Society’s Intention in Distribution of Zakat, Infaq and Shadaqah (ZIS) through the Use of Crowdfunding Platform

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ABSTRACT
One of the strategy of collecting zakat, infaq, and shodaqoh (ZIS) fund is through digital collection. However, the community's intention to distribute zakat, infaq and shadaqoh through the crowdfunding platform have increased. The purpose of this study is to discover the Technology Acceptence Model (TAM) and trust theory by analyzing what factors influence the intention of the Indonesian people to channel zakat, infaq and shadaqoh through the use of a crowdfunding platform. The population in this study are people who have used digital payment platforms with a sample of population 385 respondents. This study uses data analysis techniques with the Patrial Least Squares-Structural Equation Modeling (PLS-SEM) method. The results found that society intention in distribution of zakat, infaq and shadaqah (ZIS) through the use of crowdfunding platform affected by perceived ease of use, perceived usefulness and trust. This research is expected to provide benefits about policies to increase behavioral intention to distribute zakat, infaq and Shodaqoh through the use of crowdfunding platforms.

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INTRODUCTION

A decrease in people’s intention to distribute zakah, infak and shadaqah (ZIS) will have an impact on the country's economy, one of which is to increase poverty (Zen & Setiadi, 2017; Sari, Syamsurijal & Widiyanti, 2018; Mahfuzha, et. al., 2019). Because ZIS can reduce poverty levels, as stated by Beik & Irawan (2017) Islam et. al., (2019) which found that with the distribution of zakat, the income level and welfare level of the mustahik household have increased and there is an increase in the spiritual mustahik.

The digital zakat payment platform has been able to increase the number of zakat payers by online system (Santoso, 2019; Hanafi, 2020; Ibrahim & Chek, 2020; Beik, Swandaru & Rizkiningsih, 2021). In 2018 zakat collection through digital reached 6%, in 2019 and 2020 targeted respectively to reach 15% and 30% (Irhamsyah, 2019). Although the collection of zakat through digital continues to increase, there is still not much zakat collected through the platform, because the amount of non-cash muzaki payments is still small when compared to the amount of muzaki in cash (Rosli, Salamon & Huda, 2018; Atiya, et. al., 2020; Nailah & Rusydiana, 2020; Mohammed, et. al., 2021; Harun & Ab Rahman, 2021). Therefore the use of the zakat platform is still ineffective (Mahri et al., 2019).

Given the growth in the collection of zakat funds, people are faced with the need for efficiency in distributing zakat (Manara, 2018; Rachman & Salam, 2018; Salleh & Chowdhury, 2020; Wahid, Osmera & Noor, 2021). While the strategies for collecting zakat funds are continuously carried out by various Zakat Management Organizations to achieve the expected potential (Mujiatun, 2018; Kesuma & Sobri, 2020; Toni, 2020; Saripudin, Djamil & Rodoni, 2020; Widiastuti, et. al., 2021). One of them is innovating with the payment of zakat, infaq, and Shodaqoh through crowdfunding platforms such as Kitabisa.com and Aksi Cepat Tanggap (ACT) which have collaborated with five Amil Zakat Institutions. When making payments through this platform, muzaki can monitor plans, updates, and distribution of zakat so that this can strengthen muzakki’s confidence in distributing zakat as a strategy effort to increase zakat acceptance (World Bank, 2017; Kholid, 2018; Baznas, 2019; Lim, et. al., 2020; Hamdani, 2020; Ninglasari & Muhammad, 2021).

The following figure, show that zakah, infak and shadaqah payment rates through both of two crowdfunding platforms Kitabisa.com and Aksi Cepat Tanggap (ACT) are continuously increasing. Based on figure 1, the amount of ZIS payments received by the crowdfunding platform always increases since 2014 to 2018.
The theory that explains a person’s behavior in the acceptance and use of information systems and technology by individuals according to Davis (1989) is to use the Technology Acceptance Model (TAM). In TAM, there are two main factors, namely perceived benefits and perceived ease of use. Both of these factors are influenced by external variables. The main external factors that usually manifest are social factors, cultural factors, and political factors (Surendran, 2012). This research was conducted to examine how people’s behavior in distributing ZIS funds using a crowdfunding platform using the Technology Acceptance Model (TAM) theory by adding a trust variable. This is because according to Gefen et al., (2003) trust is a central aspect in many economic transactions because of the deeply human need to understand the social environment. Reichheld in Gefen et al., (2003) states that trust is very important in various transactions, especially those that contain an element of risk. Trust has always been an important element in influencing consumer behavior and lack of trust is cited as one of the main reasons why consumers are not involved in e-commerce (Pavlou, 2003).

Asmy et al., (2019) found that perceived usefulness and perceived ease of use had a significant effect on payment intentions with zakat using the Integrated Zakat Crowdfunding Model (IZCM). In line with this research Bashir & Madhavaiah (2015) Sayekti & Putarta (2016) found that trust, social influence, perceived enjoyment, perceived risk and attitude (attitude towards IBS) affects towards behavioral intention to use internet banking. However, Rahmawaty (2016) found that trust has no positive effect on the intention to use internet banking.

This study aims to test the Technology Acceptance Model (TAM) theory by analyzing what factors influence the intention of Indonesians to channel ZIS through the use of a crowdfunding platform and using several exogenous latent variables and endogenous latent variables. Besides, this study analyzes how trust influences the
intensity of Indonesian people in distributing ZIS payments through the use of a crowdfunding platform.

RESEARCH METHOD

The research method used in this research is the causality method using a quantitative approach. The research design used in this research is descriptive research design and explanatory research design. The method for retrieving data is carried out by distributing questionnaires/questionnaires using Google Form technology and disseminated through various communities and distributed to the public at large.

The object in this study consisted of exogenous latent variables, namely the perception of ease of use (X1), and trust (X2). Meanwhile, the endogenous latent variables in this study are behavior intention (Y) and perceived usefulness (M) as mediating variables. The subjects in this study are Indonesians who have used digital payment platforms. This research was conducted in the period from April-August 2020.

According to Zuhdi et al., (2016), the minimum sample size used by PLS-SEM is in the range of 30-100 sample sizes. However, the number of population in the study is unknown, so the sample is taken based on the highest data from the population recommended by Sekaran & Bougie (2016) which is 384 samples around up to 385 samples, and is based on the Lemeshow formula which is as follows (Suryani & Hendryadi, 2016):

\[ n = \frac{Z^2pq}{d^2} = \frac{Z^2p(1-p)}{d^2} \]

Information:
- \( n \) = Number of samples required
- \( Z \) = Score Z, based on the desired value of
- \( \square \) = Degree of freedom
- \( d \) = Error tolerance
- \( p \) = proportion of cases studied in the population, \( p = 0.5 \), if \( p \) is unknown
- \( q \) = \( 1-p \), which is the proportion at which an event occurs, \( q = 1-0.5 = 0.5 \)

In this study, an error tolerance of 5% was used so that the error tolerance limit was 0.05. The amount of Z is determined based on the value \( \square \), if \( \square = 5\% \) then the Z value is 1.96, then the \( Z^2 = 3.84 \) is rounded to 4. Then the formula for determining the sample is as follows:

\[ n = 4pq/d^2 \], then it becomes \( n = 4\frac{(0.5)(1-0.5)}{(0.05)^2} = 384 \)

A total of 385 respondents participated in this study. Respondents have no difficulty understanding the questions given. Table 1 shows the sample demographics.
Table 1. Sample Demographic Description

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>97</td>
<td>25</td>
</tr>
<tr>
<td>Woman</td>
<td>288</td>
<td>75</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-25</td>
<td>302</td>
<td>78.44</td>
</tr>
<tr>
<td>26-35</td>
<td>45</td>
<td>11.69</td>
</tr>
<tr>
<td>36-45</td>
<td>15</td>
<td>3.89</td>
</tr>
<tr>
<td>46-55</td>
<td>15</td>
<td>3.89</td>
</tr>
<tr>
<td>56-65</td>
<td>8</td>
<td>2.08</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SMP</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>SMA</td>
<td>187</td>
<td>49</td>
</tr>
<tr>
<td>D3</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>S1</td>
<td>163</td>
<td>42</td>
</tr>
<tr>
<td>S2</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>S3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Profession</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student</td>
<td>223</td>
<td>58</td>
</tr>
<tr>
<td>ASN/TNI/Polri</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Professional</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>Private Employees</td>
<td>51</td>
<td>13</td>
</tr>
<tr>
<td>BUMN Employee</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Others</td>
<td>59</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 1. Conceptual framework of the Study
This study chooses the following theoretical model to discover the factors influence the intention of Indonesians to channel ZIS through the use of a crowdfunding platform using the Technology Acceptance Model (TAM) and trust theory. Figure 1 show a details of conceptual framework of this study. The hypotheses of this research can be formulated as follows:

- **H1**: Perceived ease of use has a positive effect on behavioral intention
- **H2**: Perceived ease of use has a positive effect on perceived usefulness in using the crowdfunding platform.
- **H3**: Perceived usefulness has a positive effect on behavioral intention to use the crowdfunding platform.
- **H4**: Trust has a positive effect on behavioral intention in using the crowdfunding platform.
- **H5**: Trust has a positive effect on perceived usefulness in using the crowdfunding platform.
- **H6**: Perceived usefulness mediates the relationship between perceived ease of use and intention behavioral.
- **H7**: Perceived usefulness mediates the relationship between trust and intention behavioral.

The data analysis stage will be carried out to answer the research hypotheses that have been formulated. This test is performed using the Partial Least Square-Structural Equation Modeling (PLS-SEM) method. The software used to process data with PLS-SEM was SmartPLS 3.0 version 3.3.2.

**RESULT AND DISCUSSION**

Referring to table 2 at convergent validity of this study, the result of AVE value is above 0.50 for all constructs such as BI, PEOU, PU, and TR. Furthermore, convergent validity was confirmed in this study. Also, the analysis of convergent validity, loading, and cross loading of each construct is carried out, after eliminating one statement on the PEOU and four statements on PU so that the results of loading and cross loading meet the requirements. In this table also describes the data trends on construct loading and the value of cross loadings.

**Table 2. PLS Measurement Model & Result of Cross Loading**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Statements</th>
<th>Removed statement</th>
<th>Statement Details</th>
<th>Main Loading</th>
<th>AVE</th>
<th>Composite Reliability (CR)</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI</td>
<td>3</td>
<td>-</td>
<td>B11,B12,B13</td>
<td>0.883</td>
<td>0.802</td>
<td>0.924</td>
<td>0.520</td>
</tr>
</tbody>
</table>
The result of discriminant validity referring to table 3, the AVE value is greater than each construct when compared to the AVE value of other constructs and the loading value is also greater than the loading value of other constructs. It can be said, the discriminant validity has been fulfilled. The composite reliability value has also met the minimum requirements for data reliability and measurement, which value is above 0.70.
Table 3. The Result of Discriminant Validity Model

<table>
<thead>
<tr>
<th></th>
<th>BI</th>
<th>PEOU</th>
<th>PU</th>
<th>TR</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI</td>
<td>0.896</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEOU</td>
<td>0.666</td>
<td>0.824</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PU</td>
<td>0.632</td>
<td>0.789</td>
<td>0.864</td>
<td></td>
</tr>
<tr>
<td>TR</td>
<td>0.695</td>
<td>0.839</td>
<td>0.743</td>
<td>0.849</td>
</tr>
</tbody>
</table>

On the other hand, according to the results of the bootstrapping test results described in figure 1. To test the hypothesis in this study, the t-statistic value was used partially for each of the direct influence pathways. Based on the result of hypothesis testing path diagram above, all indicators for each variable have a statistical value greater than 1.96 (t-table). To test the relationship between variables (hypothesis testing), the t value of the Smart PLS output is compared with the t table value.

Another indices were used in this study is measuring the relationship between constructs. Table 4 provides the results of the relationship between constructs (variables). Based on reult, PEOU, PU, and TR have a positive effect on BI. PEOU and TR affect PU. This means that hypotheses 1, 2, 3, 4, and 5 in this study are supported.

Table 4. The Result of Hypothesis Test and Mediation Effect Test

<table>
<thead>
<tr>
<th></th>
<th>Original Sample</th>
<th>T Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEOU → BI</td>
<td>0.173</td>
<td>2.434</td>
<td>0.008</td>
</tr>
<tr>
<td>PEOU → PU</td>
<td>0.559</td>
<td>8.469</td>
<td>0.000</td>
</tr>
<tr>
<td>PU → BI</td>
<td>0.193</td>
<td>3.264</td>
<td>0.001</td>
</tr>
<tr>
<td>TR → BI</td>
<td>0.407</td>
<td>5.597</td>
<td>0.000</td>
</tr>
<tr>
<td>TR → PU</td>
<td>0.274</td>
<td>4.134</td>
<td>0.000</td>
</tr>
<tr>
<td>PEOU → PU → BI</td>
<td>0.108</td>
<td>3.163</td>
<td>0.001</td>
</tr>
<tr>
<td>TR → PU → BI</td>
<td>0.053</td>
<td>2.371</td>
<td>0.009</td>
</tr>
</tbody>
</table>

As revealed on the summary model in figure 3, found that the score for X2/df is 1.536 signifies a satisfactory fitness index between both the hypothesised model and the relevant data. In other words, this result is steady with the proposed acceptable ranges of 3 to 1 by Hair et al. (2010). As discoursed earlier, the general fit of the model can be assessed through several indicators. So, in order to evaluate the fitness of the structural model, this study selected several most often reported test statistics. The model fit indices results signpost that the model have an acceptable model fit (X2 = 933.648; df = 608; X2/df = 1.536; P= 0.000; GFI = 913; AGFI = 894; RMSEA = 0.032). The result from a structural model is fit and could be used for hypotheses testing.
Hypotheses are tested for the respective paths in the model. This hypothesis testing uses a significance level of 5%. When using the t-statistical test, at the 5% significance level the value of the t-table is 1.96 with 385 samples. The test criteria for $H_a$ are accepted and $H_0$ is rejected if the t-statistical value is $> 1.96$. The test using the probability level is when the P-Values value $<$ 0.05, then $H_a$ is accepted, and $H_0$ is rejected.

The result of Partial Least Square-Structural Equation Modeling (PLS-SEM) method in figure 1, found that the t-statistical value for all variables has a value above the t-table value. This means that the t-statistic value $> 1.96$. Hypothesis testing in this study uses one tailed or one-party test, which is to test whether the effect is positive or negative. Significance analysis model to see the acceptance or rejection of the hypothesis, it can be seen from the bootstrapping results.

Based on the study found that perceived ease of use which has a positive influence on behavioral intention in using the crowdfunding platform. This means that the easier the crowdfunding platform is used, operated, and learned, the higher the intention or desire to use the crowdfunding platform. The results of this study also in line with what was stated by Khan & Woosley (2011) which states that the desire to use or apply technology will greatly depend on the level of ease in learning and using it. Further, the results of this in line with research conducted by Aditya & Wardhana (2016), Jaziri (2019), Gefen, et. al., (2003), and Patel & Patel (2018) who found that...
perceived ease of use had a positive influence on intention to use technology. However, the results of this test are in contrast to research conducted by Bashir & Madhavaiah (2015) and Rahmawaty (2016) which states that perceived ease of use does not affect behavioral intention.

On the other hand, the perceived ease of use has a positive effect on perceived usefulness which means that the easier the crowdfunding platform can be used, the higher the level of perceived usefulness. This is because technology will not be useful for users if the technology is difficult to use (Fatmawati, 2015). The results of this study in line with what was found by Rahmawati & Narsa (2019), Asmy et al (2019), Suyanto (2019), Jamshidi & Hussin (2015) and Hanggono et. al., (2015) who found that there was a positive relationship between perceived ease of use and perceived usefulness.

Moreover, the result of the study also found that perceived usefulness has a positive effect on behavioral intention. It is means that the more useful and more useful the crowdfunding platform is, the higher the intention or desire to use the crowdfunding platform. The result in line with research conducted by Asmy et. al., (2019), Suyanto (2019), Gefen et. al., (2003), Jaziri (2019), Aditya & Wardhana (2016) and Patel & Patel (2018) which state that there was a positive relationship between perceived usefulness and intention to behave. In contrast, several research conducted by Bashir & Madhavaiah (2015) and Sayekti & Putarta, (2016) found that perceived usefulness does not have a significant effect on behavior intention.

The results of this study also found that trust has a positive effect on behavioral intention. The higher one's trust in the crowdfunding platform, the higher the level of intensity or desire to use the crowdfunding platform. This result in line with research conducted by Tirdanatan et. al., (2014), Rauniar et. al., (2014), Jamshidi & Hussin (2015), Bashir (2015), Li et. al., (2017), Islam et. al., (2019), Gefen et. al., (2003), Jaziri (2019).

Further this study also found that trust has a positive influence on perceived usefulness. The higher the trust in the crowdfunding platform, the higher the level of perceived usefulness in using the crowdfunding platform. This study in line with research conducted by Priyono (2017), Gefen et. al., (2003) and Pavlou (2003) which found that trust has a significant effect to perceived usefulness. However, in contrast to this study found by Loanata & Tileng (2016) that trust has a significant negative effect on perceived usefulness.

On the technology Acceptance Model (TAM) concern, the results of the study found that perceived ease of use has a positive and significant effect on behavioral intention through perceived usefulness as mediation. The results of this study in line with Setiawan & Sulistiawati (2017) and Pavlou (2003) which stated that perceived ease of use of technology did not have a significant effect directly on the intention to use technology. In contrast, Rahmawaty (2016) found that perceived ease of use is not related to interest in usage behavior.
CONCLUSION

The result indicated that society intention in distribution of zakat, infaq and shadaqah (ZIS) through the use of crowdfunding platform was influenced by perceived ease of use, trust, and perceived usefulness. Because perceived ease of use, perceived usefulness, and trust have a positive effect on behavior intention. Meanwhile, perceived ease of use and trust have a positive effect on perceived usefulness. The perceived ease of use and trust have a positive and significant influence on the intention to behave with the perceived usefulness as a mediating variable.

However because of the research on the crowdfunding platform as a medium for distributing Zakah, Infaq and Shadaqah is still limited in Indonesia, further research should use the variables of perceived risk, perceived enjoyment, and promoting effectiveness. Subsequent research is to add respondent data regarding income and separate zakat, infaq, and shodaqoh.

REFERENCES


