Evaluation of one of leading Indonesia's digital wallet using the unified theory of acceptance and use of technology

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ABSTRACT

The goal of this research is to assess the utilization of one of Indonesia's most popular digital wallets. Respondents in this study range in age from 15 to 44 years old and live on Java Island. The author employs the unified theory of acceptance and utilization of technology (UTAUT) paradigm to assess the use of this digital wallet. This UTAUT model comprises four latent variables that affect behavioral intention (BI) and use behavior (UB): performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC). In this study, the UTAUT model is combined with two additional variables: perceived risk (PR) and promotional benefits (PB). According to the findings, performance expectancy, social influence, and perceived risk all have an impact on behavioral intention, whereas effort expectancy has a less impact. Furthermore, the factors facilitating conditions and promotional benefits have a minor impact on use behavior, whereas behavioral intention factors have a considerable impact on use behavior.

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1. INTRODUCTION

Today, the use of technology is almost inseparable from every aspect of human life. From simple things to complicated things, everything will intersect with technology. Over time, technology continues to evolve with the times. It cannot be denied that technology can make human life easier by making daily work faster and more concise. One occf them is the development of technology in the financial sector.

The widespread use of electronic money reflects the rapid growth of technology in the financial sector. Based on data from Bank Indonesia [1], the amount of electronic money circulating in the community increased by 42.7% from 2018 to 2019. This is in line with a report from Visa which stated that 76% of respondents who came from Indonesia stated that they could make non-cash transactions for 24 hours and 47% of respondents stated that they can do non-cash transactions for 3 days [2]. This percentage is the highest in Southeast Asia.

The contradiction is that, after China and India, Indonesia has the world's third biggest unbanked population, with the majority of them living in rural areas. Even now, 14 percent of e-commerce sales in Indonesia are paid in cash. With this condition, startup companies in the financial sector have many opportunities to develop. Fintech services can provide convenience for online and offline transactions using only one platform, namely the digital wallet application.

A digital wallet is a payment system that converts the characteristics of a physical wallet into electronic ones, allowing users to carry out electronic transactions using various types of payments, such as

debit cards, credit cards, loyalty cards, and bank accounts [3]. This integration automatically provides convenience for user, increases security, speed, and saves time. Digital wallets generally use QR Code technology or Near Field.

Currently, Indonesia has 38 digital wallets that are officially licensed. Some of them are Gopay, OVO, LinkAja, DANA, Go Mobile, DOKU, and i.saku. Go Mobile and i.saku are examples of digital wallets issued by conventional banks where the digital wallet account is connected to the user's account at the respective bank. Go-Pay, one of the products of Indonesia's first decacorn business Go-Jek, is the most popular digital wallet software in the country. OVO is an example of a digital wallet that may be used as a payment mechanism for offline transactions at OVO's developer's businesses. DANA, being a newcomer to e-wallet apps in Indonesia, quickly shown its commitment to become the country's first e-wallet application. "DANA" means funds in English. DANA was officially introduced on March 21, 2018, which is a subsidiary of EMTEK and Ant Financial. According to data from App Annie, in the second quarter of 2019, DANA ranked third in number of users [4].

Based on previous research conducted by [5], it was found that ease of use and speed were the two main factors influencing the success of e-wallet implementation. With DANA as a new digital wallet player in Indonesia, the author wishes to obtain a deeper knowledge of the acceptance, use, and behavior of DANA digital wallet users by Indonesians living in Java by employing the unified theory of acceptance of technology use model (UTAUT). In [6] presented a theory in 2003 to identify the successful introduction of a technology and analyze user behavior based on four (four) fundamentals: performance expectation, effort expectancy, social influence, and facilitating factors. The author selected the UTAUT model because it was created by combining the dominating fundamentals of the prior model of human behavior with computing. UTAUT's basic model can explain 70% of the variable in behavioral intention and 50% of the variance in technology use. The problem is that many UTAUT studies do not use moderator factors. The findings of this study can be utilized as input for developers or other parties entering the Indonesian digital wallet market to pay attention to the elements that influence the amount of user acceptance.

This article will now be organized as follows. The following part will go through research methods, research models, and data collection techniques. The following section will go over data analysis using structural equation modeling with partial least squares (PLS-SEM). A discussion and conclusion section will be included at the end of this article.

2. RESEARCH METHOD

The UTAUT model is used in this study to determine the elements that influence DANA user acceptance. This study used PLS-SEM as a method of data analysis. Questionnaires are distributed to DANA's users who live in Java Island, Indonesia with an age range of 15 to 44 years and distributed using google form. The reason for choosing Java Island is because 56% of Indonesia's population lives on this island [7] and the majority of digital wallet users are living in this island. In addition, the contribution of internet use in Java is the highest in Indonesia, namely 55.7%. In terms of age, respondents between the ages of 15 and 44 have the highest internet penetration rate, which is above 50%.

3. RESEARCH MODEL

The unified theory of acceptance use of technology (UTAUT) Model established by [6] was utilized as the author's research model in this study. This model includes four variables: performance expectation, effort expectation, social influence, and facilitating conditions. These four characteristics have an impact on behavioral intention and use behavior. Authors choose the UTAUT model since it has the most relevant variables to the author's research.

UTAUT is already being used to explore mobile technology usage [8], mobile commerce acceptance [9], mobile payment acceptance [10], and prediction of mobile-based shopping application usage [11]. However, in order to learn more about the factors that influence behavioral intention and use behavior, this study includes two new variables: perceived risk and promotional benefits. Chen [10] found that perceived risk is a factor that directly affects user acceptance of using mobile payments. Pavlou [11] who integrated perceived risk with UTAUT found that perceived risk was significantly related to the intention to transact (behavioral intention). According to Chen [10], perceived risk is the level of a user's thinking about the occurrence of a risk in a system. Meanwhile, Tak and Panwar [12] argues that user sensitivity to promotional benefits has a positive effect on use behavior. Based on Madan and Yadav [13], promotional benefits can be in the form of various benefits such as cash rewards, coupons, discount, and loyalty points. This variable can be a new variable in the UTAUT model in the context of digital wallets. The model used in this study can be seen in Figure 1. Table 1 displays the definitions of each variable used in this study.

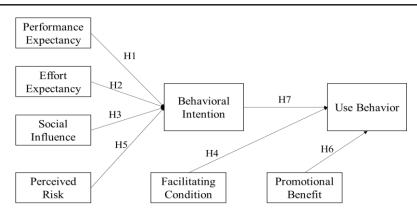


Figure 1. Research model (Author's Research)

Based on the research model, the authors developed several hypotheses, namely:

- H1: Performance expectancy affects behavioral intention
- H2: Effort expectancy affects behavioral intention
- H3: Social influence affects behavioral intention
- H4: Facilitating conditions affect use behavior
- H5: Perceived risks affect behavioral intention
- H6: Promotional benefits affect use behavior
- H7: Behavioral intention affects use behavior

Table 1. Definition of variable	
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Variable	Definition
Performance expectancy	The degree to which an individual believes that using a digital wallet will assist them in achieving daily goals
(PE)	[6]
Effort expectancy (EE)	The level of convenience associated with using a digital wallet [6]
Social influence (SI)	The extent to which someone thinks an important person thinks they should use digital wallet [6]
Facilitating conditions	The degree to which one believes that an organizational and technical infrastructure exists to support the use
(FC)	of digital wallets [6]
Perceived risk (PR)	The degree to which a person perceives that utilizing a digital wallet poses a risk [10]
Promotional benefits	The degree of user propensity for transactions when offered by agreement [11]
(PB)	
Behavioral intention (BI)	Individual overall affective reaction to using digital wallets [6]
Use behavior (UB)	Actual technology use is quantified either as a binary variable or in conjunction with frequency of use [14]

To measure the relationship between variables, the authors use several statements as indicators for each variable. The questions are given initials and numbers based on the variables. For example, the performance expectancy variable has the initials PE, so that the first question of the variable will be changed to PE1, the second question becomes PE2, and so on. There are 31 statements used in this study.

4. DATA COLLECTION METHOD

A survey was employed to obtain data for this investigation. The survey was carried out by using Google Form to create an online questionnaire. The questionnaire was distributed online via social media to the author's relatives and families using a random sampling technique. Before distributing the questionnaire, the authors conducted a readability test on 25 respondents who were personally chosen by the author. The goal of the readability test is to gather feedback from respondents on whether the statements in the questionnaire can be correctly comprehended.

4.1. Population

The DANA Digital Wallet users are the study's target group. However, this research will focus on the population in the island of Java because the island of Java has a contribution value of 55.7% of Indonesian internet users [15]. In another word, 55.7% of the 171 million internet users in Indonesia in 2018 were around 95 million users on the island of Java and represented more than half of the population of internet users in Indonesia.

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In addition, the authors also took the population based on age categories, namely in the age range 15-44 years. Based on [15], there are several age ranges that are classified as active on the internet, namely the age 10-14 years with the percentage of internet users reaching 66.2% of the total population, the age 15-19 years old with a percentage of 91%, the age 20-24 years with a percentage of 88.5%, the age 25-29 years with a percentage of 82.7%, the age 30-34 years with a percentage of 76.5%, the age 35-39 years with a percentage of 68.5% and the age 40-44 years with a percentage of 51.4%. In addition, the age 45-49 years has a percentage of internet users of 47.6%. The more you get older, the smaller the percentage of internet users who are in that age category. Meanwhile, in the 5-9 year age category, only 25.2% of the total population uses the internet.

4.2. Sample

Currently, DANA has 30 million registered users in Indonesia [16]. However, in order to represent 30 million users, the author use the Slovin algorithm to determine the lowest number of samples required. The author sets the error tolerance limit at 5%. So that the number of respondents that must be obtained is 400 respondents. The number of respondents collected for this study were 496 respondents.

5. DATA ANALYSIS

5.1. Demographic of respondents

Questionnaires were distributed from 4 November 2019 to 10 November 2019. Figure 2 shows the data of 496 respondents based on age. Most respondents were between the ages of 20 and 24 (363 respondents). Figure 2 shows the data of 496 respondents based on their age, which is the result of the author's online questionnaire. Of the 496 respondents, most of the questionnaires were filled in by respondents aged 20-24 years, with a total of 363 respondents. The second largest age category is the age category of 15-19 years, with a total of 66 respondents. The third largest age category is the age category of 15-19 years, with a total of 43 respondents. The third largest age category is the age category of 15-19 years to 40-44 years because that age category has more than 50% of the total population in that age category. In this study, respondents under 15 years of age were not users of DANA, so those under 15 years of age were not represented in this study. Therefore, this study only represents the age range of 15 to 44 years.

Based on gender, respondents were divided into two categories, namely male and female. It can be seen that of the 496 respondents that the authors obtained, 56% were male and 44% were female. Of the 496 respondents, most of the questionnaires were filled out by respondents who lived in Jakarta, with a percentage of 53%. This study has a scope only in Java, so the authors only take respondents who are domiciled in Java.

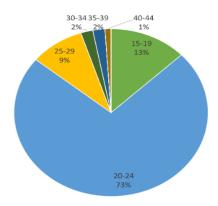


Figure 2. Demographic of respondents based on age category

5.2. Measurement model

To assess the reliability and validity of the research instrument, the measurement model (outer model) is evaluated. The reliability test in the measurement model with reflected indications is performed by examining indicator reliability and internal consistency reliability. Meanwhile, the validity test includes both convergent and discriminant validity [17].

If each indicator has an outer loading value greater than 0.7, this is a good indicator reliability test [17]. The reliability of the indicator itself reflects the proportion of indicator variants described by the variables whose values range from 0 to 1 [18]. This suggests that the indication with a closer outer loading value to 1 has a variant that is better explained by its variables.

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Furthermore, according to [19], an indication with an outer loading value between 0.4 and 0.7 does not need to be eliminated from the research. However, it must first be determined whether or not deleting these indications increases the composite reliability and average variance extracted (AVE) values above the limit value. Meanwhile, outer loading values less than 0.4 must be eliminated right away.

There are three indicators in the first phase that have an outer loading value of less than 0.7, namely FC4 (In my opinion, DANA is currently being used by many merchants), PB2 (I prefer to make purchases when there are promotional offers from DANA), and SI4 (I will use DANA if it is already widely used by the community) with their respective values being 0.648, 0.682, and 0.457. Because the outer loading value of these indicators is below the value recommended by[19], the authors delete these indicators.

Composite reliability is used to measure internal consistency reliability. Composite reliability assesses the construct measurement's internal consistency reliability. The composite reliability value must be more than 0.6 for exploratory research [20].

Table 2 shows that before the three indicators (FC4, PB2, SI4) were removed, all latent constructs already had composite reliability values above 0.6 with a value range of 0.843 to 0.935 which could be said to be valid. The difference in the value of the three indicators before and after being deleted is not significant. The composite reliability value remains above the standard recommended by [19] namely 0.6. Based on referring to [19], the authors decided not to delete the three indicators.

Construct	Original Composite Reliability Value	Composite Reliability Value after Indicator deleted	
Behavioral intentions (BI)	0.935	0.935	
Effort expectancy (EE)	0.905	0.905	
Facilitating conditions (FC)	0.839	0.875	
Promotional benefits (PB)	0.826	0.847	
Performance expectancy (PE)	0.881	0.881	
Perceived risk (PR)	0.902	0.902	
Social influence (SI)	0.843	0.885	
Use behavior (UB)	0.873	0.873	

Table 2. Composite reliability value

A convergent validity test with an average variance extracted (AVE) value greater than 0.5 is considered excellent. This score indicates that a construct can account for more than half of its indicator variants [17]. Table 3 also shows that the AVE value before the three indicators were deleted and after being deleted did not change significantly. The AVE value remains above the standard recommended by [19] namely 0.5.

Discriminant validity testing determines how much a construct differs empirically from other constructs, or how well the construct measures what it should measure. The cross loading of an indicator is used to determine discriminant validity. This method demands that each indicator in this construct have a greater loading value than the cross loading value for other constructs [17]. The cross-loading value of each indicator in its own construct is larger in this study than the cross-loading value for other constructs.

Table 5. Average variance extracted value			
Construct	Original Average Variance Extracted	Average Variance Extracted (AVE) value after indicator	
Construct	(AVE) value	deleted	
Behavioral intentions (BI)	0.783	0.783	
Effort expectancy (EE)	0.706	0.706	
Facilitating conditions (FC)	0.568	0.701	
Promotional benefits (PB)	0.615	0.735	
Performance expectancy (PE)	0.650	0.650	
Perceived risk (PR)	0.698	0.698	
Social influence (SI)	0.586	0.721	
Use behavior (UB)	0.635	0.635	

Table 3. Average variance extracted value

5.3. Structural model

The evaluation of the structural model or inner model aims to determine the relationship between the independent and dependent latent variables [20]. In evaluating the structural model (inner model), the test consists of several measurements, namely coefficients of determination (\mathbb{R}^2), Stone-Geisser's cross validated redundancy (\mathbb{Q}^2), path coefficients, and effect size (f^2).

The coefficient of determination (\mathbb{R}^2) is a measurement of the predictive accuracy of a model. \mathbb{R}^2 represents the effect of a combination of exogenous variables on endogenous variables whose values range from 0 to 1 with 1 representing complete prediction accuracy [17]. In this research, all factors are in good category. The performance expectancy, effort expectancy, social influence and perceived risk simultaneously affect the behavioral intentions variable by 59.2%. While the rest, namely 40.8%, is influenced by other variables outside the research. Then, the variables facilitating conditions, promotional benefits and behavioral intentions simultaneously affect the use behavior variable by 49.6%. While the rest, namely 50.4%, is influenced by other variables outside the research.

Effect size (f^2) assesses how big or strong a latent exogenous variable contributes to \mathbb{R}^2 belonging to endogenous latent variables [20]. The value of f^2 is calculated by considering the change in \mathbb{R}^2 when a particular construct is removed from the model. The value of f^2 can have results, namely 0.02, 0.15, and 0.35, each of which represents small, medium, and large effects, respectively. If the exogenous construct contributes to explaining the endogenous construct strongly, the difference between $\mathbb{R}^2_{included}$ and $\mathbb{R}^2_{excluded}$ will be high, which also results in a high f^2 value (Hair, 2014). The calculation of f^2 in this study is shown in the Table 4.

1 able 4. Effect size (f^2) value			
Endogenous Variable	Effect Size	Description	
UB	0.574	Large	
BI	0.005	Small	
UB	0.004	Small	
UB	0.001	Small	
BI	0.338	Medium	
BI	0.076	Small	
BI	0.064	Small	
	Endogenous Variable UB BI UB UB BI BI BI	Endogenous Variable Effect Size UB 0.574 BI 0.005 UB 0.004 UB 0.001 BI 0.338 BI 0.076	

Table 4. Effect size (f^2) value

Path coefficients represent hypothetical relationships that connect the constructs. The path coefficients ranged from -1 to +1 with coefficients closer to +1 representing a strong relationship and coefficients closer to -1 indicating a strong inverse relationship. To calculate each path coefficient, a bootstrapping procedure is required [19]. In Table 5, the path coefficient value in this research model ranges from -0.029 to 0.695. The relationship between behavioral intention and use behavior has the highest path coefficient value, which indicates a significant relationship between the two variables. Meanwhile, the link between the promotional benefit and use behavior has the lowest value which is closer to -1. This value indicates an inverse relationship, and it can be interpreted that the path has an inverse relationship from the previously established hypothesis.

The results of t-statistics can also be evaluated after bootstrapping. T-statistics test the total significance of the effect of exogenous latent variables on endogenous latent variables. By using two-tailed t-statistics with a significance level of 5%, the path coefficient will be significant if the t-statistics is greater than 1.96 [20]. Table 6 shows the calculation of t-statistics from the bootstrapping results in this research model. In Table 6, it can be seen that there are three pathways that have a low level of significance, namely effort expectancy (EE) -> behavioral intention (BI) with a value of 1.199, facilitated conditions (FC) -> use behavior (UB) with a value of 1.515, and promotional benefits (PB) -> use behavior (UB) with a value of 0.795.

Table 5. Path coefficient		
Path Coefficient	Original Sample (O)	
$BI \rightarrow UB$	0.695	
$EE \rightarrow BI$	0.050	
$FC \rightarrow UB$	0.053	
$PB \rightarrow UB$	-0.029	
$PE \rightarrow BI$	0.477	
$SI \rightarrow BI$	0.215	

Table 6. T-statistics		
Path Coefficient	T Statistics(O/STDEV)	
$\mathrm{BI} ightarrow \mathrm{UB}$	19.450	
$EE \rightarrow BI$	1.199	
$FC \rightarrow UB$	1.515	
$PB \rightarrow UB$	0.795	
$PE \rightarrow BI$	10.705	
$PR \rightarrow BI$	4.457	
$SI \rightarrow BI$	5.069	

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5.4. Hypothesis testing

The hypothesis will be tested to see if the previously established hypotheses can be accepted or rejected. The standard used to determine whether these hypotheses may be accepted or rejected is a path coefficient value more than 0.1 and a t-statistics value greater than 1.96. A substantial link between the two variables is shown by a path coefficient value more than 0.1 and t-statistics greater than 1.96. Table 7 shows the outcomes of hypothesis testing in this study.

Table 7. Hypothesis testing result				
Hypothesis	Path Coefficient	Original Sample (O)	T-Statistics (O/STDEV)	Result
H1	$BI \rightarrow UB$	0.695	19.450	Significant
H2	$EE \rightarrow BI$	0.050	1.199	Not Significant
H3	$FC \rightarrow UB$	0.053	1.515	Not Significant
H4	$PB \rightarrow UB$	-0.029	0.795	Not Significant
H5	$PE \rightarrow BI$	0.477	10.705	Significant
H6	$PR \rightarrow BI$	0.207	4.457	Significant
H7	$SI \rightarrow BI$	0.215	5.069	Significant

Table 7. Hypothesis testing result

6. RESULTS AND DISCUSSION

6.1. Performance expectancy on behavioral intention

The data processing outcomes in this study show that the performance expectancy (PE) variable has a considerable impact on the behavioral intention (BI) variable. This is consistent with prior study that found that performance expectancy had a favorable and significant effect on behavioral intention to use mobile devices as a payment medium [13], [21], [22]. The use of digital wallets eliminates the use of physical money and bank transfers, so payments using digital wallets make it faster and easier for users to make payments.

6.2. Effort expectancy on behavioral intention

The data processing outcomes in this study show that the effort expectancy (EE) variable has no effect on the BI variable. This is consistent with prior research by [23], which found that effort expectancy has no affect on behavioral intention. The negligible association between the EE variable and the BI variable in this study indicates that the effort to use a system is not a factor in someone using the DANA digital wallet.

6.3. Social influence on behavioral intention

The data processing results in this study show that the social influence (SI) variable has a considerable influence on the BI variable. This is consistent with recent study by [24] which found that social influence has an impact on behavioral intention, implying that respondents pay attention to contextual elements such as their friends' opinions, which influence their use of internet banking. The substantial association between the SI variable and the BI variable in this study indicates that respondents who use the DANA digital wallet are also influenced by the social situations around them.

6.4. Facilitating conditions on use behavior

The data processing results in this study show that the facilitating conditions (FC) variable has an insignificant effect on UB. According to the UTAUT model, the effect of facilitating conditions on use behavior becomes substantial only when age and experience are considered as moderators, which is only relevant for older workers in later stages of their experience. Furthermore, study by [24] found that enabling conditions had no significant effect on usage behavior, implying that research respondents are unconcerned about the surrounding environment, such as infrastructure, knowledge, and supporting capabilities. In this research, the insignificance of the FC variable towards use behavior (UB) shows that respondents who are users of the DANA digital wallet do not pay attention to the facilities that support them in using the DANA digital wallet.

6.5. Perceived risk on behavioral intention

The data processing outcomes in this study show that the perceived risk (PR) variable has a substantial effect on BI. These results contradict the research of [25] conducted in China and review the use of Alipay in users by integrating awareness as a context with the UTAUT model. The study states that perceived risk has a significant inverse effect on BI. This significant inverse relationship shows that Alipay users still think Alipay is not a safe payment method, so that further improvements are needed in system management, account security, and Alipay's payment security system. In this study, the significant

association between perceived risk and behavioral intention indicates that respondents believe the DANA digital wallet has a good security mechanism, which prompts them to utilize the DANA digital wallet.

6.6. Promotional benefits on use behavior

The results of data processing in this research indicate that the promotional benefits (PB) variable has an insignificant effect on UB. These findings contradict the findings of [11], which claim that promotional incentives have a major impact on usage behavior. The insignificance of the association between promotional benefits and use behavior in this study indicates that promotional benefits had no effect on respondents' use of DANA. Whether or not there are promotions provided by DANA, respondents will continue to use and transact with DANA.

6.7. Behavioral intention on use behavior

The data processing results in this study show that the BI variable has a strong positive effect on UB. Previous study also reveals that behavioral intention has a substantial influence on usage behavior, implying that online banking users use the system if they want to use it [24]. A positive and substantial link with behavioral intention to use behavior was discovered in this study, indicating that DANA digital wallet users who plan to use DANA will use the digital wallet to make transactions.

The results of the research conducted show that there are three variables that have a less significant effect, namely effort expectancy, facilitating conditions and promotional benefits. Effort anticipation has less of an impact on behavioral intention but enabling conditions and promotional benefits have less of an impact on use behavior. A design that is easy to understand is one of the important factors that must be considered when designing an application. With the design and navigation of the application that is simple and easy to understand, users can quickly and easily learn to use an application. DANA already has a good application design, seen from its design that emphasizes the user experience. The lack of significance of the effort expectancy variable in this study can be caused by the unfamiliarity of users using digital wallet-type applications, such as DANA.

In addition, the lack of effect of facilitating conditions on use behavior can be affected by the incompatibility of the user's device with DANA application. Currently, the size of DANA app on the Google Play Store is 44 MB. Supposedly, this should not be a problem for its users. Given that smartphones or other devices currently have at least 8 GB of internal memory, equivalent to 8,000 MB. Even so, there are still other factors besides the incompatibility of the devices which are the reasons for not affecting facilitating conditions towards use behavior in this study. Such as an outdated version of the operating system on the device, or broken features or devices that support using DANA on the device. In addition, not many merchants who facilitate payment of DANA use also participate in the lack of influence of facilitating conditions on use behavior.

Meanwhile, the lack of effect of promotional benefits on use behavior actually shows the loyalty of the respondents in using DANA. In this study, respondents did not pay attention to the promotions that DANA had when they wanted to use or make transactions on DANA. To increase this loyalty, which is also related to facilitating conditions, DANA can collaborate with more merchants so that users can always use DANA and make it the main payment method.

Furthermore, the social influence variable with behavioral intention has a significant relationship. The SI2 indicator has the highest value, amounting to 0.895, discussing the influence of important people according to respondents to better use DANA. Therefore, the authors recommend DANA to integrate its services into messaging applications such as LINE or WhatsApp, so that they can share information about services offered by DANA, or promotions such as cashback or discounts. The purpose of this service integration is so that the closest people who are often contacted through the social application can benefit from and recommendations for using DANA. This integration can also be applied more broadly, for example for money transfer features, gamification such as DANA *Kaget* (shocked), and other features that can add value to the social factor of using DANA.

The variable performance expectancy also has a significant influence on behavioral intention variables. The indicator with the highest outer loading value is PE2 of 0.838 about how useful DANA is for everyday life. Therefore, the authors recommend the DANA to improve the use case and features of DANA for daily payments, for example for highway payments, public transportation, and ride-hailing. When compared to similar services such as GoPay and OVO, the two DANA competitors already have a use case for ride-hailing. GoPay can be used to pay for GoRide on the Gojek application, and OVO can already be used to pay for Grab Bike in the Grab application. This can be an opportunity for DANA to add a ride-hailing use case to make it more useful in the daily life of its users. In addition, DANA is also expected to increase cooperation with merchants, be it restaurants, canteens, or shops that have high transaction values and are

frequently visited by DANA users. By further increasing the useful value of the DANA in the eyes of users, it is hoped that DANA will also be able to increase behavioral intention for DANA.

In addition, the variable perceived risk has a significant relationship with the behavioral intention variable. The PR3 indicator which discusses the security of their DANA account information will not be exposed, has the highest value of 0.880. The author draws the conclusion that PR3 is the most prominent indicator in reflecting the perceived risk variable. Therefore, the authors recommend DANA to further demonstrate the security guarantees and the latest security systems used by DANA in protecting user account information. The DANA Protection program can also be further introduced to assure users of the protection of their personal and financial data. Other programs that can assure users of the security of DANA application such as 24/7 customer service, and the latest in user data protection technologies, such as the use of encryption and artificial intelligence, can also be advertised and socialized to increase user trust.

7. CONCLUSION

Based on the results of data processing related to the use of the DANA digital wallet, several things can be concluded as follows. The results of the research that the author has done have met the validity and reliability test. This is based on the value of outer loading, AVE, cross loadings, composite reliability. Based on the data analysis, variable that affects BI are PE, SI, and PR. However, the EE has less effect on the BI factor. Meanwhile, the UB variable, FC and PB factors had less effect on the UB factor. Meanwhile, the BI factor significantly influences the UB factor. The relationship between BI and UB variables is the relationship that has the most significant positive value, namely 0.695. This is in line with the UTAUT model theory which states that behavioral intention has a direct effect on use behavior. When measuring the significance level of the relationship between variables, there are several variables that have a less significant effect, namely: EE on BI; FC against the UB variable; and PB on the UB. This is evidenced by the measurement results of the effort expectancy variable on behavioral intention which has a value of 1.199 <1.96, the variable FC for UB with a value 0,795<1,96. From these results, it can be seen which factors have an influence on the Behavioral Intention and Use Behavior of DANA users in Java. These results can be used as input for providers and other parties developing e-wallets in Indonesia in developing their products.

In this study, the research model focuses on evaluating the use of the DANA digital wallet. The variables used in this research model are performance expectancy, effort expectancy, social influence, facilitating conditions, perceived risk, and promotional benefits. For further research, the authors suggest researching more latent variables or developing latent variables in this study. As in the promotional benefits variable, the author considers the results to be inversely proportional to the reality on the ground. This study shows that promotional benefits have no significant effect on use behavior. In fact, if the DANA digital wallet holds a promo, there are many users who are willing to queue to buy goods at promo prices. The author hopes that further research can describe the differences that occur between the results of the study and the reality of the field.

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