



Factors influence online donation during COVID-19 pandemic

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Abstract

This research analyses the factors influencing user behaviour (UB) towards the online donation from cash to non-cash. This study uses quantitative research within Partial Least Square – Structural Equation Modeling (PLS-SEM) tools. The data of this study is compiled by questionnaire on 124 respondents in East Java who made online donations during the Covid-19 pandemic (March 2020 – 2021). This research uses a technology adaptation model that is the UTAUT (Unified Theory of Acceptance and Use of Technology) model using the facilitating conditions (FC), performance expectancy (PE), effort expectancy (EE) and social influence (SI) variables. The results of this study indicate that (a) FC has a positive and significant effect on PE and SI, (b) PE and SI have a positive and significant effect on EE, and (3) PE and SI have a positive and significant effect on UB. Meanwhile, ease of donating online (Effort Expectancy) does not provide influence user behaviour of online donations. In addition, recommendations are also given to online donation organisations to improve collaboration, credibility and use of promotion media.

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Introduction

The existence of restrictions on social activities due to the COVID-19 pandemic has caused changes in people's behaviour in activities to fulfill their needs. Daily life activities like office work and school education should be done from home. Currently, 60% of the community does work from home, 52% obeys public transportation rules, and 53% of the community carries out worship activities from home (Median, 2020). Economic activity also shifts from physical meetings and cash payments to online non-cash payments (electronically or digitally). This

condition can support the implementation of Bank Indonesia's National Non-Cash Movement or *Gerakan Nasional Non-Tunai* (GNNT) program in the form of electronic money as one of Indonesia's official payment instruments. The GNNT program is one of the efforts to achieve Bank Indonesia's long-term policy, namely the Indonesian Payment System (*SPI/Sistem Pembayaran Indonesia*) 2025. This policy is a form of adjustment from Bank Indonesia to changes in people's behaviour in transactions and digital technology innovations. Based on the type of storage media, electronic money is stored in the form of card- and software-based products (Hidayati et al., 2006). Card-based products are electronic money products stored in the form of cards. Meanwhile, software-based products are electronic money products stored in smartphone applications.

Based on an interview with the head of the Amil Zakat Institutions (LAZ) in East Java, the Covid-19 pandemic has affected the acceptance of zakat, infaq, and alms starting in March 2020. The impact of Covid-19 on community activities also affects donors in making donation payments, whether zakat, infaq, alms, or other Islamic social funds. Ryandono (2009) states that zakat is one of the pillars of Islam and obligatory alms for every Muslim. The term zakat lexically means purification and growth, and terminology is a part of the assets a Muslim must spend on certain activities in a certain way at a particular time, as described in the Qur'an and Sunnah. Thus, a certain percentage of excess wealth is taken from wealthy Muslims (muzaki or donors) when wealth exceeds the minimum threshold (nisab) and then given to poor Muslims to reduce the gap between the rich and the poor (Mustahik) (Djaghballou et al., 2017). Based on the Qur'an letter At Taubah verse 60 regarding zakat recipients for eight groups: indigent, poor, amil, converts, slaves, *gharimin*, travellers, and *fisabilillah*.

In comparison, infaq comes from the word *anfaqa-yunfiqu*, which means to spend/finance related to the realization of Allah's commandments. The infaq command is found in the Al-Qur'an Surah At Tagabun verse 16. According to the fifth edition of the KBBI, *infaq* is a gift (donation) of property and so on (other than obligatory zakat) for good. Therefore, *infaq* does not recognise the nisab or the amount of legally determined property. *Infaq* also does not have to be given to certain mustahik or recipients but can be given to anyone, such as family, relatives, orphans, poor people, or people who are on travel. In addition to infaq, there is also the gift/spending of assets called alms. Alms is a gift that is not only limited to wealth. Allah encourages people to multiply *infaq* and alms. The distribution of alms or donations can be used for disaster management, medical expenses, compensation for orphans, and others.

Pertiwi and Herianingrum (2020) stated that based on Law no. 23 of 2011 concerning zakat management, two institutions manage zakat in Indonesia, namely the National Amil Zakat Agency (BAZNAS) and the National Amil Zakat Institution (LAZNAS). The community formed the Amil Zakat Institution (LAZ) to assist in collecting, distributing, and utilising zakat through a comprehensive, measurable, and sustainable empowerment program to encourage community empowerment. For coordination and synergy between LAZs in East Java, the East Java Zakat Forum (FOZ) was formed with 54 Zakat Management Organizations (OPZ) members. Beik (2020) stated that one institution that plays a role in overcoming the impact of Covid-19 is the zakat institution. BAZNAS and LAZ have shown their involvement in response activities to this pandemic in health and socio-economic programs.

Central BAZNAS, for example, until May 25, 2020, has disbursed Rp 28.32 billion allocated for health emergency programs (39%), socio-economic emergencies (59%), and current program security (2%). The Financial Services Authority (OJK), on its official website <https://www.ojk.go.id> states that the Sharia-based Non-Bank Financial Industry (IKNB) is a pillar of strength in Islamic finance industry, whose development is expected to contribute to sharia economic development in Indonesia. Sharia IKNB is a field of activity related to activities in the insurance industry, pension funds, financing institutions, and other financial service institutions, which in their implementation do not conflict with sharia principles. Among

other things that have been carried out by Sharia Financial Institutions (LKS) based on Sharia Law which has been issued by the National Sharia Council of the Indonesian Ulama Council (DSN MUI), are Mudharabah Financing (Qirad), Musyarakah Financing, Ijarah Financing, Wakalah, Mudharabah Musytarakah Contracts, and Kafalah Contracts. The existence of LAZ is one of the crucial elements in supporting the implementation of Sharia IKNB activities, significantly improving the community's welfare through the distribution of zakat, infaq, and alms funds.

The change in payment method payment needs to be addressed wisely by LAZ and FOZ East Java, in general, to maintain and even increase the collection. This is important to note, considering that changes and the application of new technology will affect user acceptance, in this case, Muzakki or donors. Donors' inability to accept the changes will reduce the number of donations. As well as the inability of LAZ to prepare donation technology suitable to donors' characteristics will reduce the collection of donations, so in the end, it will reduce the distribution for the empowerment of needy people. The change in the donation method in question is from cash payment to non-cash using (1) Fintech (Financial Technology) company media such as Go-Pay, OVO, and LinkAja for payments via QR code scans, (2) e-commerce such as Elevania.co.id, Blibli.com, Shopee.co.id, Tokopedia.com ([Sulaeman & Ninglasari, 2020](#)) and transfers either through the website or between banks. Judging from the number of smartphone users connected to the internet, or called smartphones, based on Statista (2019), until today, smartphone penetration of the Indonesian population is quite significant, about a quarter of the total population. Based on Statista (2019) data, smartphone users 2019 only reached 28% of the total population of Indonesia in 2019. This figure is projected to continue to increase in the next four years so that in 2023 it will reach 33% of the total population of Indonesia. Based on this description, smartphone users will become potential customers as LAZ donors.

Based on the described description regarding the impact of Covid-19 and support for non-cash payment methods, there has been a change in donating from cash to online. From March 2020 to March 2021, online donation methods have been carried out through FinTech, e-commerce, and interbank transfers. To improve the quality of online donation payments, it is necessary to research the use behaviour of donors. The model considered in analysing the behaviour of using this technology is the UTAUT (Unified Theory of Acceptance and Use of Technology) model as in the research of [Sivanthanu \(2017\)](#), [Oliveira et al. \(2014\)](#), [Sulaeman and Ninglasari \(2020\)](#), [Tarahini et al. \(2014\)](#), [Lim et al. \(2020\)](#), [Zhou et al. \(2010\)](#), [Mahri et al. \(2019\)](#), [Rahmat and Purnaningsih \(2020\)](#), [Gupta and Aurora \(2019\)](#), [Farabi \(2016\)](#) and [Oetari and Maryani \(2020\)](#). UTAUT was built for use in information and communication research through evaluation and a combination of model factors from previous studies to explain information systems. [Venkatesh et al. \(2003\)](#) examined the primary constructs of all eight models and joined the most important constructs to form UTAUT, which can be seen as an improved version of TAM. The model was later validated in a longitudinal study and was found to explain 70 per cent of the variation in usage intentions. Gender, age, experience, and voluntary use are the four main intervention factors influencing user intentions and behaviour.

In this study, the variables observed to affect online donation users' behaviour were the variables considered in the UTAUT model: facilitating conditions, performance expectancy, effort expectancy, and social influence. This study tested eight hypotheses using the Partial Least Square – Structural Equation Modeling (PLS-SEM) method. By knowing the influence of variables and indicators on user behaviour, it is hoped that it can be input for online donation management organisations (FinTech, e-commerce, bank transfers) to develop programs following online donation users' behaviour.

Hypothesis Formulation

The hypothesis of this research consists of the following discussion.

Facilitating condition is the degree to which an individual believes that the existing technical and organisational infrastructure supports the use of the system ([Venkatesh et al., 2003](#)). Thus, Venkatesh proved that facilitating conditions (FC) are determinants of adopting new information technology. [Rachmat et al. \(2020\)](#) also stated that facilitating condition and performance expectancy significantly influence the behavioural intention variable (behavioural intention). From the above discussion, it can be stated that

H1. Facilitating conditions has a positive and significant effect on performance expectancy.

The perceived ease of use is significantly influenced by facilitating conditions and personal innovativeness in IT. It is proven by [Lim et al. \(2020\)](#) empirical study, which stated that facilitating conditions influence the perceived ease of use significantly. [Lim et al. \(2020\)](#) stated that facilitating condition and effort expectancy significantly influence the behavioural intention variable (behavioural intention). From the above discussion, it can be stated that

H2. The condition of the facility (Facilitating Condition) has a positive and significant effect on the ease of donating online (Effort Expectancy).

[Lim et al. \(2020\)](#) proved that facilitating conditions are essential in predicting the perceived usefulness of mobile internet banking among Gen-Y in Malaysia. Lim then suggests that facilitating conditions could increase the perception and capabilities of an individual toward the usefulness of the mobile banking application ([Lim et al., 2020](#)). Facilitating conditions which help in the delivery of mobile internet banking services will enhance the perception of usefulness and confidence of an individual to have a positive attitude to adopt mobile internet banking ([Crabbe, 2009](#)). Individuals who perceive mobile internet banking as comfortable to use when they are aware of environmental conditions can help them learn the method of using mobile internet banking even if they are not familiar with it ([Ja-Chul et al., 2009](#)). [Sulistiyowati \(2017\)](#) also supports this hypothesis that facility conditions and social influences significantly affect behavioural intentions regarding e-office technology. From the above discussion, it can be stated that

H3. Facilitating Conditions has a positive and significant effect on Social Influence.

[Rachmat et al. \(2020\)](#) stated that performance expectancy and effort expectancy significantly influence the behavioural intention variable. In other research, [Sulistiyowati \(2017\)](#) also found that performance expectations and social influences significantly affect behavioural intentions regarding e-office technology. From the above discussion, it can be stated that

H4. Performance Expectancy has a positive and significant effect on Effort Expectancy.

Social influence on online zakat payment platforms is when the individual choice is trusted by other people which will affect the use of the new system ([Mahri et al., 2019](#)). This hypothesis, also supported by [Rachmat et al. \(2020\)](#), stated that social influence and effort expectancy significantly influence the behavioural intention variable. From this discussion, it can be stated that

H5. Social Influence has a positive and significant effect on Effort Expectancy

Research by [Sulistiyawati \(2017\)](#) and [Rachmat et al. \(2020\)](#) found that performance expectations significantly influence the behavioural intention variable. This result is supported by [Yahaya \(2019\)](#) that performance expectancy positively affected the intention to use mobile banking for the distribution of zakat in Selangor, Malaysia. From this discussion, it can be stated that

H6. Performance Expectancy has a positive and significant effect on Use Behavior.

Based on [Mahri \(2019\)](#), the higher effort expectancy of muzaki against online zakat payment platforms will have implications for one's intention or the intention to pay zakat using the online zakat payment platform. The high expectations of the business are caused by muzaki's perceived ease when operating the online zakat payment platform. This hypothesis was also proved by [Rachmat et al. \(2020\)](#) that effort expectancy brought a significant influence on the behavioural intention variable. From the above discussion, it can be stated that

H7. Ease of donating online (Effort Expectancy) has a positive and significant effect on user behaviour (Use Behavior) of online donations.

[Mahri et al. \(2019\)](#) proved that the higher the social influence of muzaki against the online zakat payment platform would impact one's intention to pay zakat using an online platform. People who pay zakat using the online zakat payment platform are driven by a relatively high social impact of the online zakat payment platform. So it can be said that it is a form of social influence of the surrounding environment muzaki to pay zakat using the online zakat payment platform. This hypothesis is also supported by [Sulistiyawati \(2017\)](#) research, which stated that social influences significantly affect behavioural intentions in e-office technology. In other research, [Farabi \(2016\)](#) also found that social influence significantly influences the Behavior and Use of SIZISW at the Yatim Mandiri Foundation. From the above discussion, it can be stated that

H8. Social Influence has a positive and significant effect on Use Behavior.

The research gap to be resolved is regarding analysing variables that affect user behaviour (donors) on the method of donating from cash to non-cash, especially during the Covid-19 pandemic. The proposed conceptual model is shown in Figure 1. This study modified the UTAUT model to measure user behaviour (use behaviour) of online donations using FinTech, e-commerce, and interbank transfer methods. Based on the conceptual model shown in Figure 1, this study uses eight hypotheses.

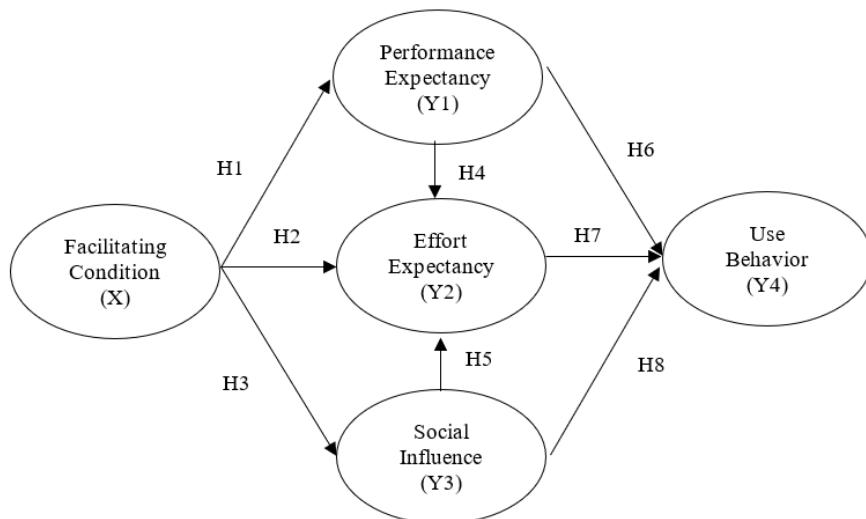


Figure 1. Conceptual model of donating behaviour during the Covid-19 pandemic

The eight hypotheses are described in Table 1 and the reference journals used. There are three new hypotheses as research gaps, namely H3, H4, and H5.

Table 1. Research hypothesis

Hypothesis	Hypothesis Description	References
H1	Facilitating conditions has a positive and significant effect on Performance Expectancy.	(Lim, Ahmad, Ikhsan, & Silitonga, 2020)
H2	Facilitating conditions has a positive and significant effect on Effort Expectancy.	(Lim, Ahmad, Ikhsan, & Silitonga, 2020)
H3	Facilitating conditions have a positive and significant effect on Social Influence.	
H4	Performance Expectancy has a positive and significant effect on Effort Expectancy.	
H5	Social Influence has a positive and significant effect on Effort Expectancy.	
H6	Performance Expectancy has a positive and significant effect on Use Behavior.	(Yahaya & Ahmad, 2019), (Rachmat, Baga, & Purnaningsih, 2020), (Sulaeman & Ninglasari, 2020), (Farabi, 2016)
H7	Effort Expectancy has a positive and significant effect on Use Behavior.	(Mahri, Nuryahya, & Nurasyiah, 2019), (Rachmat, Baga, & Purnaningsih, 2020), (Sulaeman & Ninglasari, 2020)
H8	Social Influence has a positive and significant effect on Use Behavior.	(Mahri, Nuryahya, & Nurasyiah, 2019), (Yahaya & Ahmad, 2019), (Rachmat, Baga, & Purnaningsih, 2020), (Sulaeman & Ninglasari, 2020), (Farabi, 2016)

Methodology

The conceptual framework describes the relationship between the supporting model and use behaviour, namely donors' behaviour towards the donation method (zakat, infaq, alms, and other Islamic social funds) from cash to non-cash. The variables used in this study are performance expectancy, effort expectancy, social influence, facilitating conditions and user behaviour. Detailed operational definitions of variables are in table 1.

Table 2. Variable Operational Definition

Code	Variable	Operational Definition	Source
PE	<i>Performance Expectancy</i>	Individuals expect their activity performance to increase when using a particular system (online donation).	(Venkatesh et al., 2003) (Alraja et al., 2016)
EE	<i>Effort Expectancy</i>	The expectation of individuals regarding the amount of effort that must be expended in using a particular system (online donation).	(Venkatesh et al., 2003) (Christiono & Brahmana, 2018)
SI	<i>Social Influence</i>	The influence of the social environment of individuals in using a particular system (online donation).	(Venkatesh et al., 2003) (Kana & Ariyanti, 2018)
FC	<i>Facilitating Condition</i>	The belief is that there is a means that facilitates the use of a particular system (online donation).	(Venkatesh et al., 2003) (Kana & Ariyanti, 2018)
UB	<i>Use Behavior</i>	The realisation of consumer behaviour using a particular system (online donation).	(Keaveney, 1995) (Fahmi, 2017) (Jati & Laksito, 2012) (Farabi, 2016)

A quantitative research approach uses data analysis in numbers to develop mathematical models, theories, or hypotheses related to the phenomena investigated by researchers (Suryani & Hendrayadi, 2015). In this study, the modified UTAUT model was carried out by adding the relationship hypothesis between variables: the effects of the facilitating conditions on social influence, the effect of performance expectancy on effort expectancy, and the effects of social influence on effort expectancy. This research used an online survey method to collect data from an observed population. The data of this study was compiled by an online questionnaire within a purposive sampling method. Respondents of this research consist of 124 donors of social funds in East Java who made online donations during the Covid-19 pandemic (March 2020 – 2021).

Concerning previous research and the suitability of the type of data obtained in this study, this research uses the Partial Least Squares - Structural Equation Modeling (PLS-SEM) data processing method. The PLS-SEM method is due to the type of data that is a matrix from the measurement results, with multiple dependent and independent variables. The variables used are latent, meaning that these variables must be operationally defined through manifest variables or indicators. The indicators in this study are reflective, meaning the process of developing indicators by looking for variables whose nature mirrors a constructed variable (Pertiwi & Herianingrum, 2020).

Results and Discussion

Respondents descriptive analysis

Data was collected by filling out questionnaires to respondents. Respondents are donors who have made online donations through fintech, e-commerce, and transfer methods from March 2020 to 2021 in East Java. The questions in the questionnaire are indicators used to measure variables. Table 3 shows the details of the indicators. One hundred twenty-four respondents filled out the questionnaire. They fulfilled the PLS-SEM data adequacy test with four independent variables at a significant level of 5% and a minimum R^2 of 0.1, namely 113 data (Ghozali & Latan, 2014). The respondents' descriptive data are presented in Table 4 related to gender, age range, occupation, and city of origin. Jobs are categorised into seven criteria.

Table 3. Indicator table (manifest variables)

Code	The keyword of the indicator	Indicator	References
Facilitating Condition			
FC1	Availability of institution	I think regional institutions (Lembaga Amil Zakat/LAZ) have supported online donation payments.	(Sulaeman & Ninglasari, 2020)
FC2	Availability of facilities	I have the supporting facilities (such as the internet) needed to make online donation payments.	
FC3	Sufficient knowledge	I have basic knowledge of making online donation payments.	(Zhou, Lu, & Wang, 2010)
FC4	Availability of facilities	Payment of donations online can be made via smartphones and other electronic devices (computers or laptops) that I currently have.	
FC5	Institution service	If I am having trouble donating payment online, I know that customer service will help.	(Gupta, 2019)
Performance Expectancy			
PE1	Motivation to donate	The availability of online transactions motivates me to make donation payments.	(Sulaeman & Ninglasari, 2020)
PE2	Donate speed	I did not have to wait too long to find the online donation payment transaction status.	
PE3	Donate speed	I can make donation payments faster online than offline (cash).	(Sulaeman & Ninglasari, 2020), (Zhou, Lu, & Wang, 2010), (Gupta, 2019)
PE4	Benefits of donating	Payment of donations online is helpful for my interests.	(Zhou, Lu, & Wang, 2010), (Gupta, 2019)
PE5	Cost efficiency	I can save costs in making donation payments online compared to offline (cash).	(Oliveira, Faria, Thomas, & Popovic, 2014)
Effort Expectancy			
EE1	Ease of donating	I can easily make donation payments online.	(Sulaeman & Ninglasari, 2020), (Zhou, Lu, & Wang, 2010)
EE2	Availability of supporting features	I can quickly learn about the features of the online donation payment service.	

Code	The keyword of the indicator	Indicator	References
EE3	Convenience of donating	I feel comfortable when making donation payments online.	(Gupta, 2019)
EE4	Donate safety	I have no doubts when it comes to making donation payments online.	(Oliveira, Faria, Thomas, & Popovic, 2014)
Social Influence			
SI1	Family support	My family supports making online donation payments.	(Sulaeman & Ninglasari, 2020), (Zhou, Lu, & Wang, 2010)
SI2	Environmenta l support	The social environment around me supports me in making online donation payments.	(Gupta, 2019)
SI3	Prestige in society	People who make online donation payments are more attractive (prestige) than those who transact offline (cash).	(Oliveira, Faria, Thomas, & Popovic, 2014)
SI4	Many people do	I make donation payments online because many people do that too.	
SI5	Following the trend	I feel that making donation payments online is the current trend.	
Use Behavior			
UB1	Donate more often	I more often make donation payments online than offline (cash).	(Zhou, Lu, & Wang, 2010), (Oliveira, Faria, Thomas, & Popovic, 2014)
UB2	Try additional features	I tried the additional service features found in online donation payments.	(Oliveira, Faria, Thomas, & Popovic, 2014), (Sivathanu, 2017)
UB3	Donate more money	I donate more online in nominal terms (rupiah) than offline (cash).	(Yeh, 2020)
UB4	Prefer online donation	I prefer to do online transactions for the payment of donations.	(Oliveira, Faria, Thomas, & Popovic, 2014), (Yeh, 2020)
UB5	Recommend online donation	I recommend paying donations online rather than offline (cash) to others.	(Alaeddin, Altounjy, & Zainudin, 2018)

Table 4 shows that the percentage of male respondents is 38.39%, and female respondents are 51.61%. Based on the age range, the age of 31 to 40 is the most, namely 50%. The highest jobs are private employees, 39.52%, and civil servants, 25.81%. Meanwhile, based on city origin, the percentage of respondents from Surabaya was 62.10%.

Table 4. Respondents' descriptive data

Gender	#	Percentage	Age Range	#	Percentage
Female	64	51.61%	18 - 23 years old	7	5.65%
Male	60	48.39%	24 - 30 years old	16	12.90%
			31 - 40 years old	62	50.00%
			41 - 50 years old	24	19.35%
			Above 50 years old	15	12.10%
Occupation	#	Percentage	City of Origin	#	Percentage
Private employees	49	39.52%	Surabaya	77	62.10%
Civil Servant	32	25.81%	Gresik	15	12.10%
Entrepreneur	11	8.87%	Sidoarjo	11	8.87%
BUMN employee	8	6.45%	Malang	5	4.03%
Housewife	8	6.45%	Jember	3	2.42%
Lecturer	7	5.65%	Others	13	10.48%
Student	6	4.84%			
Others	3	2.42%			

Analysis of online donation payment methods

This study's online donation payment methods are financial technology (FinTech), e-commerce and transfer. Table 5 shows the results of the recapitulation of respondent payment methods.

OVO, GoPAy, LinkAja and DAN are FinTech companies in great demand by the public to support online transactions. In the FinTech method, OVO occupies the highest percentage of 26.72%; the second is GoPay, 24.43%. Furthermore, Sharia Services with a rate of 15.27%, LinkAja with a rate of 16.69% and DANA with a percentage of 11.45%. Ipsos Customer Experience Research Director Olivia Samosir stated that GoPay controlled 58% of digital wallets, followed by OVO at 29%, DANA at 9% and LinkAja at 4%.

The biggest e-commerce method is kitabisa.com, which is 43.40%, then Tokopedia.com at 21.70% and shopee.co.id at 14.15%. Furthermore, there is another e-commerce but with a percentage that is not large enough, namely Bukalapak.com. blibli.com, Health Care, lazada.co.id, elevania.co.id and WeCare.id.

Table 5. Online donation payment method

Financial Technology			E-commerce			Transfer		
OVO	35	26.72%	kitabisa.com	46	43.40%	Direct	110	78.57%
GoPay	32	24.43%	Tokopedia.com	23	21.70%	interbank		
Sharia Service	20	15.27%	Shopee.co.id	15	14.15%			
LinkAja	22	16.79%	Bukalapak.com	5	4.72%	Via Website	30	21.43%
DANA	15	11.45%	Blibli.com	4	3.77%			
Flip	2	1.53%	Peduli Sehat	3	2.83%	Others	0	0.00%
PayPal	2	1.53%	Lazada.co.id	3	2.83%			
OY!	1	0.76%	Elevania.co.id	1	0.94%			
Others	2	1.53%	WeCare.id	1	0.94%			
			Others	5	4.72%			

As many as 78,57% of respondents prefer to transfer zakat, infaq, alms and other Islamic social funds directly to the account number of the intended online donation manager. Meanwhile, 21.43% of respondents made transfers by opening the website and following the steps listed on the website.

Evaluation and analysis of measurement model

Validity test

The convergent validity test aims to determine the correlation between indicators used to measure a latent variable (Ghozali & Latan, 2014). The validity test was carried out based on the Loading Factor (LF) criteria and Average Variance Extracted (AVE) values. The LF value is used to measure each indicator of each latent variable. Meanwhile, the AVE value is used to measure each latent variable. An indicator is highly correlated if it has a Loading Factor (LF) value greater than equal to 0.7 or an Average Variance Extracted (AVE) value greater than equal to 0.5 (Hair, Hult, Ringle, & Sarstedt, 2016). Based on Table 6, it is known that all latent variables in this study have met the criteria for convergent validity. This is indicated by the Average Variance Extracted (AVE) value which ranges from 0.572 to 0.781.

The discriminant validity test aims to ensure that the indicators used in different latent variables do not have a high correlation (Ghozali & Latan, 2014). Two criteria will be used in the test based on the value of Cross Loading and Fornell. The requirements for the Cross Loading value will be met if the Loading Factor (LF) value of a latent variable is greater than the Loading Factor (LF) value of other latent variables (Ghozali & Latan, 2014). Based on table 4.23, all latent variables in this study are valid based on the discriminant validity test with Fornell's criteria.

Reliability test

After all indicators and latent variables were declared valid based on the convergent and discriminant validity test criteria, the reliability test was carried out. The test was conducted to measure the internal consistency of a latent variable with a minimum value criterion of 0.6 (Ghozali & Latan, 2014). Based on Table 6, it is known that all latent variables in this study have reliability. This is indicated by the Composite Reliability (CR) value which ranges from 0.869 to 0.932. Thus, there are five latent variables and 20 valid and reliable indicators in this study.

Evaluation and analysis of structural models

Multicollinearity test

Multicollinearity occurs when two or more independent variables are interrelated (Garson, 2016). This study's multicollinearity test was only performed on the structural model. This is done because the measurement model in this study is reflective. If a measurement model is formative, then a multicollinearity test is carried out on the measurement and structural models (Hair, Hult, Ringle, & Sarstedt, 2016).

Coefficient of determination test

The coefficient of determination test aims to determine the ability of the independent latent variable to explain the latent dependent variable (Ghozali & Latan, 2014). Based on Table 7, the coefficient of determination is known through the R square adjusted value of this study's four dependent latent variables, namely PE, EE, SI, and UB. For example, the independent latent variable (FC) used to measure the latent dependent variable (PE) could only explain 0.411, equivalent to 41%. Meanwhile, 59% of other factors cannot be explained through the indicators in this study.

Table 6. Result of validity and reliability test

Variable	Indicator	Loading Factor	Composite Reliability	Average Variance Extracted (AVE)	AVE Square root value (\sqrt{AVE})
Facilitating Conditions (FC)	FC2	0.904	0.915	0.781	0.884
	FC3	0.852			
	FC4	0.895			
Performance Expectancy (PE)	PE1	0.833	0.905	0.658	0.811
	PE2	0.787			
	PE3	0.819			
	PE4	0.870			
Effort Expectancy (EE)	EE1	0.814	0.902	0.699	0.836
	EE2	0.787			
	EE3	0.905			
	EE4	0.834			
Social Influence (SI)	SI1	0.824	0.869	0.572	0.757
	SI2	0.822			
	SI3	0.731			
	SI4	0.673			
	SI5	0.720			
Use Behavior (UB)	UB1	0.893	0.932	0.773	0.879
	UB3	0.833			
	UB4	0.916			
	UB5	0.872			

Table 7 Result of multicollinearity and coefficient of determination test

Variable	Multicollinearity Test					Coefficient of Determination Test	
	FC	PE	EE	SI	UB	R Square	R Square Adjusted
FC	1.00 0		1.960	1.00 0			
PE			2.136		3.413	0.416	0.411
EE					3.937	0.747	0.741
SI			2.094		2.178	0.404	0.399
UB						0.675	0.667

The test was carried out based on the Variance Inflation Factor (VIF) value criteria. A latent variable will be free from multicollinearity if it has a VIF value of less than 5 (Hair, Hult, Ringle, & Sarstedt, 2016). Based on Table 7, it can be seen that the structural model in this study is free from multicollinearity. This is indicated by the VIF, which ranges from 1 to 3,937.

Hypothesis test

The bootstrapping method is one of the advantages of PLS-SEM, where random sampling can be done with the help of a computer (Ghozali & Latan, 2014). In this study, hypothesis testing was carried out using the bootstrapping method through the smartPLS 3.2 software. The method was carried out with a bootstrapping sample size value of 5000 (Hair, Hult, Ringle, &

Sarstedt, 2016), and the significance level used was 0.05 with the type of test in the form of a two-tailed test.

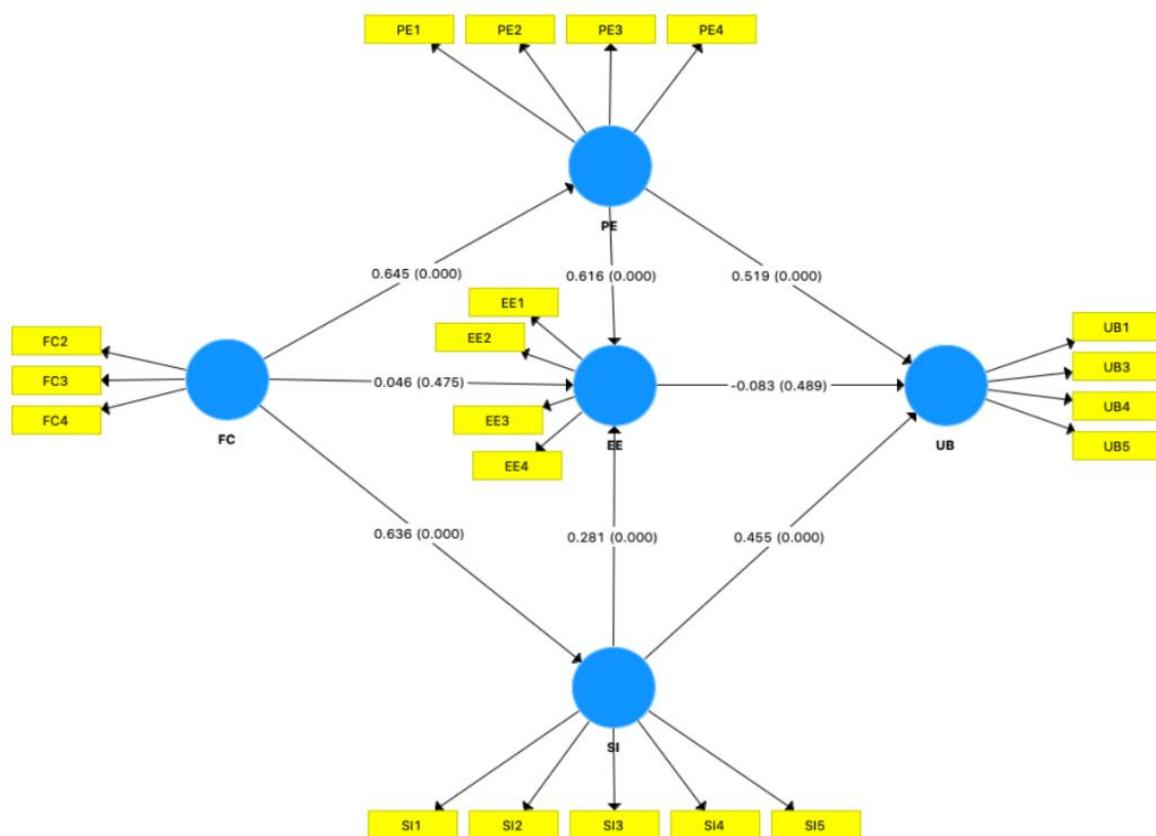


Figure 2. Structural model results

The two-tailed test was chosen because the direction of the value generated from a correlation in this study can be negative or positive (Garson, 2016). Thus, the p-value obtained is 0.05. Based on Figure 2, it is known that there are 6 out of 8 hypotheses that show significant results. This is indicated by the p-value, which is smaller than 0.05. Moreover, the path coefficient value can determine the direction of the hypothetical relationship.

Facilitating conditions has a positive and significant effect on Performance Expectancy

Facilitating conditions in the form of availability of donor facilities in the form of internet and electronic devices (smartphones and laptops) and sufficient knowledge of donors in making online donation payments. This variable is proven to impact the Performance Expectancy of online donations positively and significantly. So that it can increase donors' motivation to donate online, support the speed of donating and increase the benefits of donating online. Respondents as donors who made online donations stated that their internet support facilitates online donation transactions anywhere and anytime within smartphone and laptop facilities they have. So they can make online donation transactions anywhere and anytime. This is, of course, in line with the data of Statista (2019), which states a big smartphone penetration in Indonesia. Based on this description, smartphone users are the supporting capacity for increasing online donations through FinTech media, e-commerce or interbank transfers.

This research result follows Venkatesh et al. (2003) that facilitating conditions is one of the determinants of adopting new information technology. Rachmat et al. (2020) also stated that

facilitating conditions and performance expectancy significantly influence behavioural intention.

The condition of the facility (Facilitating Condition) does not affect the ease of donating online (Effort Expectancy)

This result follows Raleting and [Raleting \(2011\)](#) that facilitating conditions do not influence perceived usefulness in mobile internet banking. However, this study's result differs from [Sulistiyowati \(2017\)](#) and [Lim et al. \(2020\)](#) finding that facilitating conditions are essential in predicting the perceived usefulness of mobile internet banking among Gen-Y in Malaysia. Also, not support [Crabbe \(2009\)](#) that facilitating conditions could help in the delivery of mobile internet banking services will enhance the perception of usefulness and confidence of an individual to have a positive attitude to adopt mobile internet banking ([Crabbe, 2009](#)).

Facilitating Condition has a positive and significant effect on Social Influence

Facilitating conditions in the form of availability of donor facilities in the form of internet and electronic devices (smartphones and laptops) and sufficient knowledge of donors in making online donation payments have a positive and *significant influence on Social Influence in online donations. This increases the support of family and environment (coworkers, relatives) in donating online and the number of donors who donate online.

Respondents also stated that they could determine to whom the donation will be distributed, which gives satisfaction to the donor and becomes an advantage of online donation. Time efficiency and satisfaction in donating online can ultimately increase the motivation of donors to continue using the online donation system and increase the number of donations made. This finding is in line with [Venkatesh et al., 2003](#) and [Alraja et al., 2016](#) that an individual's belief in using a particular system can help him achieve benefits that will facilitate his performance, in this case, the performance of making donations.

Performance Expectancy has a positive and significant effect on Effort Expectancy

Performance Expectancy in the form of motivation to donate, speed of online donation, and the benefits of online donation in the form of clarity of distribution objectives and recorded transactions have a positive and significant impact on Effort Expectancy. The benefits donors felt included the practical convenience of donating, the availability of supporting features, and the convenience and safety of donating.

Based on research by [Venkatesh et al., 2003](#) and [Kana & Ariyanti, 2018](#), environmental influences will support the use of the new system, namely online donation. In this study it was confirmed that the influence of the social environment, both from family and the environment (relatives, coworkers), prestige in society, the number of people who use and trends in using online donations influence the ease of donating online. The online donation system shows that the effort individuals expend to fulfil the need for donation ([Christiono & Brahmana, 2018](#)) is less than offline donations.

Social Influence has a positive and significant effect on Effort Expectancy

Social Influence in donating online in the form of family and environmental support (relatives, coworkers), prestige in the community, the number of people who have made online donations and following all-digital trends have a positive and significant impact on Effort Expectancy. This can increase the convenience and security of online donations felt by donors. Respondents stated that they prefer to donate online for payment of zakat, infaq, alms and other Islamic donations. In addition, respondents also stated that they often donate online and with more value than offline donations (cash). This is in line with research conducted by [Jati & Laksito, 2012](#) regarding the number of users' intensity in using information technology.

One of the widely used online donation platforms is Kitabisa. Kitabisa is a crowdfunding platform for donating or raising funds online that already has a Money and Goods Raising permit (PUB) from the Ministry of Social Affairs and has also been registered as a Zakat Collecting Unit (UPZ) within the National Amil Zakat Agency (BASNAZ). Based on the advantages of the online donation system that respondents felt, both from the performance expectancy variable and the social influence variable, the respondent stated that he would recommend paying donations online rather than offline (cash) to others. This condition is in line with the research of [Keaveney, 1995](#) [Fahmi, 2017](#) regarding the behaviour that occurs when consumers use a service with other alternative services.

Performance Expectancy has a positive and significant effect on Use Behavior

Performance Expectancy in the form of motivation to donate, speed of online donation, and the benefits of online donation in the form of clarity of distribution objectives and recorded transactions have a positive and significant impact on the Use Behavior of online donations. Donors prefer to donate online, so donors make more frequent donations. This result is in line with research by [Sulistiyowati \(2017\)](#), [Yahaya \(2019\)](#) and [Rachmat et al. \(2020\)](#) that performance expectations have a significant influence on the behavioural intention variable.

Ease of donating online (Effort Expectancy) does not provide influence user behaviour (Use Behavior) of online donations

This result is not supported by the research of [Rachmat et al. \(2020\)](#) that effort expectancy brought a significant influence on the behavioural intention variable. On the other side, this research is supported by [Yahaya \(2019\)](#) that effort expectancy is not proven to affect user behaviour of mobile banking for zakat distribution. Moreover, [Farabi \(2016\)](#) research also stated that effort expectancy impacts donor behaviour. This ineffectiveness of the effort expectancy (EE) variable on user behaviour (UB) based on [Farabi \(2016\)](#) can be possible because there is still a lack of socialisation of the application of SIZISW so that its use is less familiar; this results in SIZISW being not easier to understand, learn and interact with.

Social Influence has a positive and significant effect on Use Behavior

This research proved that social influence positively and significantly influences the Use Behavior of online donations. So Muzakki (donors) who have donated online would recommend this system to others. This research follows [Mahri et al. \(2019\)](#) that a relatively high social impact drives people who pay zakat using the online zakat payment platform. So, it can be said that it is a form of social influence of the surrounding environment muzaki to pay zakat using the online zakat payment platform. In other research, this result also supports [Sulistiyowati \(2017\)](#), [Yahaya \(2019\)](#) and [Farabi \(2016\)](#) that social influence has significant influence on donor user behaviour.

Conclusion

The results of this study indicate that (a) Facilitating condition has a positive and significant effect on PE and SI, (b) Performance Expectancy and SI have a positive and significant effect on EE, and (3) PE and Social Influence have a positive and significant effect on UB. Meanwhile, the ease of donating online (Effort Expectancy) does not provide influence user behavior of online donations. At the end of the study, several recommendations were given. The first is a collaboration between institutions/organisations that provide online donations through FinTech, e-commerce, and bank transfers. The second is increasing the credibility of online donation services by providing real-time reports and updates to donors. The third is to use various

promotional media to inform online donation programs to expand donors' reach and distribution.

This study has several limitations, including the number and the range of respondents who became the research object. Research is still reaching respondents in East Java, represented by 14 towns. This is due to the limited research time, so it is necessary to limit the scope of questionnaire distribution. Further research can be extended to all districts in East Java and the Java Island. In addition, the variables used in the research model are also limited, focusing on the acceptance of new technology variables studied by Venkatesh. However, the advantage of this study is to test three new hypotheses which have not been studied previously. Further research can be developed to research the use behaviour of online donations by considering related variables only technology (Task Technology Fit/TTF models). This thing needs to be done to find out how the influence of technology on online donation system acceptance.

Author's Contribution

Muhamad Nafik Hadi Ryandono: Supervision, Conceptualization, Investigation, Validation, Writing -Original draft.

Aditya Kusuma: Conceptualization, Writing -Original draft, Methodology, Formal analysis.

Anny Maryani: Interview and process data collection.

Ida Wijayanti: Writing-Review & editing, Project administration.

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Declaration of Competing Interest

We declare that we have no conflict of interest.

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