and the internet resources, zakat's massive potential can be optimized through digital zakat, one of them is raising zakat funds through the Fintech applications. Moreover, the Muslim millennials cannot be separated from internet in

their day-to-day activities; hence, using Fintech to perform zakat payment is considered appropriate in the present time.

Conclusion

This study extends the use of TAM and TPB to the zakat context. Particularly, this study explores the determinants of Muslim millennial intentions in using Fintech to perform zakat payment. A significant effect was found on the effect of perceived ease of use and perceived usefulness on attitudes. Moreover, attitudes, subjective norms, and perceived behavioral control significantly affect the use of Fintech to pay zakat. Likewise, this study's empirical results confirm that attitude acts as an intervening relationship between perceived ease of use and perceived usefulness on the Muslim millennials' intention of using Fintech to perform zakat payment. For this reason, this study only accepts five of the seven proposed hypotheses because perceived ease of use and perceived usefulness do not directly affect the intention to use Fintech.

The integration of TAM and TPB in Fintech in the context of zakat payments still remains paucity of evidence. Theoretically, the results of this study contribute to developing the TAM and TPB literature in the zakat context. Practically, it can help zakat management institutions recognize the Muslim millennials' characteristics and develop digital platforms as a means of zakat funding that will hopefully increase Indonesia's zakat potentials. Despite of the compelling results, this study acknowledges a limitation. This study's scope is limited to the context of zakat and the number of samples that might not represent various provinces in Indonesia. Thus, further studies are suggested to analyze the use of Fintech in Islamic social finance instruments other than zakat. The respondents' categories can be more varied, such as students, civil servants, and other groups. Future research can also consider samples of respondents from various provinces in Indonesia to enhance the diversity and represent the whole Indonesian society.

Author's Declaration

The author made substantial contributions to the conception and design of the study. The author took responsibility for data analysis, interpretation and discussion of results. The author read and approved the final manuscript.

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References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T Alalwan, A. A., Dwivedi, Y. K., Rana, N. P. P., & Williams, M. D. (2016). Consumer adoption of mobile banking in Jordan. *Journal of Enterprise Information*

- Management, 29(1), 118-139. https://doi.org/10.1108/jeim-04-2015-0035
- Arora, S., & Sahney, S. (2018). Antecedents to consumers' showrooming behaviour: an integrated TAM-TPB framework. *Journal of Consumer Marketing*, 35(4), 438–450. https://doi.org/10.1108/JCM-07-2016-1885
- Awa, H. O., Ojiabo, O. U., & Emecheta, B. C. (2015). Integrating TAM, TPB and TOE frameworks and expanding their characteristic constructs for e-commerce adoption by SMEs. *Journal of Science and Technology Policy Management*, 6(1), 76–94. https://doi.org/10.1108/JSTPM-04-2014-0012
- Charities Aid Foundation. (2019). CAF World Giving Index 10th Edition. *Charities Aid Foundation, October*. https://www.cafonline.org/about-us/publications/2019-publications/caf-world-giving-index-10th-edition
- Chen, Y., Dai, R., Yao, J., & Li, Y. (2019). Donate time or money? The determinants of donation intention in online crowdfunding. *Sustainability (Switzerland)*, 11(16), 1–21. https://doi.org/10.3390/su11164269
- Chuang, L.-M., Liu, C.-C., & Kao, H.-K. (2016). The Adoption of Fintech Service: TAM perspective. *International Journal of Management and Administrative Sciences* (*IJMAS*), 3(7), 1–15.
- Darmansyah, D., Fianto, B. A., Hendratmi, A., & Aziz, P. F. (2020). Factors determining behavioral intentions to use Islamic financial technology. *Journal of Islamic Marketing*, https://doi.org/10.1108/JIMA-12-2019-0252
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, 13(3), 319–340. https://doi.org/10.2307/249008
- Elhajjar, S., & Ouaida, F. (2020). An analysis of factors affecting mobile banking adoption. *International Journal of Bank Marketing*, 38(2), 352–367. https://doi.org/10.1108/IJBM-02-2019-0055
- Ghazali, E. M., Mutum, D. S., Chong, J. H., & Nguyen, B. (2018). Do consumers want mobile commerce? A closer look at M-shopping and technology adoption in Malaysia. *Asia Pacific Journal of Marketing and Logistics*, 30(4), 1064–1086. https://doi.org/10.1108/APJML-05-2017-0093
- Ghozali, I. (2015). *Structural Equation Modeling: Metode Alternatif dengan Partial Least Square (PLS.* Badan Penerbit Universitas Diponegoro.
- Giovanis, A., Athanasopoulou, P., Assimakopoulos, C., & Sarmaniotis, C. (2019). Adoption of mobile banking services: A comparative analysis of four competing theoretical models. *International Journal of Bank Marketing*, 37(5), 1165–1189. https://doi.org/10.1108/IJBM-08-2018-0200
- Google, Temasek, & Bain&Company. (2019). e-Conomy SEA 2019 Swipe up and to the right: Southeast Asia's \$100 billion Internet economy. In *e-Conomy SEA 2019*. https://www.bain.com/insights/e-conomy-sea-2019/
- Hair, J. J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. SAGE Publications, Inc.
- Hanafizadeh, P., Keating, B. W., & Khedmatgozar, H. R. (2014). A systematic review of Internet banking adoption. *Telematics and Informatics*, 31(3), 492–510. https://doi.org/10.1016/j.tele.2013.04.003

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- 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
- Hudaefi, F. A., Beik, I. S., Zaenal, M. H., Choirin, M., Farchatunnisa, H., & Junari, U. L. (2020). How does zakat institution respond to fintech? Evidence from BAZNAS Indonesia. *IJZIP: International Journal of Zakat and Islamic Philanthropy*, 2(1), 33–40.
- KNEKS. (2018). Masterplan Ekonomi Syariah Indonesia 2019-2024. In *Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional*.
- KPMG. (2020). *The Pulse of Fintech H1* 2020. https://home.kpmg/xx/en/home/insights-/2020/09/pulse-of-fintech-h1-20-global.html
- Leong, K., & Sung, A. (2018). FinTech (Financial Technology): What is It and How to Use Technologies to Create Business Value in Fintech Way? *International Journal of Innovation, Management and Technology*, 9(2), 74–78. https://doi.org/10.18178/ijimt.2018.9.2.791
- Milian, E. Z., Spinola, M. de M., & Carvalho, M. M. d. (2019). Fintechs: A literature review and research agenda. *Electronic Commerce Research and Applications*, 34(March-April), 1–21. https://doi.org/10.1016/j.elerap.2019.100833
- Niswah, F. M., Mutmainah, L., & Legowati, D. A. (2019). Muslim Millennial'S Intention of Donating for Charity Using Fintech Platform. *Journal of Islamic Monetary Economics and Finance*, *5*(3), 623–644. https://doi.org/10.21098/jimf.v5i3.1080
- Nunkoo, R., Ramkissoon, H., & Gursoy, D. (2013). Use of Structural Equation Modeling in Tourism Research: Past, Present, and Future. *Journal of Travel Research*, 52(6), 759–771. https://doi.org/10.1177/0047287513478503
- Puskas BAZNAS. (2020). Outlook Zakat Indonesia 2020. In Baznas.
- PwC Indonesia. (2019). *Indonesia's Fintech Lending: Driving Economic Growth Through Financial Inclusion*. https://pwc.com.
- Rachman, M. A., & Salam, A. N. (2018). The Reinforcement of Zakat Management through Financial Technology Systems. *International Journal of Zakat*, 3(1), 57–69.
- Safeena, R., Date, H., Hundewale, N., & Kammani, A. (2013). Combination of TAM and TPB in Internet Banking Adoption. *International Journal of Computer Theory and Engineering*, 5(1), 146–150. https://doi.org/10.7763/ijcte.2013.v5.665
- Safitri, T. A. (2020). The Development of Fintech in Indonesia. *Advances in Social Science, Education and Humanities Research*, 436(May), 666–670. https://doi.org/10.2991/assehr.k.200529.139
- Saksonova, S., & Kuzmina-Merlino, I. (2017). Fintech as financial innovation The possibilities and problems of implementation. *European Research Studies Journal*, 20(3A), 961–973. https://doi.org/10.35808/ersj/757
- Shaikh, I. M., Qureshi, M. A., Noordin, K., Shaikh, J. M., Khan, A., & Shahbaz, M. S. (2020). Acceptance of Islamic financial technology (FinTech) banking services by

- Malaysian users: an extension of technology acceptance model. *Foresight*, 22(3), 367–383. https://doi.org/10.1108/FS-12-2019-0105
- Thaker, M. A. M. T., Mohd Thas Thaker, H., & Allah Pitchay, A. (2018). Modeling crowdfunders' behavioral intention to adopt the crowdfunding-waqf model (CWM) in Malaysia. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(2), 231–249. https://doi.org/10.1108/imefm-06-2017-0157
- Troise, C., O'Driscoll, A., Tani, M., & Prisco, A. (2020). Online food delivery services and behavioural intention a test of an integrated TAM and TPB framework. *British Food Journal*, 123(2), 664-683. https://doi.org/10.1108/BFJ-05-2020-0418
- Tweneboah-Koduah, E. Y., Adams, M., & Acheampong, G. (2019). The role of theories in social marketing in predicting physical activity behavior among the youth. *Journal of Social Marketing*, 9(4), 398–417. https://doi.org/10.1108/JSOCM-01-2018-0005
- Usman, H., Mulia, D., Chairy, C., & Widowati, N. (2020). Integrating trust, religiosity and image into technology acceptance model: the case of the Islamic philanthropy in Indonesia. *Journal of Islamic Marketing*. https://doi.org/10.1108/JIMA-01-2020-0020
- Venkatesh, V., & Davis, F. D. (2000). 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
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly: Management Information Systems. 27(3), 425-578. https://doi.org/10.2307/30036540
- Yadav, R., Chauhan, V., & Pathak, G. S. (2015). Intention to adopt internet banking in an emerging economy: A perspective of Indian youth. *International Journal of Bank Marketing*, 33(4), 530–544. https://doi.org/10.1108/IJBM-06-2014-0075
- Yahaya, M. H., & Ahmad, K. (2019). Factors Affecting the Acceptance of Financial Technology among Asnaf for the Distribution of Zakat in Selangor A Study Using UTAUT. *Journal of Islamic Finance*, 8(Special Issue), 035–046.
- Yang, H. H., & Su, C. H. (2017). Learner behaviour in a MOOC practice-oriented course: In empirical study integrating TAM and TPB. *International Review of Research in Open and Distance Learning*, 18(5), 35–63. https://doi.org/10.19173/irrodl.v18i5.2991