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by Yazid Afandi

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ADOPTION OF UTAUT MODELLING TO ANALYZE THE IMPACT OF DIGITIZING ISLAMIC PHILANTHROPY

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Abstract

²¹ The rapid development of financial technology in the ⁵⁹ disruption era has triggered the innovation of donation payments to philanthropic institutions. This study aims to evaluate the determining of individual habits in adopting digital ⁵¹ payment technology in Islamic philanthropic institutions. This research approach uses UTAUT, which is a model to explain user behavior towards information technology adoption. The population of this study is people who have used digital payments in philanthropic institution, such as using m-banking, QRIS, E-Wallet, E-Money, Crowdfunding, Marketplace etc. Sample of 250 respondents was obtained (Muzakki) with random sampling technique. The UTAUT model was solved by path analysis (Structural Equation Modelling) method us ⁴⁴ SmartPLS. The results showed that all constructs had a significant positive effect except for the effect of facilitating conditions on use behavior. The findings of this study indicate that payment digitization is still targeting the technology literate segment. So that policy holders must be more massive in the payment electrification movement that targets all potential segments, such as the middle-aged segment. Given this segmentation, apart from the potential in terms of income, they also have a high awareness of donating.

Keywords: Digitalization, Digital Payment, UTAUT

Abstrak

Pesatnya perkembangan financial technology di era disrupsi memicu adanya inovasi dalam pembayaran donasi pada lembaga filantropi. Penelitian ini bertujuan untuk determinasi kebiasaan individu dalam mengadopsi teknologi pembayaran digital pada lembaga filantropi Islam. Pendekatan penelitian ini menggunakan UTAUT yang merupakan model untuk menjelaskan perilaku pengguna terhadap adopsi teknologi informasi. Populasi penelitian ini adalah masyarakat yang pernah menggunakan pembayaran digital pada lembaga filantropi isla ⁴⁸ seperti menggunakan m-banking, QRIS, E-Wallet, E-Money, Crowdfunding, Makrketplace dll. Sampel yang diambil sebanyak 250 responden (Muzakki) dengan menggunakan metode teknik random sampling. Model UTAUT diselesaikan dengan analisis jalur (Structural Equation Modelling) menggunakan SmartPLS. Hasil penelitian menunjukkan semua konstruk berpengaruh positif signifikan kecuali pengaruh facilitating conditioni terhadap use behavior. Temuan penelitian ini menunjukkan bahwa digitalisasi pembayaran masih menasar segmen melek teknologi. Sehingga pemegang kebijakan harus lebih masif dalam gerakan elektronifikasi pembayaran yang menasar semua segmentasi potensial, seperti segemen setengah baya. Mengingat segementasi ini, selain potensi dari sisi pendapatan, mereka juga memiliki kesadaran berdonasi yang tinggi.

Keywords: Digitalisasi, Pembayaran Digital, UTAUT

Introduction

Islamic teachings are a significant factor in Muslim communities' motivation to engage in charitable giving. Zakat, infaq, shadaqah is the concept of philanthropic ³ alms in Islam (Muhtada, 2014). Zakat in the term Fiqh means a certain amount of assets that are required by Allah SWT to be handed over to those who are entitled (Qardawi, 1999; Qardawi & Kahf, 2000). In terminology (syara'), zakat means compulsory right removed from the property (Az-Zuhaili, 2011). Meanwhile, according to Beik terminologically zakat has the meaning of issuing some assets with certain requirements to be given to certain groups (mustahiq) with certain conditions (Beik, 2009). In general, according to Qardhawiy, zakat can be defined as part of the assets that must be given by every Muslim who meets certain conditions. These requirements are nishab (the ⁴³ minimum amount of assets that must be issued zakat), haul (the period specified when a person is obliged to pay zakat), and the level (the size of the zakat that must be paid) (Qardawi, 1999).

In formal juridical terms, the existence of zakat is regulated in Law No. 38/1999 on Zakat Management. To encourage the implementation of this law, the government has facilitated through Badan Amil Zakat (BAZ) which are tasked with managing zakat, infaq, and alms. Meanwhile, the private sector is allowed to form the Lembaga Amil Zakat (LAZ) to be an alternative choice for the Muslim community in paying Zakat, infaq and alms. Most of the population of Indonesia, who is predominantly Muslim, actually zakat is an economic sector that has the potential to be developed (Muhtada, 2014). Normatively, zakat is a very important social security system in Islam. The existence of zakat is needed in order to reduce poverty and income inequality (Qardawi, 1999). At present, almost all countries in the world are experiencing a recession, which has led to the problem of increasing poverty.

The worldwide economy has suffered ⁵³ as a result of the Covid-19 pandemic. The IMF observed that with over 95% of nations likely to experience recession or negative economic growth, the world economy has reached the verge of collapse. The Covid-19 has also resulted in global economic losses of US\$12 trillion (Fauzia, 2020).

Table 1. World GDP Projection Growth 2020-2023 (yoy)

	Year over Year						Q4 over Q4 2/		
	2020	2021	Projections		Difference from April 2022 WEO		Projections		
			2022	2023	2022	2023	2021	2022	2023
World Output	-3.1	6.1	3.2	2.9	-0.4	-0.7	4.4	1.7	3.2
Advanced Economies	-4.5	5.2	2.5	1.4	-0.8	-1.0	4.7	1.3	1.5
United States	-3.4	5.7	2.3	1.0	-1.4	-1.3	5.5	1.0	0.6
Euro Area	-6.3	5.4	2.6	1.2	-0.2	-1.1	4.7	0.7	2.1
Germany	-4.6	2.9	1.2	0.8	-0.9	-1.9	1.8	0.5	1.5
France	-7.9	6.8	2.3	1.0	-0.6	-0.4	4.9	0.4	1.1
Italy	-9.0	6.6	3.0	0.7	0.7	-1.0	6.4	0.6	1.6
Spain	-10.8	5.1	4.0	2.0	-0.8	-1.3	5.5	1.3	2.3
Japan	-4.5	1.7	1.7	1.7	-0.7	-0.6	0.4	2.4	0.6
United Kingdom	-9.3	7.4	3.2	0.5	-0.5	-0.7	6.6	0.1	1.3
Canada	-5.2	4.5	3.4	1.8	-0.5	-1.0	3.2	2.5	1.7
Other Advanced Economies 3/	-1.8	5.1	2.9	2.7	-0.2	-0.3	4.6	2.0	2.8
Emerging Market and Developing Economies	-2.0	6.8	3.6	3.9	-0.2	-0.5	4.2	2.1	4.7
Emerging and Developing Asia	-0.8	7.3	4.6	5.0	-0.8	-0.6	3.8	4.0	4.7
China	2.2	8.1	3.3	4.6	-1.1	-0.5	3.5	4.1	3.2
India 4/	-6.6	8.7	7.4	6.1	-0.8	-0.8	3.9	4.1	7.2
ASEAN-5 5/	-3.4	3.4	5.3	5.1	0.0	-0.8	4.7	3.4	6.1
Emerging and Developing Europe	-1.8	6.7	-1.4	0.9	1.5	-0.4	6.1	-7.0	7.7
Russia	-2.7	4.7	-6.0	-3.5	2.5	-1.2	4.8	-13.9	4.8
Latin America and the Caribbean	-6.9	6.9	3.0	2.0	0.5	-0.5	3.9	1.8	2.1
Brazil	-3.9	4.6	1.7	1.1	0.9	-0.3	1.6	1.5	1.5
Mexico	-8.1	4.8	2.4	1.2	0.4	-1.3	1.2	2.9	1.0
Middle East and Central Asia	-2.9	5.8	4.8	3.5	0.2	-0.2	...	...	...
Saudi Arabia	-4.1	3.2	7.6	3.7	0.0	0.1	6.7	6.9	3.7
Sub-Saharan Africa	-1.6	4.6	3.8	4.0	0.0	...	...	...	...
Nigeria	-1.8	3.6	3.4	3.2	0.0	0.1	2.4	2.1	2.3
South Africa	-6.3	4.9	2.3	1.4	0.4	0.0	1.8	2.2	1.7
Memorandum									
World Growth Based on Market Exchange Rates	-3.4	5.8	2.9	2.4	-0.6	-0.7	4.4	1.6	2.5
European Union	-5.8	5.4	2.8	1.6	-0.1	-0.9	4.9	0.9	2.8
Middle East and North Africa	-3.4	5.8	4.9	3.4	-0.1	-0.2	...	...	...
Emerging Market and Middle-Income Economies	-2.2	7.0	3.5	3.8	-0.3	-0.5	4.3	2.0	4.7
Low-Income Developing Countries	0.1	4.5	5.0	5.2	0.4	-0.2	...	...	...
World Trade Volume (goods and services) 6/	-7.9	10.1	4.1	3.2	-0.9	-1.2	...	...	...
Advanced Economies	-8.8	9.1	5.3	3.2	-0.3	-1.4	...	...	...
Emerging Market and Developing Economies	-6.2	11.7	2.2	3.3	-1.8	-0.9	...	...	...
Commodity Prices (US dollars)									
Oil 7/	-32.7	67.3	50.4	-12.3	-4.3	1.0	79.2	28.6	-13.4
Nonfuel (average based on world commodity import weights)	6.7	26.1	10.1	-3.5	-1.3	-1.0	16.4	5.7	-0.6
World Consumer Prices 8/	3.2	4.7	8.3	5.7	0.9	0.9	5.6	8.3	4.1
Advanced Economies 9/	0.7	3.1	6.6	3.3	0.9	0.8	4.9	6.3	2.3
Emerging Market and Developing Economies 8/	5.2	5.9	9.5	7.3	0.8	0.8	6.1	10.0	5.7

Source: Kose et al. (2020)

The World Bank (2020) establishes two measurements, which are baseline and the downside scenarios. It is explained how the Covid-19 might push 71 million people into extreme poverty by 2020 under the default scenario. In the meantime, 100 million people are anticipated to fall into this level of poverty in the worst-case scenario. It causes the global extreme poverty rate to rise from 8.23% in 2019 to either 8.82% (baseline scenario) or 9.18% (downside scenario). The World Bank reports that this proportion marks the first rise in worldwide extreme poverty since 1998 (Baznas, 2020a).

The third quarter of 2020 saw Indonesia's GDP decline by 3.49 percent, maintaining the second quarter's economic rate of minus 5.32 percent (Azanella, 2020). The economic impact during a recession is very pronounced and the effect is domino on economic activity. The impact that is felt includes, among others, the drop in investment during a recession, which will automatically eliminate a number of jobs, which causes the rate of layoffs to increase significantly. Production of goods and services has also declined, reducing national GDP. If it is not resolved immediately,

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the domino effect of recession will spread to various sectors. These effects can range from non-performing bank credit to hard-to-control inflation or deflation. Also, the trade balance is minus and has a direct impact on foreign exchange reserves. On a real scale, many people lose their homes because they are unable to pay the installments, weakening their purchasing power. Then, many businesses have to go out of business (Shalihah, 2020). COVID-19 pandemic triggered an increase in the potential for poverty.

Graphic 1. Indonesian Growth Rate of GDP Projection (yoy)



Source: IMF, (2022)

The Islamic social finance sector in facing this economic crisis, offers through Zakat, Infaq and Alms (ZIS) as a potential solution. The position of zakat can be used as a medium to increase the stimulant consumption and production of mustahiq which will generate demand. If this can be done in parallel, it will generate supply. If this situation can be formed, it will gradually restore the balance of economic transactions in society. As the purpose of zakat stated in QS At-Taubah verse 103, "Take zakat from their property, to clean and purify them, and pray for them" (Hambari et al., 2020).

Since the Covid-19 pandemic spread in major cities in Indonesia, the local government has issued preventive policies to deal with the spread of Covid-19, including policies to restrict social movements. So, in the midst of a pandemic situation like this, this initiative will certainly make it easier for muzakki and donors to make zakat payments digitally through a platform that is internally owned by the Zakat Management Organization (OPZ) without having to meet face to face.

BAZNAS and LAZ have made digitalization efforts even before the pandemic took place. However, with the pandemic, BAZNAS and LAZ are increasingly strengthening and optimizing

zakat collection through various digital channels. On the internal channel, the Zakat Management Organization (OPZ) in Indonesia generally has its own website-based digital payment channels. Then, in 2020, most of the OPZs already have external digital channels in collaboration with various providers digital wallet services in Indonesia and have been linked with Quick Response Indonesian Standard (QRIS). So that, with once scan, muzaki or donors can choose which digital wallet will be used in making zakat payments. Furthermore, in utilizing other external digital channels such as platforms crowdfunding, BAZNAS took the initiative to make ZakatHub as a common platform for all OPZs in Indonesia to take advantage of raising zakat funds through a crowdfunding platform (Baznas, 2020b).

The innovation of Islamic digital philanthropy initiated by BAZNAS is expected to increase the funding obtained. Especially with the ease of payment offered, such as through mobile applications, by e-wallets, e money, mobile banking etc. So that the hope is that the increasing funding sector will have an impact on the distribution of aid to people affected by covid-19. Increasing digital financial inclusion would make it easier to implement policies backed by the government to solve this challenge (Sahay et al., 2020)

This study aims to determine potential of islamic philanthropy such as ZISWAF in Indonesia to overcome the crisis that occurred during the covid-19 pandemic. The approach model used is the unified theory of acceptance and use of technology (UTAUT). This model explains public acceptance of the technology used, in this case digital zakat payments. The four primary drivers of intention to embrace new information technology, such as performance expectancy (PE), facilitating conditions (FC), social influence (SI), and effort expectancy (EE) (Venkatesh et al., 2003).

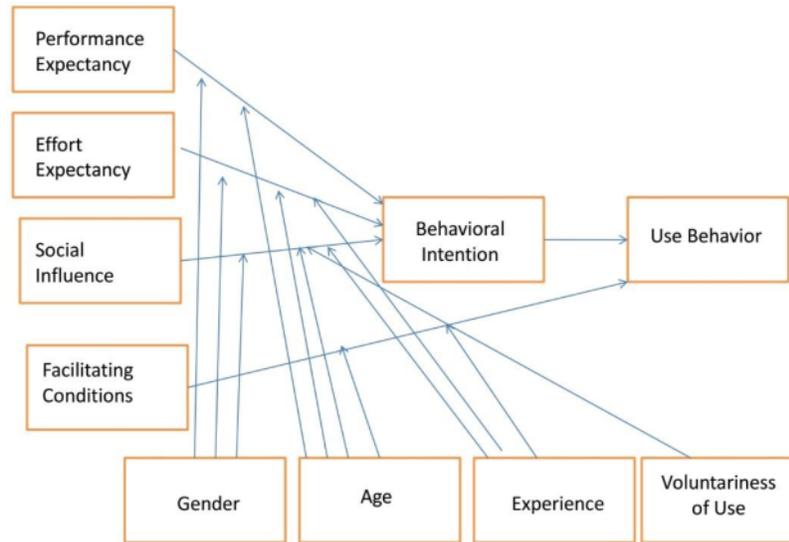
A number of scholars have utilized UTAUT as a model to comprehend how FinTech products and services are being adopted technologically. The UTAUT approach, projects that high public acceptance (muzakki) will increase one's intention (muzakki) to use non-cash zakat payment technology. Especially during a pandemic, this convenience will encourage the community after having the intention to use it, then it will have an impact on getting used to using digital platform-based zakat payment facilities. If this is done intensely and continuously, it will gradually minimize the Gini index (Gini ratio) so as to shorten the income inequality. This is in accordance with the zakat spirit, which wants a distribution of wealth. This wealth distribution will improve economic resilience in the aggregate during a pandemic and even after a pandemic.

Literature Review

One of the most recent technology acceptance models, UTAUT was created by Venkatesh by fusing eight widely used theories of technology acceptance into a single theory. Venkatesh discovered several characteristics that seem to be a substantial direct predictor of behavioral intention (BI) or use behavior (UB) in at least some of the models. Following additional research, it was discovered that four primary constructs, performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC) play a significant role as a direct determinant of behavioral intention (BI) and use behavior (UB). The UTAUT model includes some

moderating variables, such as gender, age, experience, and voluntariness of use as check to see if these factors have the potential to boost or reduce the influence on intentions (Venkatesh et al., 2003). According to Venkatesh's assessment, UTAUT outperformed the other eight theories in explaining up to 70% of user variances (Chang, 2012; Venkatesh et al., 2003).

Figure 1. UTAUT Modelling



Source: Baptista & Oliveira, (2015)

Performance expectancy is a measure of the extent to which an individual believes, that using the system will help individuals to achieve benefits in certain jobs or activities. The five indicators used in performance expectancy are: a) perceived usefulness, i.e the level of confidence in using systems that support performance, b) extrinsic usefulness, which is the user's perception that with increased performance, they will get rewards such as changes in performance, promotions, or salary increases, c) job fit, which is how system capabilities improve user performance, d) relative advantage, which shows that the use of the system will result in innovation when compared without using the system, and e) outcome expectations, i.e the expected results relate to user behavior (Venkatesh et al., 2003).

In the context of digital-based zakat payments, the ease of accessing zakat payment applications (by system) will increase expectations to be more productive due to efficiency in terms of both time and costs. The hope of this benefit will increase the interest of individuals to use digital-based payments, especially in this pandemic, it will create new habits in popularizing digital culture. In several previous studies, it was found that performance expectancy, which is the level of expectation that each individual has that the use of the system can improve performance, can influence individual intentions to use digital platform-based zakat payments (Ahmed & Mansoori, 2017; Farabi, 2016; Hasif & Ahmad, 2019; Sulaeman & Ninglasari, 2020).

H₁: *Performance expectancy has an effect on muzakki's behavior in digital-based philanthropic payments with intention as moderating*

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Effort expectancy is the level of convenience, associated with the use of the system/ technology by users. The three indicators used in effort expectancy are: a) Perceived ease of use, i.e the level of user confidence that using the system will facilitate their business, b) Complexity, i.e that the system is relatively more difficult to understand and use, and c) Ease of use, i.e that the innovation used can cause difficulties in using it (Venkatesh et al., 2003).

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The emphasis in this construct is that convenience plays an important role in determining intentions. In this study, the ease of the digital-based zakat payment application platform has a real impact on increasing payments, both in quantity and frequency. Individuals who feel comfortable with digital payment application such as mobile banking, e-wallets, marketplaces, etc. will influence individual habits in making transactions. This pandemic era requires individuals to minimize social activity so that the use of the application platform makes it easier for them to comply with government recommendations so as not to crowd, maintain distance and carry out social activities. Digital-based payment innovations break down the complexities and difficulties of transactional activities. According to Ahmed, Sulaeman, that effort expectancy, which is defined as the level of convenience associated with using a system, also has a role in shaping individual intentions in using digital technology such as zakat payments, the easier it is to use, the more often it is used and forms habits (Ahmed & Mansoori, 2017; Sulaeman & Ninglasari, 2020).

H₂: *Effort expectancy has an effect on muzakki's behavior in digital-based philanthropic payments with intention as moderating*

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Social influence is the extent to which a person perceives that the other party believes that it is best to use the system/ technology. The three indicators used are: a) Subjective norm, i.e the user's perception that some people will influence their behavior, b) Social factors, i.e the culture that develops in the organization will affect user behavior, and c) Image, i.e the innovation that is carried out will increase the image or status in the social system where the user is located (Venkatesh et al., 2003).

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The main emphasis in this construct is that external factors outside of oneself also play a role in determining individual behavior. In the theory of word of mouth, it is stated that in addition to one's own factors, other people's factors are believed to be the media to influence a person's thoughts. The behavior of paying zakat on a digital basis, for example, may be influenced by other people's testimonies as a form of usage satisfaction. So that the greater the influence of the social environment, it will increase the use of digital transactions, in this case for zakat payments. In several previous studies, social Influence is an external influence on individuals in using technology, enabling individuals to make zakat payments digitally due to the persuasion of others (Farabi, 2016; Hasif & Ahmad, 2019; Sulaeman & Ninglasari, 2020).

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H₃: *Social influence has an effect on muzakki's behavior in digital-based philanthropic payments with intention as moderating*

Facilitating conditions is the extent to which an individual believes that the technical and organizational infrastructure is available to support the use of the system/ technology (Venkatesh et al., 2003). According to Venkatesh et al. (2003) enabling conditions did not have an impact on behavioral intention but did have an impact on use behavior. As a result, the UTAUT models were created to primarily consider how enabling factors affect use behavior. Three indicators in facilitating conditions are: a) Perceived behavioral control, i.e external and internal perceptions that limit behavior and include oneself, resources, facilities conditions and technological conditions, b) Facilitating conditions (facility conditions), i.e environmental objective factors that use ease of doing, including supporting computers, and c) Compability, i.e innovation that is consistent with values, needs and experiences. Facilitating condition is the level of someone believing that the organizational and technical infrastructure is available to support the system, in this case the community (muzakki) believes that zakat institutions have credibility in managing a digital ecosystem (Farabi, 2016).

The results of the research by Venkatesh et al., (2012) supported by the research of Baptista & Oliveira, (2015) which explains that facilitating conditions have an affect on the intention to use e-filing. Khan et al., (2017) which explains that facilitating conditions have a positive influence on the intention to use online banking, as well as research Kranthi & Asraar Ahmed, (2018) which explains that facilitating conditions have a positive influence on the intention to use smart watch technology.

H₄; *Facilitating condition has an effect on muzakki's behavior in digital-based philanthropic payments*

Research Method

People who have used digital payments in charitable institutions make up the study's demographic (population). The sample for this study consists of muzakki who make cashless payments online, either by scanning QR codes or utilizing the online zakat page, mobile banking, crowdfunding, websites, marketplace, or e-wallets (QRIS). Determination of the minimum sample using the Slovin formula as follows:

Formula

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{6743591}{1 + 6743591 (0,1)^2}$$

$$n = 99, 97 \text{ (Minimum 99 respondent)}$$

Information:

N : Population (Calculated based on the population of the Soloraya residency in 2021)

n : Sample
e : error (10%)

The sampling process used random sampling using questionnaire. The questionnaire method is used in the data gathering model along with primary data. The survey employed a Likert scale score range of 1 to 5. The area for distributing the questionnaires is the Surakarta Residency which consists of the districts of Sragen, Karanganyar, Sukoharjo, Kl²³n, Boyolali, Wonogiri and Surakarta City. Quantitative data analysis in this study used a path analysis using structural equation modeling (SEM) approach.

Result

Based on the distribution of online questionnaires using google forms, data were obtained as many as 250 respondents (minimum 99 respondent is proven). Then after the data is processed using descriptive analysis, the following information is obtained:

Table 2. Respondent Information Data

Age		Occupation	
0 – 20	26	PNS / TNI / Polri	38
21 – 30	13	Private sector employee	32
31 – 40	24	Entrepreneur	36
41 – 50	117	Labourer	62
50 – 60	68	Trader	26
60 <	2	IRT	30
		Student	26
6 Education		Saving	
No school	2	No saving	43
Elementary	30	0 – Rp 500.000	133
Junior High	40	Rp 500.000 – Rp 1.000.000	59
Senior High	119	Rp 1.000.000 <	15
Undergraduate	29		
Postgraduate	30		
7 Income (monthly average)		Expenditure (monthly average)	
0 – Rp 1.000.000	97	0 – 1.000.000	108
Rp 1.000.000 – Rp 3.000.000	99	1.000.000 – 3.000.000	105
Rp 3.000.000 – Rp 5.000.000	32	3.000.000 – 5.000.000	22
Rp 5.000.000 – Rp 10.000.000	19	3.000.000 – 10.000.000	13
Rp 10.000.000 <	3	10.000.000 <	2
Gender		Platform	
Male	135	M-Banking	88
Female	115	I-Banking	8
Institution		E-Wallet	25

BAZ	76	E-Money	8
LAZ	128	Crowdfunding	11
Other	46	Marketplace	6
		Web Page	28

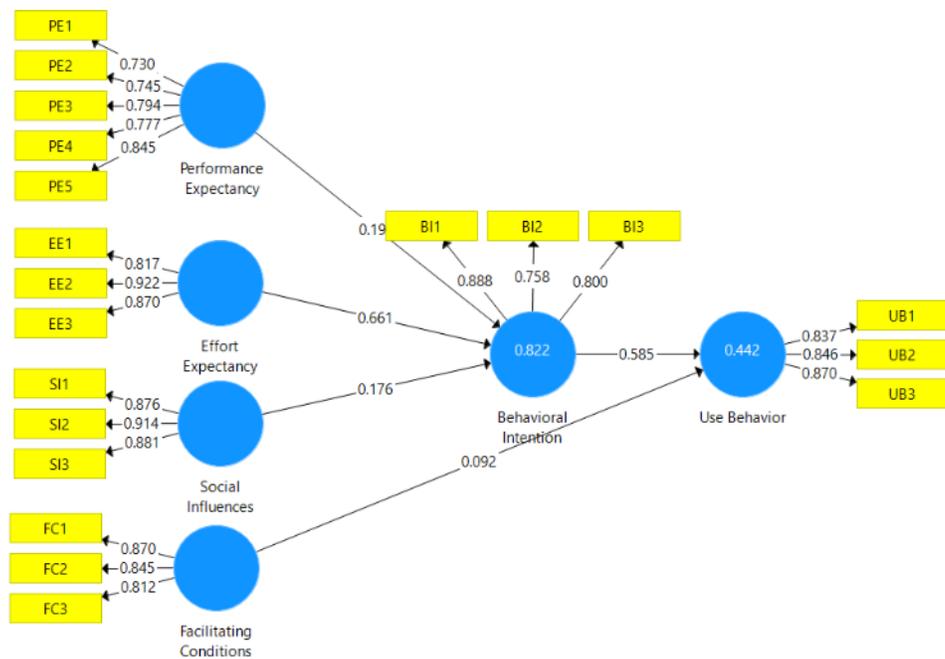
Source: Processed Data (2022)

Outer Model Analysis

Convergent Validity

The correlation between item/indicator scores and construct scores can be used to determine whether the measuring model with reflexive indicators has convergent validity. If an indicator's correlation value is more than 0.70, it is regarded as dependable. However, a loading of 0.50 to 0.60 is still appropriate at the research stage of the scale development stage. The structural model in this study is shown in the following figure:

Figure 2. Outer Loading



Source: Processed Data (2022)

Based on the result for outer loading, the indicator has a loading above 0.60 so it can be concluded that the data does not have convergent validity.

Discriminant validity

The goal of discriminant validity is to determine how significantly the latent construct differs from other constructs. An indication that a construct is distinctive and capable of explaining the phenomenon being measured is a high discriminant validity value. The average variance retrieved is used for the discriminant validity test (AVE). For a good model, a value above 0.5 is advised.

Table 4. Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
BI	0.748	0.755	0.857	0.667
EE	0.839	0.843	0.904	0.758
FC	0.797	0.81	0.88	0.71
PE	0.838	0.845	0.885	0.607
SI	0.87	0.883	0.92	0.793
UB	0.811	0.823	0.887	0.724

Source: Processed Data (2022)

According to the table above, all constructions are reliable because the Average Variance Extracted (AVE) of each variable has a construct > 0.50. As a result, each variable has a high level of discriminant validity.

Composite Reliability and Cronbachs Alpha

The reliability test in PLS can use two methods, composite reliability and cronbach's alpha. Cronbach's alpha evaluates the dependability value of a construct's lower bound, whereas composite reliability measures the reliability value of a construct's actual value. In order to estimate a construct's internal consistency, composite reliability is thought to be preferable. The Composite Reliability value must be greater than 0.7 (>0.7) and Cronbach's alpha must be greater than 0.7 (>0.7) according to the general rule of thumb. Based on table 4 above, each variable's composite reliability and cronbah's alpha value has a construct value greater than 0.7. These findings show that every variable has achieved composite reliability, supporting the assertion that every variable has a high level of reliability.

Inner Model Analysis

Determination (R²)

The purpose of testing the coefficient of determination is to evaluate the model's capacity to explain how the simultaneous influence of the independent variables affects the dependent variable, which is represented by the modified R-Square value (Ghozali, 2016). The coefficient of determination demonstrates how well the independent variables' contribution to the regression model can account for the variation in the dependent variable. Following data processing with the SmartPLS 3.0 application, the R Square value is calculated as follows:

Table 5. Coefficient of Determination (R^2)

	R^2	Ajd R^2
Behavioral Intention	0.822	0.82
Use Behavior	0.442	0.438

Source: Processed Data (2022)

The Adjusted R Square value for the variable behavioral intention is 0.82, according to the table above. This indicates that 82% of the variance in behavioral intention is accounted for by the variables of performance expectancy, effort expectancy, social effects, and enabling situations, while the remaining 18% is accounted for by other variables. The usage behavior variable's Adjusted Square value is currently 0.438. This indicates that 43.8% of purchase decisions are impacted by the variables of performance anticipation, effort expectancy, social effects, enabling situations, and behavioral intention, whereas the remaining 46.2% is influenced by other variables.

Goodness of Fit Model (GoFM)

The goodness of fit test, according to Ghazali (2011), is used to assess how well the sample regression function predicts the real value statistically. The goodness of fit model test indicator can be seen from the following values:

Table 6. Goodness of Fit Model Indicator

Indicator	Cut-Off
RMS Theta	< 0,102
NFI	> 0,9
SRMR	< 0,1
VIF	< 10

Table 7. Goodness of Fit Model Test

	Saturated Model	Estimated Model
SRMR	0.096	0.143
d_ ULS	3.312	4.267
d_ G	4.060	4.530
Chi-Square	3.338.225	3.483.827
NFI	0.953	0.929
rms Theta	0.097	

Table 8. Variable Inflation Factor

Item	VIF	Item	VIF	Item	VIF
BI1	2.011	FC1	1.728	SI1	2.131
BI2	1.352	FC2	1.748	SI2	2.488
BI3	1.688	FC3	1.626	SI3	2.355
EE1	1.731	PE1	1.789	UB1	1.679
EE2	2.883	PE2	1.842	UB2	1.920

EE3	2.261	PE3	1.721	UB3	1.778
		PE4	7.594		
		PE5	8.591		

Source: Processed Data (2022)

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Based on the test results, it is found that the model is robust because it has met the requirements of the goodness of fit test.

Hypothesis Testing

The relationship between the latent components, which has been hypothesized in this study, must then be evaluated after the inner model has been assessed. The T-Statistics and P-Values values were used in this study's hypothesis testing. If both the T-Statistics value and the P-Value are less than 0.05, the hypothesis is accepted. The outcomes of the direct effect Path Coefficients are as follows:

Table 9. Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
BI > UB	0.585	0.578	0.083	7.062	0.000
EE > BI	0.661	0.667	0.049	13.549	0.000
FC > UB	0.092	0.099	0.1	0.927	0.354
PE > BI	0.198	0.197	0.042	4.707	0.000
SI > BI	0.176	0.17	0.031	5.652	0.000

Source: Processed Data (2022)

Based on the table above, it shows that of the five hypotheses that have a direct effect, there is 1 (one) hypothesis that is rejected, namely H₃ because the T-Statistics value is < 1.96 and P-Values > 0.05 while the other 4 (four) hypotheses are accepted because the T-value is - Statistics > 1.96 P-Values < 0.05.

Table 10. Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
EE > BI > UB	0.387	0.386	0.067	5.747	0.000
PE > BI > UB	0.116	0.113	0.028	4.115	0.000
SI > BI > UB	0.103	0.098	0.022	4.716	0.000

Source: Processed Data (2022)

Based on the table above, it shows that the 3 hypotheses that have an indirect effect are accepted because the T-Statistics value > 1.96 P-Values < 0.05.

Discussion

Performance expectancy (PE) is a measure of the extent to which an individual believes that using the system will help individuals to achieve benefits in certain jobs or activities. In table 9, the relationship between the variable performance expectations (PE) and Behavioral intentions (BI) has a T-statistics value of $4.707 > 1.960$, which means that there is a significant direct effect. Furthermore, to test the indirect relationship, it can be seen in table 10 where the relationship between performance expectations (PE) and use behavior (UB) obtains a T-statistics value of $4.115 > 1.960$ which means that it indirectly has a significant effect. So that hypothesis 1 is accepted.

The ease of accessing zakat payment apps (via system) in the context of digital-based zakat payments will raise expectations to be more productive due to efficiency in terms of both time and cost. In particular during this pandemic, it is hoped that these advantages would spur individual interest in adopting digital-based payments, forming new habits and spreading digital culture. In a number of earlier research, it was discovered that Performance Expectancy (PE), or the degree to which a person expects that using a system will improve performance, can influence a person's inclination to utilize a digital platform-based zakat payment system (Ahmed & Mansoori, 2017; Farabi, 2016; Hasif & Ahmad, 2019; Sulaeman & Ninglasari, 2020). However, this only applies to people who are used to adapting financial technology in their daily lives. This segmentation is more suitable for the Indonesian millennial generation, where the frequency of electronic transactions is higher than conventional transactions. This means that the effect is still segmented (Bharata & Widyaningrum, 2020; Wei et al., 2021).

Effort expectancy (EE) is the level of convenience associated with the use of the system/technology by users. In table 9, the relationship between the variable performance expectations (PE) and behavioral intentions (BI) has a T-statistics value of $13.459 > 1.960$, which means that there is a significant direct effect. Furthermore, to test the indirect relationship, it can be seen in table 10 where the relationship between effort expectations (PE) and use behavior (UB) obtains a T-statistics value of $5.747 < 1.960$ which means that it indirectly has a significant effect.

The findings of this study prove that convenience plays an important role in determining one's intention to use something. In this study, it was found that the convenience of a digital-based zakat payment application platform had a significant impact on increasing payments. It is felt by users that the perceived convenience brings an increase in both quantity and frequency of ZISWAF payments. This pandemic era requires individuals to minimize social activities so that the use of application platforms makes it easier for them to comply with government recommendations to continue to comply with health protocols such as social distancing. Previous research also supports that the level of comfort associated with the use of a system also has a role in shaping individual intentions to use digital technology (Ahmed & Mansoori, 2017; Sulaeman & Ninglasari, 2020).

Social influence (SI) is the extent to which a person perceives that the other party believes that it is best to use the system/technology. In table 9, the relationship between the variable social influence (SI) and behavioral intentions (BI) has a T-statistics value of $5.652 > 1.960$, which means that there is a significant direct effect. Furthermore, to test the indirect relationship, it can be seen

in table 10 where the relationship between social influence (SI) and use behavior (UB) obtains a T-statistics value of $4.716 < 1.960$ which means that it indirectly has a significant effect.

In the word-of-mouth theory, it is stated that in addition to self-factors, other people's factors are believed to be a medium to influence one's thinking. Therefore, external factors outside oneself have an influence in determining individual behavior. Specific in the findings of this study is that the behavior of paying zakat digitally is influenced by the testimony of others as a form of user satisfaction. In addition, community testimonials, application ratings, massive advertisements also subconsciously form confidence to use it steadily. So that the greater the influence of the social environment, the greater the use of digital transactions, especially in paying Zakat and other donations. In several previous studies, social influence (SI) is an external influence on individuals in using technology, enabling individuals to make digital zakat payments due to persuasion from others (Farabi, 2016; Hasif & Ahmad, 2019; Sulaeman & Ninglasari, 2020).

Facilitating condition (FC) is the extent to which a person perceives that the other party believes that it is best to use the system/ technology. In table 9, the relationship between the variable facilitating condition (FC) and use behavior UB) has a T-statistics value of $0.927 < 1.960$, which means that there is a no significant direct effect.

The facilitating condition, is the degree to which an individual believes that the organizational infrastructure facilitates the use of technology so that individuals can use the technology comfortably and easily (Rahmatika & Fajar, 2019). Gupta et al., (2018) stated that facilitating conditions reflect the influence of the required resources such as internet or memory for smartphones or hardware and what is also important is knowledge in increasing the intention to use technology. The results of the research by Baptista & Oliveira, (2015) concluded that the facilitating conditions have an influence on the intention to use technology. However, the findings of this study do not support the results of previous studies (Khan et al., 2017; Kranthi & Asraar Ahmed, 2018). This study found that the facilitating conditions (FC) did not affect the use (Use Behavior). This is due to the fact that the main obstacle is not access to facilities, but rather knowledge of the use of technology. Indonesian people in general are still struggling with changes, such as from conventional to digital transactions. Nevertheless, the government has always encouraged the payment transition through the National Non-Cash Movement program, such as e-toll, electricity vouchers, QRIS to digital banking (electronification).

Conclusion

The UTAUT model explains how users behave when using technology. Performance expectancy, effort expectancy, social influence, and facilitating factors are the four main intention and usage determinants in UTAUT. Each factor then influences behavioral intention and use behavior. UTAUT is expected to be a useful tool for policy makers who need to assess the likelihood of success for the introduction of new technologies and help them understand acceptance drivers to proactively formulate interventions targeted at user populations who may be less likely to adopt and use the new system. This study found that the adoption of technology in Islamic philanthropy (ZISWAF Payments) has received good acceptance, but its nature is still limited to layers of society

who are already proficient in using digital transactions, such as the millennial generation and below. Therefore, socialization programs must often be intensified to conduct electronic payments (digital). The National Non-Cash Movement (GNNT), which was initiated by the government, does show data on the implementation of massive payment transitions. However, education for the non-technologically literate segment such as the elderly needs to be considered, considering that this group is a potential segment in terms of income and awareness of donations.

Bibliography

- Ahmed, K., & Mansoori, A. (2017). *Use of a modified UTAUT model to investigate Emirati Citizens ' adoption of e-Government in Abu Dhabi Use of a Modified UTAUT Model to Investigate Emirati Citizens ' Adoption of e -Government in Abu Dhabi A Thesis submitted in partial fulfilment of the Fa.* <https://ro.uow.edu.au/theses1>
- Az-Zuhaili, W. (2011). *Fiqih Islam Wa Adillatuhu*, Terj. Abdul Hayyie al-Kattani, dkk. In 5.
- Azanella, L. A. (2020). *Indonesia Resmi Resesi, Ini Bedanya dengan Krisis dan Depresi Ekonomi*. Kompas. <https://www.kompas.com/tren/read/2020/11/06/162000865/indonesia-resmi-resesi-ini-bedanya-dengan-krisis-dan-depresi-ekonomi?page=all>
- Baptista, G., & Oliveira, T. (2015). Understanding mobile banking: The unified theory of acceptance and use of technology combined with cultural moderators. *Computers in Human Behavior*, 50, 418–430. <https://doi.org/10.1016/j.chb.2015.04.024>
- Baznas. (2020a). *Zakat in Time of Covid-19 Pandemic: Evidence From World Zakat Forum* (Baznas (ed.)). Center of Strategic Studies – The National Board of Zakat (Puskas BAZNAS). <https://drive.google.com/file/d/1mudt9GRe2xoihO1ZL0lffhFNf2RM0WpB/view>
- Baznas, P. (2020b). *Outlook Zakat Indonesia 2021*. Pusat Kajian Strategis – Badan Amil Zakat Nasional (PUSKAS BAZNAS). <https://drive.google.com/file/d/1VWF8UEtDMitsz0bWRfh2O7bAWFP98QO/view>
- Beik, I. (2009). Analisis Peran Zakat Dalam Mengurangi Kemiskinan: Studi Kasus Dompot Dhuafa Republika. *Pemikiran Dan Gagasan*, 2(January 2009), 45–53.
- Bharata, W., & Widyaningrum, P. W. (2020). Analisis Penerimaan Teknologi Mobile Banking Terhadap Use Behavior Melalui Pendekatan Model Utaut 2 (Studi Pada Nasabah KCU BCA Malang). *CAPITAL: Jurnal Ekonomi Dan Manajemen*, 3(2), 139–159. <https://doi.org/10.25273/CAPITAL.V3I2.6080>
- Chang, A. (2012). UTAUT and UTAUT 2: A Review and Agenda for Future Research. *The Winners*, 13(2), 10. <https://doi.org/10.21512/tw.v13i2.656>
- Farabi, N. A. (2016). Analisis Penerapan Sistem informasi ZISW Dengan Menggunakan Metode UTAUT. *Indonesian Journal on Computer and Information Technology*, 1(2), 71–79.
- Fauzia, M. (2020). *IMF: Covid-19 Sebabkan Perekonomian Global Rugi Rp 168.000 Triliun*. Kompas. <https://money.kompas.com/read/2020/06/25/125033526/imf-covid-19-sebabkan-perekonomian-global-rugi-rp-168000-triliun>
- Gupta, A., Dogra, N., & George, B. (2018). What determines tourist adoption of smartphone apps?: An analysis based on the UTAUT-2 framework. *Journal of Hospitality and Tourism Technology*, 9(1), 48–62. <https://doi.org/10.1108/JHTT-02-2017-0013>
- Hambari, Arif, A. A., & Zaim, M. A. (2020). The Role of Zakat Institution in Facing Covid-19: A Case Study of the Federal Territory Islamic Council (MAIWP) of Malaysia. *4th International Conference of Zakat (ICONZ)*, January.

- <https://www.iconzbaznas.com/submission/index.php/proceedings/article/view/225/113>
- Hasif, M., & 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, 035–046.
- Khan, I. U., Hameed, Z., & Khan, S. U. (2017). Understanding Online Banking Adoption in a Developing Country. *Journal of Global Information Management*, 25(1), 43–65. <https://doi.org/10.4018/JGIM.2017010103>
- Kose, M. A., Ohnsorge, F., Pazarbasioglu, C., Arteta, C., Baffes, J., Dieppe, A., Guénette, J.-D., Kabundi, A., Kasyanenko, S., Celik, S. K., Kindberg-Hanlon, G., Kirby, P., Maliszewska, M., Matsuoka, H., Nagle, P., Okawa, Y., Okou, C., Ruch, F. U., Steinbach, R., ... Maximiliano, A. (2021). *Global Economic Prospects* (Issue June).
- Kranthi, A. K., & Asraar Ahmed, K. A. (2018). Determinants of smartwatch adoption among IT professionals – An extended UTAUT2 model for smartwatch enterprise. *International Journal of Enterprise Network Management*, 9(3–4), 294–316. <https://doi.org/10.1504/IJENM.2018.094669>
- Muhtada, D. (2014). Islamic Philanthropy and the Third Sector: The Portrait of Zakat Organizations in Indonesia. *Islamika Indonesiana*, 1(1), 106. <https://doi.org/10.15575/isin.v1i1.43>
- Qardawi, Y. Al. (1999). Fiqh Al Zakah: A Comparative Study of Zakah, Regulations and Philosophy in the Light of Qur'an and Sunnah (Volume I). In *King Abdulaziz University*.
- Qardawi, Y., & Kahf, M. (2000). Fiqh Al Zakah: A Comparative Study Of Zakah, Regulations And Philosophy In The Light Of Qur'an And Sunnah. *Fiqh Al Zakah (Volume II)*.
- Rahmatika, U., & Fajar, M. A. (2019). Faktor - Faktor yang Mempengaruhi Minat Penggunaan Electronic Money: Integrasi Model TAM – TPB Dengan Perceived Risk. *NOMINAL*, VIII, 274–284.
- Sahay, R., von Allmen, U. E., Lahreche, A., Khera, P., Ogawa, S., Bazarbash, M., & Beaton, K. (2020). *The promise of fintech : financial inclusion in the post COVID-19 era* (Issue 20).
- Shalihah, N. F. (2020). *Mengenal Apa Itu Resesi Ekonomi, Dampak, dan Penyebabnya*. Kompas. <https://www.kompas.com/tren/read/2020/08/04/151000465/mengenal-apa-itu-resesi-ekonomi-dampak-dan-penyebabnya-?page=all>
- Sulaeman, S., & Ninglasari, S. Y. (2020). An Empirical Examination of Factors Influencing the Behavioral Intention to Use Zakat-Based Crowdfunding Platform Model for Countering the Adverse Impact of COVID-19 on MSMEs in Indonesia. *International Conference of Zakat*, 203–218. <https://doi.org/10.37706/iconz.2020.218>
- 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), 425–478. <https://doi.org/10.2307/30036540>
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). *Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology I*. 36(1), 157–178.
- Wei, M. F., Luh, Y. H., Huang, Y. H., & Chang, Y. C. (2021). Young Generation's Mobile Payment Adoption Behavior: Analysis Based on an Extended UTAUT Model. *Journal of Theoretical and Applied Electronic Commerce Research 2021*, Vol. 16, Pages 618-637, 16(4), 618–637. <https://doi.org/10.3390/JTAER16040037>

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