OVO E-Wallet as a Platform of Digital Payment in Indonesia: An Empirical Analysis

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Abstrak - Nowadays, payment systems in the digital era use more electronic money than physical money; one of the famous ones is OVO e-wallet. OVO has supported in some various merchandises, so that people can easily download and use it. Moreover, the trust of the community is very important that OVO continues to be used in every online transaction in almost every places and vendors. The purpose of this study is to study the factors that influence the use of OVO by its consumers. The location of the research in Depok, West Java, Indonesia. The number of respondents is 123 persons; who were surveyed by online using the convenience sampling methods. This type of research is a quantitative research with explanatory analysis. The analysis technique uses validity, reliability, and hypothesis testing by using the AMOS application as a data processing tool. The results of this study indicate that the perceived ease of use, trust, and benefits significantly influence the combination of OVO use. Based on the results of the research, the research proves that OVO can convince the users of the data in the OVO application that confidentiality is guaranteed so that OVO can be trusted.

Keywords: Digital Payment

INTRODUCTION

The digital revolution era has produced a lot of new technologies; one of which is an electronic wallet. As a means of platform of payment today, electronic wallets increasingly provide ease of use for its users. One who is accepted does not need to carry cash in many vendors and places that have been cooperated with OVO. People soon will be going everywhere just by bringing a gadget that is connected to a digital application, a variety of convenience transactions [1].

Electronic wallet also provides many advantages that can minimize the use of cash in purchasing, save a lot of time, get lots of prizes, and can be purchased online at any time and anywhere. Due to its function and flexibility, there are more and more digital wallet users. Based on the Waterhouse Coopers Price Survey (PwC) related to Global Consumer Insights, it is estimated that 47% of respondents in Indonesia currently use cellular payments to conduct transactions in 2019. [2]

In Indonesia, there are 38 electronic wallets that have received official licenses, but there are ten of the most popular ones today, such as OVO, DOKU, Go-PAY, FUND, AJA Link, Jenius, Go Mobile by CIMB, I Pocket, SakuKu, and Paytren. The number of electronic wallets that have sprung up resulted in increasingly fierce competition between applications. Therefore, we need a strategy to win the trust of users in Indonesia. This trust can be seen from the side of application system security, payment security, and personal data security [4].

One of Indonesia's top financial applications since October 2017 is OVO [5]. OVO has collaborated with merchandise partners throughout Indonesia and the biggest one is partnering with Grab and Tokopedia. The more merchandise partners, the more OVO users get more ease of use, usefulness, and trust so that the intention to use is higher.

The purpose of this study is to determine the factors that influence the intended use of OVO e-wallets in Indonesia. The variables used are perceived ease of use, perceived trust, usefulness, and intention to use which are then processed using structural equation modeling).

RESEARCH METHOD

This research is included in explanatory research, namely research that aims to test a theory or hypothesis to support or oppose a theory or hypothesis from existing research results. [7]. The alternative hypothesis in this study is the variables that are accepted for use, perceived trust and benefits as significantly and positively influence the efficiency of OVO use.

The location of the study in Depok, West Java, Indonesia with handling a research of people who use OVO e-wallets. The nominal population is unknown. It must be included in the sampling using accidental sampling / convenience sampling technique. Moreover, random sampling / accidental sampling is a sampling technique in which members take samples by means of people who are easy to meet or who at the right time. [7] The number of samples obtained was 123 respondents surveyed by using online questionnaires.

The questionnaire contained a statement of the factors that influenced the intensity to use OVO, namely perceived ease of use, perceived usefulness and perceived trust. The validity of the questionnaire was tested using the Structural Equation Modelling (SEM) model. After all the statements are declared valid then proceed to the next stage which is testing the hypothesis.

The novelty value of this study is the location of research in Depok that has never done before. Depok is located in the province of West Java with a population of 1,857,734. This city is crowded with various commercial activities so that the use of the OVO e-wallet is quite extensive.

1. Characteristics of Respondents.

The results of the study explained that the gender of the most respondents were female by 69.9% while the rest were male. While the age of most respondents around 31 - 40 years at 42.3%, while the second position ranged from 21 - 30 years at 33%, and the rest was <20 years and> 40 years. As for the latest education, master's degrees were the most 46.4%, followed by diploma degrees of 33.3%, the rest were bachelor's degrees, doctoral degrees and high schools. Meanwhile, most respondents' occupations were 28.4% lecturers and 19.5% of civil servants were private employees, teachers, entrepreneurs and others.

2. Data Analysis

The initial model in the study consisted of three exogenous variables (perceived ease of use, trust, and usefulness) and one endogenous variable, namely intension to use by involving twelve indicators on exogenous variables and four indicators on endogenous variables. The initial model can be seen in Figure 1 below.b.

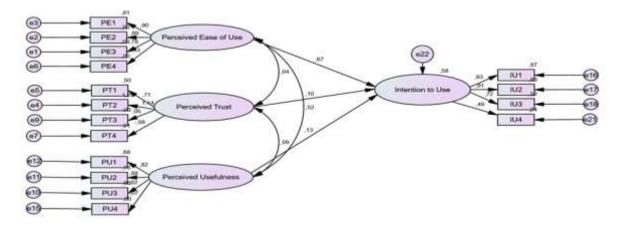


Figure 1: Suitability test on the first model

The initial step in testing respondent data is the Validity Test using a confirmatory factor analysis (CFA) test that measures whether the construct (indicator) is able or not to reflect its latent variables. Criteria called able is if the Critical Ratio (CR)> 1.96 and Probability (P) <0.05. [8] The sign for *** is significant <0.001. Critical Ratio and Probability values in this study can be seen in Table 1 where all constructs have a CR value of 1.96 and a Probability value <0.05 so that it can be stated that all indicators are able to reflect their exogenous variables.

Variable	Indikator	C.R.	Р
Perceived Ease of Use	PE3		
	PE2	10,736	***
	PE3	10,646	***
	PE4	10,655	***
Perceived Trust	PT2		
	PT1	2,102	,036
	PT3	7,345	***
	PT4	6,671	***
Perceived Usefulness	PU3		
reiceived Osefulliess	PU1	10,822	***

Table 1. Validity Test Results using Confirmatory Factor Analysis (CFA)

RESULTS AND DISCUSSION

	PU2	10,278	***
	PU3	10,063	***
Intention To Use (IU)	IU1		
	IU2	14,815	***
	IU3	9,905	***
	IU4	,6,832	***

The next step is conducting a Convergent Validity Test which aims to determine whether the model has a high proportion of variants or not with a factor of loading criteria> 0.5. [8]. Table 2 shows the loading factor value <0.5 on the indicators PE4, PT3, PT4, PU4, and IU4 are declared invalid. Therefore, invalid indicators are excluded from the model and a new model is created which is then issued again with convergent validity

Construct	Indicato r	Loadin g Factor	Result
	PE1	,90	Valid
Perceived Ease of	PE2	,89	Valid
Use	PE3	,78	Valid
	PE4	,03	Not Valid
	PT1	,71	Valid
	PT2	1,14	Valid
Perceived Trust	PT3	,05	Not Valid
	PT4	-,8	Not Valid
	PU1	,82	Valid
Perceived	PU2	,88	Valid
Usefulness	PU3	,82	Valid
	PU4	,07	Not Valid
	IU1	,93	Valid
Intention To Use	IU2	,91	Valid
(IU)	IU3	,71	Valid
	IU4	,49	Not valid

Table 2. Results of Covergent Validity Test

In the Final Model Suitability Test that can be seen in Figure 2, all loading factors > 0.5 are obtained; so that, the bias shows that all constructs (indicators) have high proportion of variance; then, the final suitability model can be proceed to the next stage, namely the reliability test

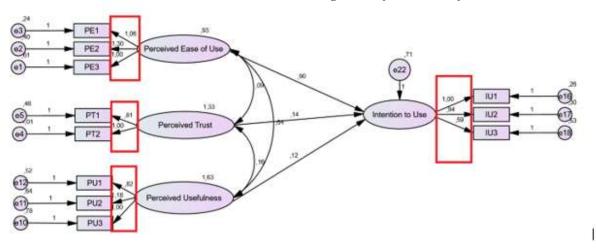


Figure 2. Suitability test on the final model

Reliability Test is used to see the reliability and consistency of the data. This can be fulfilled if the construct reliability value> 0.7. The value of construct reliability between 0.6 to 0.7, is still acceptable with the provisions of construct validity (indicators) in the good model [8]. In Table 4 the results are obtained that all variables have values that support constructs> 0.7 which means that they meet

the data consistency requirements. [8]	the data	consistency	requirements.	[8]
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Variable	Construct Reliability
Perceived Ease of Use	0,892802
Perceived Trust	0,910018
Perceived Usefulness	0,869524
Intention To Use	0,894733

Table 3 F	Reliability '	Test R	esults

Next, there is data normality test with univariate and multivariate normality that analysis the level of data normality that is used in this study. The value of c.r. recommended is in the range of -2.58 to 2.58, but it can be seen that not all are in the range of values, but because the deviation is marginal, so this can be ignored. Table 4 shows that all indicators have a value of c.r. range of -2.58 to 2.58 so that it can be said that the data obtained from respondents are normally distributed. [8]

Table ⁴	5	Hypothe	esis Te	st Resi	ilts
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Tabel 4	Result	of Normali	ty Data

Indicator	C.r.
PE1	-2,491
PE2	-2,270
PE3	-2,400
PT1	-,740
PT2	-1,693
PU1	-1,465
PU2	-2,533
PU3	-2,148
IU1	-2,493
IU2	-2,231
IU3	-,889

The final step in testing the suitability of the model is assessing the Goodness of Fit Index.

Components in goodness of fit are chi square, probability, CMIN / DF, GFI, AGFI, TLI, CFI and RMSEA. The results of Goodness of fit produced in the study showed good fit for all components. The most important thing in Goodness of fit is the chi square obtained 36,461 where this result fits the criteria \leq table with df 38 and a significance level of 5% is 53.38. In table 4 the chi-square value of 36.461 is obtained so that the Final Conformity Model is declared marginal Fit.

			Estimate	S.E.	C.R.	Р	Results
Intention_To Use	<	Perceived_Ease of Use	,275	,083	3,452	***	Supported
Intention_To Use	<	Perceived_Trust	,179	,068	2,736	,008	Supported
Intention_To Use	<	Perceived_Usefulness	,285	,073	3,349	***	Supported

In the hypothesis test above, the conditions for accepting H1 are if the CR value> 1.96 and the P value <0.05 [10]. In Table 5 shows all the values of C.R> 1.96 and P <0.05. This can be interpreted asperceived ease of use, trust and usefulness significantly influence the intensity of the use of OVO e-wallet. OVO e-wallet has attracted many respondents. At the beginning of use, users find it easy to operate the OVO e-wallet application, which makes users want to continue using the application again. Moreover, users also feel the benefits of OVO e-wallet such as time savings when making transactions so that users will continue to use this application in every transaction. The trust felt by users also has a positive impact on the intensity of the use of OVO applications

CONCLUSION

OVO electronic wallet helps users in daily life with some assistance in usage, Benefits received, and trust

received. The purpose of this study is to find out the factors that influence the intention to use an OVO electronic wallet. The results showed that the variables made it easier to use, the benefits received and the perceived trust had a positive effect on Nilat to use an OVO electronic wallet. This contradicts research conducted by Amoroso and Watanabe where these three variables also positively oppose the use of e-Cell phones phones in Japan [6]

This study only uses three exogenous variables only to find out their effect on the intention to use an OVO electronic wallet. It is hoped that for further research, it can use other variables

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