



# Analysis of Muzakki Intention in Paying Zakat Using Electronic Zakat Payment System

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**Abstract.** Realization of zakat acceptance in Indonesia is still not optimal even though many Amil Zakat Institutions (AZI- Lembaga Amil Zakat) have developed an Electronic Zakat Payment System (EZPS). This study was conducted to explain behavior intention to use EZPS using a technology acceptance model approach. We used 80 muzakki who are EZPS users, and the data were analyzed using SEM-PLS. We identified that Perceived Usefulness (PU) and Perceived Ease of Use (PEU) have a very significant effect on behavior intention to use EZPS. The implication of this research is that AZI, which develops EZPS, should pay attention to the convenience and usability of EZPS by paying attention to the features, services, and clarity of procedures in using EZPS.

**Keywords:** EZPS · Behavior intention · Muzakki · Mustahik

## 1 Introduction

Indonesia is a country that has the largest Muslim population in the world and has great potential in collecting zakat. In Islam, paying zakat is an obligation and it is part of the pillars of Islam. However, BAZNAS data shows that the zakat collected by Amil Zakat Institutions (AZI) in Indonesia is still below the collected zakat potential [1–3]. The potential for zakat in Indonesia has reached IDR 286 trillion, but the realization of zakat collection only reached 3.7 trillion in 2015 [3]. National zakat collection in Indonesia in 2015 reached Rp 3.7 trillion and this achievement was only 1.3% of its potential [1]. This means that the AZI in Indonesia is still not effective in collecting zakat [1–3].

One of AZIs' efforts to increase zakat collection is by developing a digital zakat payment system (EZPS). Many AZIs have developed EZPS as an effort to make it easier for *muzakki* to pay zakat. BAZNAS, which is the AZI formed by the government, has developed digital zakat and has three platforms, the BAZNAS Platform, the Commercial Platform, and the Social Media Platform [4]. In fact, BAZNAS commercial platform collaborates with 18 e-commerce companies. Another AZI, *Rumah Zakat* also provides zakat payments via T-Cash, OVO, Go-Pay, and bank ATMs. However, Research Forum for Zakat and Philanthropy Indonesia by examining 104 AZI in the period 2016–2018 shows that the acquisition of ZISWAF funds (*Zakat, Infaq, Shodaqoh, and Waqf*) is still

dominated by conventional collection [5]. This fact also shows that the development of an electronic zakat payment system has not been effective in increasing the collected zakat. This is because, basically, the development of information technology is to improve the performance of users of the information system [6]. However, performance improvements are often hindered by users' reluctance to accept and use the developed systems [6].

The experts have tried to explain the problem of *muzakki* paying zakat through AZI. However, previous studies have focused more on the behavior of paying zakat using a psychological theory approach, such as the TPB theory approach. Mukhibad [1] used the Extended Theory of Planned Behavior (TPB) approach to explain the intention of *muzakki* to pay zakat through AZI. The results of his study show that the reputation and trust of *muzakki* towards AZI and religiosity affect the intention of the *muzakki* to pay zakat through AZI. Indahsari [7] used TPB in explaining the intention of *muzakki* in Bangkalan Regency, East Java, in paying zakat and found that *muzakki's* trust in AZI influenced their intention to pay zakat. Haji-Otman [8] used TPB in explaining *muzakki's* behavior in Malaysia and found that religiosity has an important role in moderating impact between perceptions of behavioral control and the intention of *muzakki* to pay zakat.

Unlike previous studies, this study focuses on the problem of *muzakki's* low usage of EZPS as a medium for paying zakat. We use the TAM approach in explaining this problem. The reason is that TAM is used to explain computer usage behavior [9]. However, in the next development, TAM is also used to explain the behavior of using computer-based technology such as e-payment [10–13]. On this basis, we adopt TAM to explain *muzakki's* behavior intention toward EZPS.

We present this paper in five interrelated sections. First, we present the background reasons for the study. Second, we present the TAM theory and hypothesis development. Third, we present samples, variable measurement methods, and data analysis. Fourth, we follow with the results of research and discussion. The final section is the conclusions, implications, and suggestions of the study.

TAM was first introduced by Davis in 1989 [14]. TAM adopts Theory Reason Action (TRA) which is specifically developed to explain the determinants of computer reception behavior [9, 13]. It is used to explain user behavior in the use of computer technology [9]. In explaining the behavior of using information technology, TAM uses two main factors, i.e. the perception of use and the perception of ease [6, 9]. Although TAM is based on TRA, there are two fundamental differences between the two, i.e. (1) TAM looks at external factors from computer technology [15]; (2) TAM does not use subjective norms in explaining user behavior [15].

The next development of TAM is used by researchers in explaining products that use information system technology [16]. Martono [17] and [18] examined user behavior in using financial information systems with the TAM approach. They found that PEU and PE had a positive influence on the intensity of system use and that perceptions of system use would also have a positive influence on system use behavior. Zhong [13], using user behavior in using facial recognition payments, found that enjoyment, facilitation conditions, personal innovation, availability of coupons, ease of use, usability, and user attitudes were the main drivers of customer decisions to use facial recognition payments.

Other researchers also use TAM in explaining the behavior of E-Commerce users [19, 20] and found that PU, convenience, and perceived enjoyment had a positive influence on intention to use E-commerce.

TAM assumes that the first factor that explains the user using or rejecting the information system is the user's perception of the usefulness of the information system. PU is the basic element users use to evaluate the benefits obtained in using a system [21]. The perception of use will be obtained if the user can directly feel the direct impact of using the system [6]. PU is a representation of the user experience, obtained through the use of information technology [21].

PU is the level of user confidence in an information system capable of adding benefits, facilitating work, so that it has an impact on increasing user work performance. PU is defined as the extent to which a user (*muzakki*) believes that using a EZPS will improve his job performance [20]. Thus, the user's PU increases the intensity of a person using the system [21].

PU is defined as the degree to which a user (*muzakki*) believes that task performance can be improved by using certain technologies [13]. By applying this definition to EZPS technology, its PU could be related to *muzakki's* perception that using EZPS would be a more efficient and productive alternative, which could enhance their zakat-paying experience.

H1: Perceived Usefulness (PU) increases *muzakki's* intention to pay zakat using EZPS.

PEU relates to the level of user confidence that using a particular system will be free of effort [22]. PEU is defined as the degree to which a user (*muzakki*) believes that a particular technology can be easily understood or operated [13]. We use this analogy in explaining EZPS. The perception of ease of use can refer to *muzakki's* perception that payment via EZPS is easy to understand and use. The perception of ease of use also concerns procedures, services, and availability of manuals and this will concern *muzakki's* perception in using EZPS.

H2: Perceived Ease of Use (PEU) increases *muzakki's* intention to pay zakat using EZPS.

## 2 Methodology

This study uses *muzakki* who have used EZPS provided by various zakat receiving institutions in the city of Semarang. By distributing questionnaires manually, we obtained 80 *muzakki* who were willing to become respondents.

The variable of PU is measured by the six indicators presented in Table 1. We develop the indicators used by [6, 9, 11, 12, 23–25]. The variable of PEU is measured by the six indicators that we present in Table 1. The same as the method of measuring PU variable, we develop indicators of PEU based on opinions of [6, 15, 24–27]. The variable of behavior intention to use EZPS is measured by three indicators (Table 1). We developed this indicator from [24, 27]. The three variables we used (usefulness, ease of use, behavior intention) we develop from the previous studies by adjusting be in line with the objectives of this study. We used this method because to our knowledge, there is no research that explains the PU, ease of use, and behavior intention to use EZPS.

All variables were measured by a Likert scale with 1 (strongly disagree) to 5 (strongly agree).

The research data will be analyzed using the structure equation model (SEM-PLS). We tested the feasibility of the model by looking at the Average Path Coefficient, Average R-squared, Average Adjusted R-squares, and Average Block VIF [17, 28].

### 3 Results and Discussion

The Table 1 showed that the respondents welcomed EZPS quite well because most respondents agreed to use it. This can be seen in the average score of EZPS behavior intention of 3.42. PU that measures respondents' perceptions of the benefits of EZPS shows an average score of 3.76. This score also shows that the respondents feel that they have received good benefits from EZPS. They think that EZPS is easy to use. However, they feel that EZPS is not flexible enough for transactions. Respondents' perception of the ease of EZPS use have a higher score (4.16). This score shows that the respondents' perception of EZPS is easy to use. Respondents view that EZPS is effective in paying zakat.

The description of each variable is presented in the following table:

The results of the model feasibility test resulted in Average path coefficient (APC) = 0.415,  $P < 0.001$ . Average R-squared (ARS) is 0.643,  $P < 0.001$ . Average adjusted R-squared (AARS) is 0.633,  $P < 0.001$ . Average block VIF (AVIF) is 3.260, and Average full collinearity VIF (AFVIF) is 2,897. This model is ideal because it has AVIF and AFVIF less than 3.3. Thus, the model is suitable to be used to answer the hypothesis.

Path coefficients and P. The value used to test multicollinearity shows the causality between PU and PEU resulting in a coefficient value of 0.606 with P values less than 0.001. This coefficient is less than 0.8 and results in the conclusion that there is no multicollinearity between the independent variables.

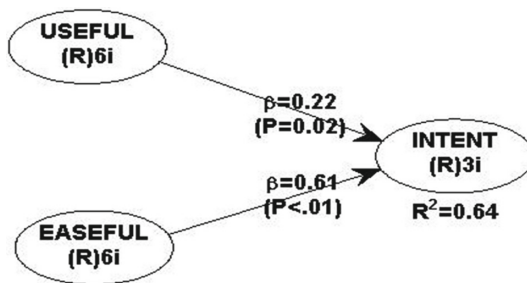
The results of the hypothesis test presented in Fig. 1 show that the relationship of PU to behavior intention to use EZPS has a coefficient of 0.22 with a significance of 0.02, so hypothesis 1 is accepted. This shows that PU has a significant positive effect on *muzakki's* behavior using EZPS. Figure 1 also shows that the relationship between PEU on behavior intention has a coefficient of 0.61 with a significance of  $< 0.01$ . These results show that hypothesis 2 is accepted. PEU has a positive and significant effect on behavior intention to use EZPS.

Our results indicate that PU has a positive effect on *muzakki* behavior using EZPS. These findings corroborate previous findings [12, 16–18, 21, 24, 29]. PU is closely related to obtaining the benefits of using information systems in improving user performance [20, 21]. On this basis, *muzakki* benefit from the use of EZPS. These findings indicate that *muzakki* believe that EZPS can be used as a medium for paying zakat effectively and efficiently. Through EZPS, *muzakki* do not need to go directly to the AZI office to make payments. In addition, through EZPS, direct contact between *muzakki* and AZI, or even between *muzakki* and *mustahik* does not occur. This will certainly support sincerity, reduce conflicts of interest between *muzakki* and *mustahik*, and maintain *mustahik's* good name.

Our results also show that PEU has a positive effect on *muzakki's* behavior using EZPS. This finding is in line with the Technology Acceptance Model, that information

**Table 1.** Descriptive statistics

Indicators	Min	Max	Mean	Std. Dev.
<b>PU</b>				
Using EZPS would make it easier for me	1.00	5.00	3.98	0.75
I will find it easy to do what I want by using EZPS	1.00	5.00	3.84	0.92
My interaction with EZPS will be clear and understandable in making zakat payments	1.00	5.00	3.26	1.17
I would find the EZPS to be flexible to interact with.	1.00	5.00	3.90	0.81
It would be easy for me to become skillful at using the EZPS.	1.00	5.00	4.03	0.86
I would find the EZPS easy to use.	1.00	5.00	4.10	0.84
<b>PUE</b>				
Using EZPS will allow me to complete my obligation to pay zakat	1.00	5.00	4.10	0.84
EZPS will increase my enthusiasm to pay zakat	1.00	5.00	4.05	0.87
EZPS will improve my routine in paying zakat	1.00	5.00	4.24	0.80
EZPS will increase my effectiveness in paying zakat	1.00	44.00	4.68	4.54
EZPS will make paying zakat easier	2.00	5.00	4.03	0.80
I get the benefits of EZPS in paying zakat	1.00	5.00	3.90	0.88
<b>Behavior Intention</b>				
Assuming I had access to the EZPS, I intend to use it.	1.00	5.00	2.10	0.88
Given that I had access to the EZPS, I predict that I would use it.	1.00	5.00	3.91	0.80
I plan to use the EZPS in the future.	1.00	5.00	3.91	0.84



**Fig. 1.** Output model.

systems that have usefulness for users are the main factors for users to use them. This finding is also in line with the findings of previous researchers [16–18, 29]. PEU is used to measure user perceptions of the ease of operating information systems [13]. Easy to operate information systems are information systems that are free from efforts, so that

users find them easy to use [22]. The ease of features and services provided by EZPS to *muzakki* can increase behavior intention to use EZPS. This convenience concerns the availability of manuals, simple procedures, and various services.

## 4 Conclusion

This study was conducted to explain *muzakki*'s behavior in using EZPS as a medium for their payment in paying zakat. We used the Technology Acceptance Model approach in explaining their behavior. Our results show that there are two main factors that become *muzakki*'s reasons of using EZPS, i.e., PU and PEU. These two factors are proven to have a positive and very significant influence on behavior intention to use EZPS.

The implication of this finding is that AZI, which develops EZPS, needs to pay attention to the usefulness of the system. EZPS will be useful if the EZPS offered as an alternative to paying zakat is easy to use, has a user manual, a complete service, and is easily accessible. The focus of this study is EZPS in general and does not specifically focus on one of the EZPS owned by one AZI. Thus, the results of this study explain the behavior of using EZPS in general. Further researchers can focus on certain EZPS to complement the results of this study.

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