

Perceived Enjoyment, Application Self-efficacy, and Subjective Norms as Determinants of Behavior Intention in Using OVO Applications

Wahyu Agus WINARNO¹, Imam MAS'UD², Trias Widya PALUPI³

Received: November 05, 2020 Revised: January 05, 2021 Accepted: January 15, 2021

Abstract

This study examines the role of perceived enjoyment, self-efficacy, and subjective norms as determinants of behavioral intention to use the OVO application. This study's target population is the users of the OVO application who have used it as an electronic transaction. This study's population was the OVO application users as an electronic transaction tool in Jember Regency. Samples were randomly selected at the time of the survey with specific criteria. The survey location is determined at the Plaza because it is a shopping center that mostly has payments at OVO partner merchants. The model empirically tested using data gathered from 150 respondents of OVO users. The research model was tested by using the structural equation modeling (SEM) approach. The results showed that all constructs in the original TAM model were statistically significant. Subjective norm has a positive effect on perceived usefulness, and perceived enjoyment positively affects perceived ease of use of OVO applications. On the other hand, applications' self-efficacy does not affect the perceived ease of using OVO applications for electronic transactions. This condition shows that subjective norms are dominant external individual perspectives compared to self-efficacy, which are personal internal characteristics in determining the behavioral intention of using OVO applications in electronic transactions.

Keywords: Perceived Enjoyment, Self-efficacy, Subjective Norm, Technology Acceptance Model, OVO Applications

JEL Classification Code: M14, M15, M31, M38

1. Introduction

Electronic business development can never be separated from the use of information technology (IT). Information technology is considered vital because it makes companies able to compete globally and creates conveniences and practicalities for individuals who use it. As a form of cutting-edge IT, smartphones have made mobile payment models in society grow rapidly (Teo et al., 2015). People will find it

easier to carry out activities and fulfill non-cash payments only through their mobile devices. The Government of Indonesia, through Bank Indonesia since 2009, has launched and supported payments via mobile devices. On 14 August 2014, Bank Indonesia also encouraged non-cash transactions, often known as the National Non-Cash Movement. During the Covid-19 pandemic starting in early 2020, when it could not be predicted when it would end, making physical distancing even more stringent was applied so that alternatives for people to transact cashlessly or with online transactions would increase.

According to Financial Times Confidential Research, there are five major Mobile Payment service providers in Indonesia, namely Go-pay, OVO, TCash, BCA, Klikpay, Doku wallet (Khoirunnisa, 2019). Go-pay was the leader during the period, and OVO came in second despite OVO a newcomer. Furthermore, the claim that OVO is the number one platform in Indonesia is strengthened by the statement of the Financial Times Confidential Research, which states that the increase in the OVO rating has resulted from the promotion of aggression that expanded the service to become a payment partner in the Grab and Tokopedia applications (Khoirunnisa, 2019).

¹First Author and Corresponding Author. Faculty of Economics and Business, University of Jember, Indonesia [Postal Address: Kampus Tegalboto, Jl. Kalimantan No.37, Jember, Jawa Timur 68121, Indonesia] Email: wahyuaw@unej.ac.id

²Faculty of Economics and Business, University of Jember, Indonesia. Email: mas.imam@unej.ac.id

³Faculty of Economics and Business, University of Jember, Indonesia. Email: triastypalupi@gmail.com

OVO's vision is to become a financial application that works sustainably and provides attractive offers for its users. In 2019, OVO launched its first loan feature called OVO Pay Later, which is expected to increase users. In this OVO feature, there is an easy transfer of nominal money offered in the application.

Predicting individual behavior intention in using the new technology can be predicted with the TAM model (Kurniawati et al., 2017; Winarno & Putra, 2020). This model explains how user behavior intention is predicted by the ease of use and the usefulness of applying a technology (Davis et al., 1989; Venkatesh & Bala, 2008). Some researchers have predicted a person's behavioral intention in using new technology such as fintech applications (Chuang et al., 2016; Das & Das, 2020; Haqqi & Suzianti, 2020; Susilo et al., 2019), and intention in using e-wallets (Aji et al., 2020; Chawla & Joshi, 2019). The research uses the original Technology Acceptance Model (TAM) approach (Susilo et al. 2019), as well as various antecedent modification concepts from the perceived ease of use and the perceived usefulness such as perceived risk (Aji et al., 2020; Haqqi & Suzianti, 2020) and perceived benefits (Haqqi & Suzianti, 2020), as well as trust brands and services (Chuang et al., 2016).

In contrast to the computer and office applications and the like, predicting behavior intention in using applications on smartphones is strongly influenced by external factors such as the influence of the social environment, and individual internal factors such as perceived enjoyment, as well as self-efficacy in using these technologies (Venkatesh & Bala, 2008). This study focuses on accepting information technology systems in the form of the OVO application, which is the top of mind among digital wallet users in Indonesia. There are three predictors used in this study as external variables of the TAM model. The first is the subjective norm, perceived enjoyment, and self-efficacy. Based on these three variables, this paper aims to examine an individual's intention in using OVO to transact electronically and to explain the role of dominant antecedents as predictors of behavior intention in using OVO.

This research is expected to provide several contributions. First, three external variables of the TAM model proposed in this article can explain two perspectives that influence the behavior intention in using technology: the internal perspective comes from within (perceived enjoyment and self-efficacy on technology); and external perspectives (subjective norms). Second, this study complements the research conducted (Susilo et al., 2019) on the behavior intention in using OVO and GO-PAY, which only uses the original TAM model.

2. Literature Review and Hypothesis Development

2.1. Technology Acceptance Model (TAM)

Belief-attitude-intention-behavior underlies the causal relationship in the technology acceptance model used to

explain and predict the new systems' acceptance and use behavior (Padilla-Meléndez et al., 2013; Sipior et al., 2011). Davis et al. (1989) developed a TAM model based on the TRA (Theory of Reasoned Action) model, which provides an explanation of the determinants of information system adoption in general, and the ability to explain technology end-user behavior (Yadav & Mahara, 2017). The main determinants of behavioral intention in using technology are determined by two beliefs: perceived usefulness and ease of use (Venkatesh & Bala, 2008). Perceived usefulness (PU) is defined as the "extent to which a person believes that using a technology will improve his or her job performance" (Davis et al., 1989; Venkatesh & Bala, 2008). In short, IT will improve job performance in their work (Venkatesh & Bala, 2008). Perceived ease of use is defined as the extent to which a person believes that using technology will be free of effort (Davis et al., 1989; Venkatesh & Bala, 2008).

Attitudes towards behavior were defined by Davis et al. (1989) as a positive or negative individual feeling from someone about performing target behavior. Mathieson (1991) stated that behavior is also defined as a user's evaluation of their intention in using the systems. Behavioral intention is defined by Davis et al. (1989) as a desire (interest) for someone to do a specific behavior. Someone will do a behavior if they have a behavioral intention to do it. Figure 1. is the TAM model first developed by Davis (1989).

The TAM model development is carried out at two levels: the first is to develop and expand the TAM model, and the second is to modify and test the TAM model (Marangunić & Granić, 2015). Venkatesh and Davis (2000) developed and tested the TAM 1 model by exploring external variables/predictors of perceived usefulness such as social influence variables and cognitive instrument processes that affect users' perceived usefulness and user behavior interest, which is hereinafter called the TAM model. The next turn is to complete predictors or external variables of perceived ease of use to determine behavioral interest in technology. Venkatesh and Bala (2008) developed TAM 3 by including variables in the adjustment and anchor dimensions as external variables of perceived ease of use such as self-efficacy, anxiety, playfulness enjoyment, and usability.

Based on the TAM theory's literature review and the argument for determining behavioral intention predictors using the OVO application to transact electronically, Figure 2 is a model to be tested and validated in this study. The model still uses three main TAM variables, which are the core of the predictors of intention in behavior, namely perceived usefulness, perceived ease of use. However, this time researchers used external variables from the TAM model, namely subjective norm, self-efficacy, and perceived enjoyment, to predict behavioral intention in using the OVO application.

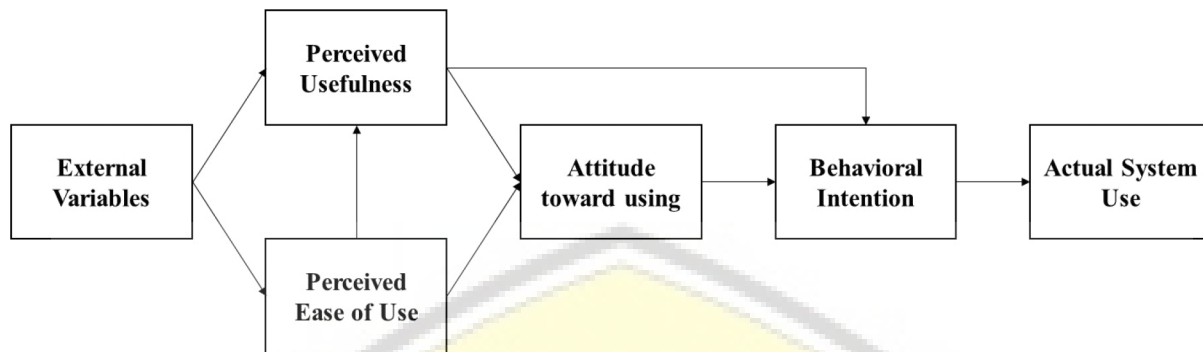


Figure 1: Technology Acceptance Model (Davis et al., 1989)

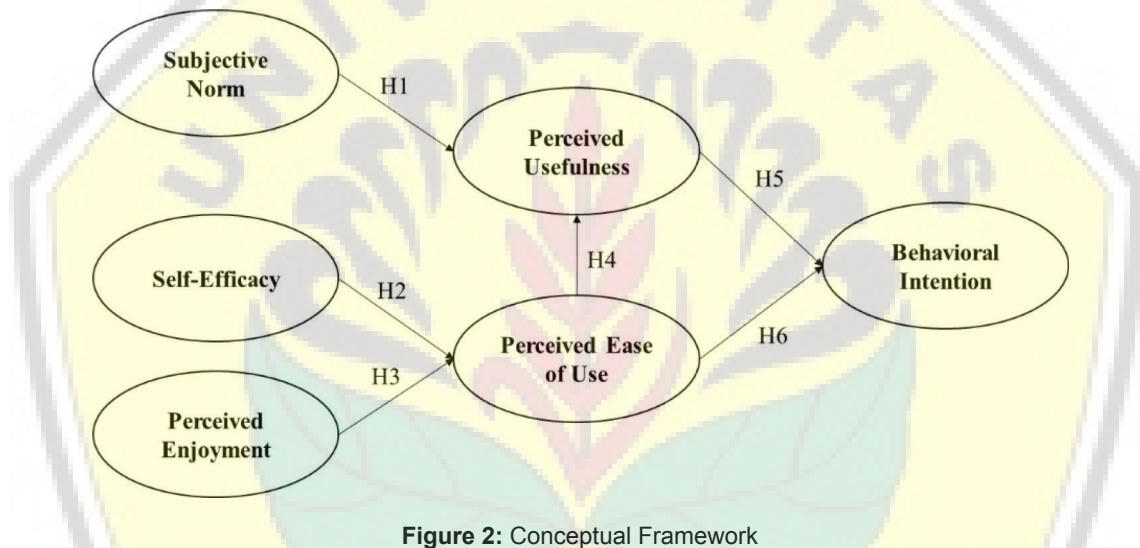


Figure 2: Conceptual Framework

2.2. Hypothesis Development

2.2.1. Subjective Norms and Perceived Usefulness

Subjective norms are human thoughts that require doing something or not doing anything at all (Davis, 1989). Subjective Norms are one's perceptions or views of other people's beliefs that will influence the interest in doing or not doing the behavior being considered (Jogiyanto, 2007). Subjective norms are determinants of intention that arise from social pressure/influence on one's view of other people's beliefs as consideration for doing or not doing certain behaviors (Ajzen, 1991).

In the digital era, social communities formed due to social media technology have a strong influence on providing information and building opinions about something in a group. The use of the OVO application has spread widely to smartphone users for use in electronic transactions due to the social influence that develops in the environment or

community, both regarding the benefits of discounts given and the benefits of electronic wallets in general.

Venkatesh and Davis (2000) state that subjective norms can indirectly influence behavior intention in using technology's perceived usefulness. Research conducted by Muslimah and Aisyah (2016) shows that subjective norms significantly affect WOMunity of WOM Finance customers' perceived usefulness. Based on this argument, the hypothesis can be formulated as follows.

H1: Subjective norms positively affects perceived usefulness of OVO Application

2.2.2. Self-efficacy and Perceived Ease of Use

One's self-efficacy can also explain predictors of interest in behaving using applications in the form of self-confidence and confidence in carrying out work related to technology

(Hasan, 2007). Self-efficacy is the level of an individual's confidence in his ability to carry out a specific task or job using particular technology (Venkatesh & Bala, 2008). Self-efficacy is a person's belief in organizing and deciding the necessary actions to achieve the desired performance (Hasan, 2007). With the existence of self-efficacy, the use of technology becomes something that is considered to be mastered. In the use of technology, self-belief is one of the determinants of individual characteristics in perceiving the ease of using specific applications. When someone has high self-efficacy, then that person will have a high perception of the ease of use of the application (Venkatesh & Bala, 2008).

The research results that link self-belief with perceived ease of use show that self-efficacy positively and significantly affects perceived ease of use in using the community application. In other words, one's behavior intention will increase with the presence of high self-efficacy in a person's computer (Muslimah & Aisyah, 2016). The level of user confidence in using OVO will affect the perceived ease of use. The higher the OVO application's self-confidence, the higher the level of perceived ease of use of the OVO application for electronic transactions. Based on the explanation that has been described, the following hypothesis can be formulated as follows.

H2: *Self-efficacy positively affects perceived ease of use for OVO applications.*

2.2.3. Perceived Enjoyment and Perceived Ease of use

Perceived enjoyment is the extent to which activities using a particular system are considered pleasurable in itself, apart from any performance consequences resulting from using the systems (Venkatesh & Davis, 2000). The perceived enjoyment of a person using technology will impact the intention and intensity of using the technology (Venkatesh & Bala, 2008). Convenience and enjoyment in a person using technology will make the user's perception of the application feel comfortable because they have obtained the initial comfort.

The TAM model discusses the perception of comfort, that a person's attitude towards using a technology depends on his comfort for the individual to believe in using the technology (Venkatesh & Bala, 2008). Amelia (2019) shows a positive and significant influence on perceived enjoyment on perceived ease of use of an application. This condition is indicated by the higher level of comfort in using the OVO application, which will affect the perceived ease of use of the OVO application in electronic transactions. Based on the explanation that has been described, the following hypothesis can be formulated as follows.

H3: *Perceived enjoyment positively affects perceived ease of use for the OVO application.*

2.2.4. Perceived Ease of use and Perceived Usefulness

Perceived ease of use explains the extent to which a person trusts an information technology system that will be free from physical and mental efforts (Davis, 1989). Systems or applications more frequently indicate that the system is more familiar, more comfortable to operate, and easier to use. Like OVO, it is a form of a digital wallet widely used, meaning that the application is easy to use and useful for its users.

Many previous studies show a relationship between perceived ease of use and perceived usefulness in using technology (Bogea & Brito, 2018; Hasan, 2007; Kang et al., 2014; Padilla-Meléndez et al., 2013; Winarno & Putra, 2020). Like the research by Muslimah (2019), a system that is easy to operate will make it easier and provide benefits for users. If the perception of the ease with which users of the application system are high, then the perceived usefulness will also increase. Based on the explanation and previous research that has been explained, the following hypothesis can be formulated.

H4: *Perceived ease of use positively affect the perceived usefulness of the OVO application.*

2.2.5. Perceived Usefulness and Behavioral Intention to use OVO

Davis (1989) defines the perceived usefulness as the extent to which a person believes in using a system to improve their job performance. This condition is exciting in implementing a system or using an application because user behavior depends on the OVO system/application that can be provided. The perceived benefit is the belief that the decision-making process will have an interest in using it or not. If someone believes that technology is useful, then that person will use it, and vice versa.

Chin et al. (2008) explained that the benefits include dimensions of making work more manageable, more useful, and increasing productivity. One's positive attitude to use OVO arises because he believes that using OVO can improve performance, productivity, and performance effectiveness for OVO users. Some research results show that perceived usefulness affects behavioral intention in using a particular system or application (Kang et al., 2014; Kurniawati et al., 2017; Van Anh & Thi Phuong Thao, 2020). Perceived usefulness was the most vital determinant of behavioral intention across periods (Venkatesh & Bala, 2008). The higher the perceived usefulness of the user, the higher the behavioral intention in using OVO technology.

Based on the explanation and previous research that has been explained, the following hypothesis can be formulated.

H5: *Perceived usefulness have a positive effect on OVO's behavioral intention to use.*

2.2.6. Perceived Ease of use and Behavioral Intention to use

Perceived ease of use uses a more accepted system if the system is easy to use (Davis, 1989). Users feel confident that information systems are beneficial without requiring hard effort and without requiring a long time (Davis et al., 1989; Venkatesh & Bala, 2008). In TAM, the interest in individual behavior to adopt a particular technology is determined by one's attitude towards using the technology.

TAM is related to users' perceived ease, namely the attitude of an individual towards using technology depending on how the technology can help the individual or can make it easier for the individual to make online transactions using OVO. Khairi and Baridwan (2015) state that the perceived ease in adopting an accounting information system in Islamic banking affects using a system. As a form of a digital wallet application, OVO can show the application's ease of use. The behavioral intention in using the application will also be higher (Amelia, 2019; Kang et al., 2014; Kurniawati et al., 2017; Van Anh & Thi Phuong Thao, 2020). Based on the explanation and previous research that has been explained, the following hypothesis can be formulated.

H6: *Perceived ease of use positively affect behavioral intention to use for OVO application.*

Table 1: Measurement of Research Variables

Variables	Operational definition	Measurement Items
Subjective Norm (SN) (Schepers & Wetzels, 2007); Venkatesh and Bala (2008)	Is a human thought that requires doing something or not at all	SN1. People who influence my behavior think I have to use the system. SN2. People who are important to me think that I have to use the system. SN3. The influence of others in assisting the use of the application. SN4. The environment/organization has supported the use of the application.
Self-efficacy (SE) (Hasan, 2007); Venkatesh and Bala (2008)	The level of individual confidence in his or her ability to carry out a specific task or job using a particular technology	SE1. Confidence in finding information. SE2. The capabilities required to use the system SE3. Helps access information easier SE4. Improve quality
Perceived Enjoyment (PE) (Venkatesh & Bala, 2008)	Human perception is the activity where using an information system is perceived to be fun, regardless of the performance resulting from the use of information systems.	PE1. Using the application, you can make transactions anywhere and anytime PE2. Using the application, I do not need to queue to make transactions. PE3. Save time by using the application.
Perceived Usefulness (PU) (Davis, 1989; Davis et al., 1989; Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)	The degree to which a person believes that using a particular system would enhance their job performance.	PU1. Faster completion of activities PU2. Ease of completing tasks PU3. Useful in use PU4. Increase effectiveness PU5. Advantages in use
Perceived ease of use (PEU) (Davis, 1989; Davis et al., 1989; Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)	The extent to which a person believes that using technology will be free of effort.	PEU1. Easy to operate PEU2. Clear and understandable application PEU3. Skills in use PEU4. Operate as you wish PEU5. Flexible use PEU6. Easy to use
Behavioral intention to use (BI) (Davis, 1989; Davis et al., 1989; Venkatesh & Bala, 2008; Venkatesh & Davis, 2000)	Intention a person to perform a specific behavior.	BI1. Regular use of the system BI2. Always keep using BI3. Continue to use the system in the future BI4. Future use of the system

3. Material and Methods

3.1. Sample and Data Collections

This study's population was the OVO application users as an electronic transaction tool in Jember Regency. Samples were randomly selected at the time of the survey with specific criteria. The following are the criteria for being eligible to be respondents, namely: 1. OVO users, 2. Respondents have used the OVO application at least once. The survey was conducted at Lippo Plaza Jember, which is on Jl. Gajah Mada No.106 Jember, East Java. The survey location is determined at the Plaza because it is a shopping center that mostly has payments at OVO partner merchants. Based on the criteria and direct survey locations, it is hoped that a representative sample of the population of OVO application users in Jember Regency will be obtained.

3.2. Measurement

The variables tested in this study were measured with a 5-point Likert scale. The indicators used to measure are taken from previous studies. Those indicators have also been tested for their validity and reliability. Table 1 presents the operational definitions of the variables in this study.

4. Data Analysis and Results

4.1. Demographic Characteristics

The respondents' characteristics in the data used in this study include the following data: Age, Gender, and Occupation. The results showed that as many as 70 (46.6%) respondents were male, and 80 (54.4%) female respondents. The dominance of the age of OVO users from most respondents in the range of 21-30 years was 69 respondents (46.1%). Furthermore, the age range of 31-40 years was 49 respondents (32.6%), and the rest were 32 respondents (21.3%) were over the age of 41 years.

Table 2 shows that the respondents' occupations as students were 56 (37.3%), entrepreneurs were 25 (16.6%), employees were 28 (18.6%), and others were 41 (27.3%). Student respondents are more than entrepreneurs, employees, and others. This result shows that students are also more enthusiastic about using the OVO application because they hunt for promos and cashback. Meanwhile, other occupations are more or less the same as students hunting for promos and cashback, but they tend to spend less time using the OVO application than students. The users of the OVO application varied from 18 (12%) new intensity, 36 (24%) twice used, 64 (42.6%) more than three times, and 32 (21.4%) have used OVO more than ten times. Based on the frequency of

use of the OVO application, most respondents used it three times. This condition shows that respondents will use the OVO application repetitively to make transactions after experiencing many promos and cashback.

Table 2 shows that the types of OVO transactions for payments at partner merchants are 32 (21.4%), credit top-up is 21 (14%), Lippo Insurance premium payments are 12 (19.3%), PLN token purchases are 29 (19.3%), transfer to others are 20 (13.4%), investment in OVO Invest is 11 (7.3%), and paying for purchases on Tokopedia is 25 (16.6%). All OVO application users use it for promos and cashback. However, from the respondents' characteristics based on this type of transaction, it is mostly used as transactions at partner merchants.

4.2. Validity and Reliability Test

The validity test was carried out on the research instrument by observing the t-value (indicated by the loading factor value). If each indicator value is more than its critical value at the 0.05 significance level, then the probability value / p must be less than α (0.05). The reliability test shows that the data is declared reliable when the construct reliability is more than the recommended value is 0.60. Table 3 presents the results of testing the validity and reliability of the constructs.

Table 3 shows that all indicators are significantly related to the intrinsic attribute construct (all indicators are valid). Construct reliability is above the recommended value of 0.60; thus, all indicators are declared reliable.

4.3. Structural Equation Modelling (SEM) Analysis

The causality test of the structural equation model is carried out after the assumptions are met. Based on the tests carried out, the normality test results or assessment of normality (CR) give a CR value of 1.391, which lies between $-1.96 \leq CR \leq 1.96$ ($\alpha = 0.05$); therefore, the multivariate data is average. The data is also univariate regular indicated by all values of the critical ratio indicators of all indicators located between $-1.96 \leq CR \leq 1.96$. The multicollinearity test results obtained a value of 83.832. This value is far from zero; therefore, there is no multicollinearity and singularity problem in the data analyzed. The results of the outlier test showed that the value of the most significant Mahalanobis distance was 69.532. This value is still below the value of the Chi-Square Table at $df = 27$ (number of statement items), which is 282.105, so it can be concluded that there is no multivariate outlier in the research data.

Table 2: Demographic information of respondents

Classification		Frequency	Percent (%)
Gender	M	70	46.6
	F	80	54.4
Age	21–30 years	69	46.1
	31–40 years	49	32.6
	41–50 years	21	14.1
	51–60 years	11	7.2
Work	University Student	56	37.3
	Self-employed	25	16.6
	Private sector employee	28	18.6
	Others	41	27.3
Frequency of Use	Once a month	18	12
	Two times a month	36	24
	3–9 times a month	64	42.6
	Ten times a month	32	21.4
Types of Transaction	Payment at merchants	32	21.4
	Refill phone balance	21	14
	Lippo Insurance payment	12	8
	Purchase of PLN tokens	29	19.3
	Transfer to others	20	13.4
	Invest in OVO invest	11	7.3
	Tokopedia Payment	25	16.6

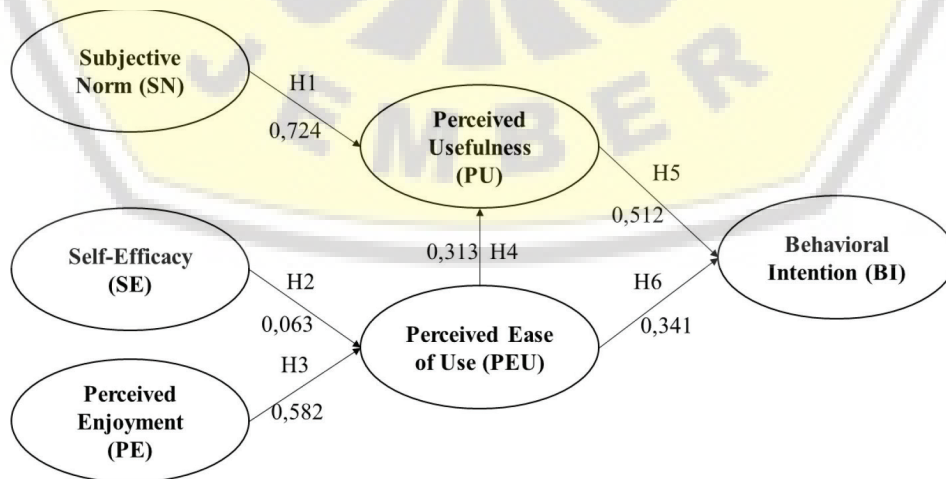


Figure 3: Research Model Path Coefficient

Table 3: Result of Construct Validity and Reliability Test

Variables			Estimate	CR.	P	Notes
sub3	←	Subjective_Norm	1.000			Valid
sub2	←	Subjective_Norm	2.512	2.915	0.004	Valid
sub1	←	Subjective_Norm	2.438	2.887	0.004	Valid
eff10	←	Self_efficacy	1.000			Valid
eff9	←	Self_efficacy	1.093	4.030		Valid
eff7	←	Self_efficacy	1.324	4.066		Valid
eff6	←	Self_efficacy	1.270	4.365		Valid
eff5	←	Self_efficacy	1.131	3.980		Valid
eff4	←	Self_efficacy	0.629	2.931		Valid
eff3	←	Self_efficacy	0.688	2.336		Valid
eff2	←	Self_efficacy	0.609	2.034		Valid
eff1	←	Self_efficacy	0.663	2.670		Valid
enj3	←	Perceived_Enjoyment	1.000			Valid
enj2	←	Perceived_Enjoyment	1.081	7.960		Valid
enj1	←	Perceived_Enjoyment	0.642	3.194	0.001	Valid
use1	←	Perceived_Usefulness	1.000			Valid
use2	←	Perceived_Usefulness	1.098	8.631		Valid
use3	←	Perceived_Usefulness	0.940	5.998		Valid
use4	←	Perceived_Usefulness	1.222	7.804		Valid
eas1	←	Perceived_Ease_of_Use	1.000			Valid
eas2	←	Perceived_Ease_of_Use	1.149	3.673		Valid
eas3	←	Perceived_Ease_of_Use	1.667	4.342		Valid
eas4	←	Perceived_Ease_of_Use	1.463	4.004		Valid
beh1	←	Behavioral_Intention_to_Use	1.000			Valid
beh2	←	Behavioral_Intention_to_Use	1.448	4.872		Valid
beh3	←	Behavioral_Intention_to_Use	0.826	4.561		Valid
eff8	←	Self_efficacy	0.916	3.390		Valid

Table 4: Causality Test Results

Variables			Estimate	SE	CR.	P	Notes
PU	←	NS	0.724	0.259	2,796	0.005***	H ₁ Supported
PEU	←	SE	0.063	0.046	1,266	0.206	H ₂ Not Supported
PEU	←	PE	0.582	0.129	4,511	0.000***	H ₃ Supported
PU	←	PEU	0.313	0.069	4,532	0.000***	H ₄ Supported
BI	←	PU	0.512	0.170	3,010	0.002***	H ₅ Supported
BI	←	PEU	0.341	0.114	2,971	0.003***	H ₆ Supported

Notes: *** Significance at level 1%; ** Significance at level 5%; * Significance at level 10%.

After the assumptions are met, these variables can be continued with the model suitability test and the causality significance test. SEM test results with the AMOS 24 program provide structural equation modeling results that show the relationship between variables, namely:

The detailed path coefficient testing is presented in the following tables:

4.4. Discussion

4.4.1. Subjective Norm and Perceived Usefulness of OVO

The results of testing the first hypothesis (H1) show that the subjective norm positively affects OVO's perceived usefulness. The calculation result of Structural Equation Modeling (SEM) has a favorable path coefficient of 1.724 with a CR of 2.796 with a significance level of $0.005 < 0.05$. The effect shown by the regression coefficient is positive, meaning that the higher the Subjective norm will increase the perceived usefulness of the OVO application for electronic transactions. The subjective norm variable's path coefficient also has the highest value than the intention determining variable's coefficients using OVO to transact electronically.

The effect of subjective norms in accepting the OVO application is the influence of other people / social communities around the users who influence that person to use OVO. In this case, OVO users trust and provide information to others in using OVO, so that they are expected that other people can benefit from using OVO. This study's results are in line with previous research conducted by Muslimah and Aisyah (2016) and Amelia (2019) that subjective norms significantly affect user perceptions of usability. So it can be concluded that the subjective norm has a significant impact on OVO users' perceived usefulness. The study results show that acceptable subjective norms influence OVO users' perceived usefulness because subjective norms are considered capable of providing recommendations to others. Other users assume that OVO has many uses, for example, in online transactions. In addition to online transactions, OVO also provides benefits for users in running a business.

4.4.2. Self-Efficacy and Perceived Ease of Use OVO

The results of testing the second hypothesis (H2) show that self-efficacy does not affect OVO's perceived ease of use. The calculation of Structural Equation Modeling (SEM) has a favorable path coefficient of 0.063 with a CR of 1.266 with a significance level of $0.206 > 0.05$. Based on these results, the data states that self-efficacy has no role in influencing users' perceived ease of use. This hypothesis states that self-efficacy towards the perceived ease of use of OVO applications is rejected.

The background factor of respondents who are users of the OVO application as an online or electronic transaction is considered to be a group that readily accepts the application of technological innovation, such as mobile banking services. According to Kurniawati et al. (2017), an adequate level of knowledge and experience will undoubtedly cause self-efficacy to be irrelevant concerning perceived ease of use. In mobile banking services, many competitions compete to present various promos and various advantages. So, respondents no longer prioritize ease of use but use mobile banking to emphasize the usefulness of applications that provide promos and various advantages. This study indicates that individual factors do not dominate perceptions of ease of use of applications. However, those that have a dominant role in determining interest in using applications are external perspectives, namely subjective norms, including external influences and the user's social.

4.4.4. Perceived Enjoyment and Perceived Ease of Use of OVO

The results of testing the third hypothesis (H3) show that perceived enjoyment affects the OVO's perceived ease of use. The calculation result of Structural Equation Modeling (SEM) has a favorable path coefficient of 0.582 with a CR of 4.511 with a significance level of $0.000 < 0.05$. The effect shown by the regression coefficient is positive, meaning that the higher the perceived convenience of the user (perceived enjoyment) of the OVO application, the greater the perceived ease of use of the OVO application. Based on the results of this test, H3 is accepted. The perceived equation variable's path coefficient ranks second among the predictors of interest using the OVO application.

The TAM model discusses the perception of comfort, that a person's attitude towards using a technology depends on his comfort for the individual to believe in using the technology. This study's results are in line with previous research conducted by Amelia (2019), which states that perceived enjoyment affects perceived ease of use and adds to this relationship's evidence (Marangunić & Granić, 2015). The convenience that users perceive an application has an essential role in increasing the perceived ease of applying an application (Venkatesh & Bala, 2008). In the OVO application, users feel comfortable in making transactions. OVO users also find it easy if they feel comfortable using the OVO application in making transactions.

4.4.4. Perceived Ease of Use and Perceived Usefulness

The results of testing the fourth hypothesis (H4) indicate that perceived ease of use affects the OVO application's perceived usefulness. The calculation result of Structural Equation Modeling (SEM) has a favorable path coefficient

of 0.313 with a CR of 4.532 with a significance level of $0.000 < 0.05$. The effect shown by the regression coefficient is positive, meaning that the higher the perceived ease of use will increase the perceived usefulness of the OVO application. Based on these results, H4 is accepted.

Perceived ease of use explains the extent to which a person trusts an information technology system that will be free from physical and mental efforts (Davis, 1989; Davis et al., 1989). A system, application, or technology that has been developed and easy to operate will facilitate and provide benefits for users (Padilla-Meléndez et al., 2013; Winarno & Putra, 2020). In other words, if the perceived ease of use of the systems/application user is high, then the user will also get high perceived usefulness for the application (Kurniawati et al., 2017; Muslimah & Aisyah, 2016).

This study's results are in line with previous research stating that perceived ease of use affects users' perceived usefulness (Muslimah & Aisyah, 2016). The OVO application users are easy to use in transactions to increase users' effectiveness and productivity. In this case, users do not need to carry cash for transactions but only use the OVO application to benefit its users. In this position, the OVO application facilities will provide benefits for users such as payments at OVO partner merchants, which are the dominant transactions used by users, and household needs such as purchasing electricity tokens and other payments.

4.4.5. Perceived Usefulness and Behavioral Intention to Use of OVO

The results of testing the fifth hypothesis (H5) indicate that perceived usefulness affects the interest in behaving using (behavioral intention to use) the OVO application. The result of Structural Equation Modeling (SEM) has a favorable path coefficient of 0.512 with a CR of 3.010 with a significance level of $0.002 > 0.05$. The positive coefficient shows that the higher the perceived usefulness, the higher the interest in using (behavioral intention to use) the OVO application. Based on these results, H5 is accepted.

The background of 56% of respondents is students who use the OVO application for online transactions, which are millennial individuals who readily accept technological innovation, such as mobile banking services. They can sort and select useful preferences provided by the OVO application, for example shopping with an e-wallet. The right level of knowledge will undoubtedly cause them to understand the application's perceived usefulness to increase the behavioral intention to use the OVO application. The results of this study are in line with previous research conducted by (Ampol et al., 2020; Kurniawati et al., 2017; Muslimah & Aisyah, 2016; Padilla-Meléndez et al., 2013) that perceived usefulness affects behavioral intention to use an information system application. Based on this

explanation, it can be concluded that perceived usefulness affects behavioral intention to use the OVO application, which gives more influence than perceived ease of use (Ibrahim et al., 2020).

4.4.6. Perceived Ease of Use and Behavioral Intention to Use of OVO

Testing the sixth hypothesis (H6) indicates that perceived ease of use affects behavioral intention to use the OVO application. The results of Structural Equation Modeling (SEM) have a good path coefficient of 0.341 with a CR of 2.971 with a significance level of $0.003 < 0.05$. The effect shown by the regression coefficient is positive, meaning that the higher the perceived ease of use, the higher the interest in using (behavioral intention to use) the OVO application. Based on these results, it is stated that H6 is accepted.

The perceived ease of use is an individual's attitude towards using a technology depend on how the technology can help the individual or make it easier for the individual (Davis et al., 1989) to use technology such as making online transactions using the OVO application. This study's results are in line with previous research stating that perceived ease of use affects behavioral intention to use (Ampol et al., 2020; Nguyen Thi & Bui Huy, 2020). In the OVO application, users find it easy to use the OVO application as a transaction. OVO application can provide convenience for its users and can increase interest for OVO users. Based on this explanation, it can be concluded that the perceived ease of use of the user (perceived ease of use) will influence and increase the behavioral intention to use the OVO application.

5. Conclusions

The test results on the basic TAM model show consistent (robust) results from previous researchers, namely that perceived ease of use and perceived usefulness affect behavioral intention using the OVO application for electronic transactions. The hypothesis testing results on the external variables adopted in this study show different results, especially for the self-efficacy variable, which originates from an individual's internal characteristics.

The test results on individual external characteristics, namely the subjective norm, positively affect the OVO application's perceived usefulness in electronic transactions. Subjective norms have an essential role in increasing interest in behavior using the OVO application to transact electronically. This role is getting higher by showing the path coefficient through higher perceived usefulness than other external variables, namely self-efficacy and perceived enjoyment. Furthermore, perceived convenience as an individual characteristic also has an important role, which is statistically significant in indirectly influencing

the interest in using OVO through the perceived ease of use of OVO applications. Interestingly, the results of testing the hypothesis that self-confidence using OVO (self-efficacy) does not affect the perceived ease of use of OVO applications to transact electronically. This condition may be caused by respondents aged between 21-30 (46.1%) are an age that is easily influenced by the social environment rather than control by themselves, so that subjective norms have a more dominant role than self-belief, which is the individual character of each.

There are several limitations in this study, including first, in conducting the direct survey, the researcher did not consider the respondents' proportional characteristics. It impacted the goodness of fit index criteria test where only one criterion was met Chi-Square. In contrast, other criteria such as RMSEA GFI and AGFI gave marginal results. Second, the researcher does not consider other constructs that predict individual intention in transacting electronically, for example, perceived risk and perceived security, which are more dominant predictors in the use of online-based transaction applications (Damghanian et al., 2016; Ibrahim et al., 2020).

Based on this study's limitations, several suggestions can be given for further research, namely: first for future research, namely in conducting surveys, sampling, using probability sampling techniques so that the representative characteristics of respondents in the population are proportionally represented. The second suggestion is related to the TAM model's external variables. Further research can include variables such as security, trust, and risk preference, which are inherent in digital or electronic transactions.

References

- Aji, H. M., Berakon, I., & Husin, M. M. (2020). COVID-19 and e-wallet usage intention: A multigroup analysis between Indonesia and Malaysia. *Cogent Business and Management*, 7(1), 1804181. doi:https://doi.org/10.1080/23311975.2020.1804181
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179–211. doi:https://doi.org/10.1016/0749-5978(91)90020-t
- Amelia, E. (2019). *Analisis Perilaku Minat Menggunakan Mobile Payment Dengan Pendekatan Technology Acceptance Model 3: Studi Pada Pengguna Aplikasi Pembayaran OVO*. Universitas Pendidikan Indonesia,
- Ampol, N., Busaya, V., & Tanakorn, L. (2020). Causal Factors Affecting Mobile Banking Services Acceptance by Customers in Thailand. *The Journal of Asian Finance, Economics and Business*, 7(11), 421–428. doi:https://doi.org/10.13106/jafeb.2020.vol7.no11.421
- Bogea, F., & Brito, E. P. Z. (2018). Determinants of social media adoption by large companies. *Journal of technology management innovation*, 13(1), 11–18. doi:https://doi.org/10.4067/s0718-27242018000100011
- Chawla, D., & Joshi, H. (2019). Consumer attitude and intention to adopt mobile wallet in India – An empirical study. *International Journal of Bank Marketing*, 37(7), 1590–1618. doi:https://doi.org/10.1108/IJBM-09-2018-0256
- Chin, W. W., Johnson, N., & Schwarz, A. (2008). A Fast Form Approach to Measuring Technology Acceptance and other Constructs. *MIS Quarterly*, 32(4), 687–703. doi:https://doi.org/10.2307/25148867
- Chuang, L.-M., Liu, C.-C., & Kao, H.-K. (2016). The adoption of fintech service: TAM perspective. *International Journal of Management Administrative Sciences*, 3(7), 1–15.
- Damghanian, H., Zarei, A., & Siahsharani Kojuri, M. A. (2016). Impact of Perceived Security on Trust, Perceived Risk, and Acceptance of Online Banking in Iran. *Journal of Internet Commerce*, 15(3), 214–238. doi:https://doi.org/10.1080/15332861.2016.1191052
- Das, A., & Das, D. (2020). Perception, Adoption, and Pattern of Usage of FinTech Services by Bank Customers: Evidences from Hojai District of Assam. *Emerging Economy Studies*, 6(1), 7–22. doi:https://doi.org/10.1177/2394901520907728
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. doi:https://doi.org/10.2307/249008
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, 35(8), 982–1003. doi:https://doi.org/10.1287/mnsc.35.8.982
- Haqqi, F. R., & Suzianti, A. (2020). Exploring Risk and Benefit Factors Affecting User Adoption Intention of Fintech in Indonesia. *Proceedings of the 3rd Asia Pacific Conference on Research in Industrial and Systems Engineering 2020*, 13–18. doi:https://doi.org/10.1145/3400934.3400939
- Hasan, B. (2007). Examining the effects of computer self-efficacy and system complexity on technology acceptance. *Information Resources Management Journal*, 20(3), 76. doi:https://doi.org/10.4018/irmj.2007070106
- Ibrahim, M. H., Hussin, S. R., & Hussin, S. H. (2020). Factors Influencing Malaysian Consumers' Intention to Use Quick Response (QR) Mobile Payment. *Jurnal Pengurusan*, 57. doi:https://doi.org/10.17576/pengurusan-2019-57-02
- Jogiyanto, H. M. (2007). *Sistem informasi keperilakuan*: Yogyakarta: Andi Offset.
- Kang, Y., Lee, M., & Lee, S. (2014). Service-oriented factors affecting the adoption of smartphones. *Journal of technology management innovation*, 9(2), 98–117. doi:https://doi.org/10.4067/s0718-27242014000200008
- Khairi, M. S., & Baridwan, Z. (2015). An Empirical Study on Organizational Acceptance Accounting Information Systems in Sharia Banking. *The International Journal of Accounting and Business Society*, 23(1), 97–122.

- Khoirunnisa. (2019). Top 5 Mobile Payment di Indonesia 2018. Retrieved from <https://selular.id/2019/01/top-5-mobile-payment-di-indonesia-2018/>
- Kurniawati, H. A., Arif, A., & Winarno, W. A. (2017). Analisis minat penggunaan mobile banking dengan pendekatan Technology Acceptance Model (TAM) yang telah dimodifikasi. *e-Journal Ekonomi Bisnis dan Akuntansi*, 4(1), 24–29. doi:<https://doi.org/10.19184/ejeba.v4i1.4563>
- Marangunić, N., & Granić, A. (2015). Technology acceptance model: a literature review from 1986 to 2013. *Universal Access in the Information Society*, 14(1), 81–95. doi:<https://doi.org/10.1007/s10209-014-0348-1>
- Mathieson, K. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information Systems Research*, 2(3), 173–191. doi:<https://doi.org/10.1287/isre.2.3.173>
- Muslimah, D. A., & Aisyah, M. N. (2016). Pengaruh computer self-efficacy, subjective norm, dan system quality terhadap penerimaan womunity oleh nasabah WOM finance. *Jurnal Profita: Kajian Ilmu Akuntansi*, 4(8).
- Nguyen Thi, N., & Bui Huy, K. (2020). Behavioral Intention to Accept and Use Banking Service. *The Journal of Asian Finance, Economics and Business*, 7(11), 393–400. doi:<https://doi.org/10.13106/jafeb.2020.vol7.no11.393>
- Padilla-Meléndez, A., Del Aguila-Obra, A. R., & Garrido-Moreno, A. (2013). Perceived playfulness, gender differences and technology acceptance model in a blended learning scenario. *Computers & Education*, 63(4), 306–317. doi:<https://doi.org/10.1016/j.compedu.2012.12.014>
- Schepers, J., & Wetzels, M. (2007). A meta-analysis of the technology acceptance model: Investigating subjective norm and moderation effects. *Information & Management*, 44(1), 90–103. doi:<https://doi.org/10.1016/j.im.2006.10.007>
- Sipior, J. C., Ward, B. T., & Connolly, R. (2011). The digital divide and t-government in the United States: Using the technology acceptance model to understand usage. *European Journal of Information Systems*, 20(3), 308–328. doi:<https://doi.org/10.1057/ejis.2010.64>
- Susilo, A. Z., Prabowo, M. I., Taman, A., Pustikaningsih, A., & Samlawi, A. (2019). A Comparative Study of Factors Affecting User Acceptance of GO-PAY and OVO As a Feature of Fintech Application. *Procedia Computer Science*, 161, 876–884. doi:<https://doi.org/10.1016/j.procs.2019.11.195>
- Teo, A.-C., Tan, G. W.-H., Ooi, K.-B., & Lin, B. (2015). Why consumers adopt mobile payment? A partial least squares structural equation modelling PLS-SEM approach. *International Journal of Mobile Communications*, 13(5), 478–497. doi:<https://doi.org/10.1504/ijmc.2015.070961>
- Van Anh, N., & Thi Phuong Thao, N. (2020). An Integrated Model of CSR Perception and TAM on Intention to Adopt Mobile Banking. *The Journal of Asian Finance, Economics and Business*, 7(12), 1073–1087. doi: <https://doi.org/10.13106/jafeb.2020.vol7.no12.1073>
- Venkatesh, V., & Bala, H. (2008). Technology acceptance model 3 and a research agenda on interventions. *Decision sciences*, 39(2), 273–315. doi:<https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. doi:<https://doi.org/10.1287/mnsc.46.2.186.11926>
- Winarno, W. A., & Putra, H. S. (2020). Technology acceptance model of the Indonesian government financial reporting information systems. *International Journal of Public Sector Performance Management*, 6(1), 68–84. doi:10.1504/IJPSM.2020.105089
- Yadav, R., & Mahara, T. (2017). An Empirical Study of Consumers Intention to Purchase Wooden Handicraft Items Online: Using Extended Technology Acceptance Model. *Global Business Review*, 20(2), 1–19. doi:10.1177/0972150917713899