

Continuance intention of mobile payment Using modified extending model of acceptance and use of technology

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KEYWORDS

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Mobile Payment
UTAUT2

ABSTRACT Mobile payment (m-payment) is payment using information technology system. Nowadays, the system is growing familiar to pay online shopping in Indonesia. There are almost a half of Indonesian population using m-payment for business transactions. One of m-payments which is growing popular called DANA. Introducing information technology into a business is important to make transaction easier than traditional one. This phenomenon has been studied based on the extension of Unified Theory of Acceptance and Use of Technology (UTAUT2). The research's aim is to analyse the effect of UTAUT2's variables on sustainability m-payment usability and the role of user's experience as a moderator. All DANA users as the population of this study and the sample are 100 DANA users in Malang, East Java. Simple linear regression and Moderated Regression Analysis (MRA) completed to examine relevance hypothesis. The results shows that the statement of price saving orientation and information quality are not reliable, there is a significant positive effect both of hedonic motivation and habits on continuance intention, and experience does not moderate the effect of hedonic motivation on continuance intention.

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1. INTRODUCTION

The process of technology adoption is defined as the stage of an individual or organization in deciding to use technology. Research on technology adoption focuses mostly on the organizational level, not on the individual (Babita & Subhasish, 2008; Im, 2011). The theory is used to explain the behaviour of individuals in the adoption of technology, the Technology Acceptance Model (TAM) (Davis, 1989) and Theory of Planned Behaviour (TPB) (Ajzen & Beck, 1991). The number of studies using this model is boring because there is no new, more comprehensive approach in explaining the phenomenon of technology adoption (Nang-gong, 2018). The stage after using technology is called post-adoption (post-adoption). When compared with many pre-adoption studies, post-adoption research has received less attention (Son, 2020; Zhou, 2011). Yet the implications of post-adoption behaviour raise all kinds, including on the ongoing behaviour of such an intention to resume the use of (continuance intention) against the technology after the first consumption (Amoroso & Chen, 2017; Dianty, 2018; Lew et al., 2020; Xiaoyu et al., 2014). Continuance intention (CI) is a user's decision to continue using a product or service that has been used before (Han et al., 2018; Lee & Kwon, 2011). Continuance intention also refers to the level of strength of a person's intention to continue to perform certain behaviours (Amoroso & Chen, 2017). The emergence of technological evolution, especially the inter-

net, has changed the mindset and increased the willingness of users to change payment systems from paper-based to modern electronic-based payment systems (Mondego, 2008). Modern payment systems have modified economic and business scenarios to meet the growing demand for online services (Liébana-Cabanillas et al., 2014). This can trigger an increase in the need for technology. The existence of these technological developments has led to an increase in technology adopters. The PricewaterhouseCoopers (PwC) survey related to Global Consumer Insights 2019 indicates that 47 percent of Indonesians use m-payments to make transactions. This figure is an increase of 9 percent compared to 2018 which was around 38 percent (PWC, 2019).

One of the M-payments that is developing in Indonesia is DANA which was released at the end of 2018. In October 2019, DANA users reached 30 million people with an average number of transactions of more than 2 million per day (Sofuroh, 2019). DANA allows users to carry out practical transactions ranging from bill payments, barcode scan transactions at various merchants, interbank transactions, to making e-commerce payments. DANA facilitates users with the most complete services, the most advanced systems, and ensures user security. In this study, continuance intention is a person's activity to make transactions repeatedly using DANA (Amoroso & Chen, 2017). DANA involves the user's tendency to continue or continue to use when the user feels the benefits obtained (Hedman & Henningsson, 2015). Continuance intention is examined in terms of

consumers or users who have previously used it, not in terms of new users or users who will use it. With this effort, it is very important to know the factors in the maintenance of consumer research relationships because sustainable intentions involve reasoned use and aware of long-term needs.

The UTAUT2 model will be modified to suit the research focus. Venkatesh argues that “context-focused theories are considered important in providing an understanding of phenomena and for meaningfully extending theory” (Venkatesh & Brown, 2005). It is therefore important to examine how UTAUT2 can be generalized to different research contexts. This study will use the three variables of the UTAUT2 model. The first variable is hedonic motivation which is the pleasure obtained by users when using technology (Venkatesh & Morris, 2003). Research by Indrawati & Putri (2018) shows that hedonic motivation has a positive and significant influence on the sustainability of the use of m-payment (Dianty, 2018). The second variable is price value, in this study, price value will be replaced with price saving orientation, because the use of mobile payment (m-payment) does not incur monetary costs, but to get the price low (Rodríguez & Trujillo, 2014). The third variable is a habit which is a trait in which a person tends to perform behaviour automatically by going through a learning process (Limayem, & Cheung, 2007). In several studies, habit has a positive and significant influence to be one of the factors that will influence users to continue long-term use (Dianty, 2018; Xiaoyu et al., 2014). The last variable is information quality which will be an additional variable in this study, information quality is the consumer’s perception of the extent to which information on m-payment is believed to be accurate, clear, and of good quality (Kuan & Bock, 2008).

The moderator variable will use experience (experience), which to examine the intention to use sustainability will require more experience than age (age) and gender (gender). The variables of price saving orientation, habit, and information quality will not be moderated by experience, because this research is related to continuance intention. Price saving orientation is the price savings obtained by the user so that no experience is needed in this variable. Habit is the habit of using m-payment as a transaction tool, user habits mean that this user has repeatedly made transactions using DANA and without being strengthened by user experience, he will continue to make transactions using DANA because it has become a habit. Information quality is a perception related to the quality of information seen from how accurate and how clear the information provided by DANA is to users so that it does not need to be strengthened using experience. The relationship between hedonic motivation and continuance intention will be moderated by experience. The pleasure that users get will be strengthened by the experience so that the intention to continue use will be stronger. The relationship between hedonic motivation and continuance intention, moderated by experience, lacks supporting literature. Previous researchers observed the direct effect of hedonic motivation on continuance intention (Amoroso & Chen, 2017; Xiaoyu et al., 2014). Lack of literature, it is necessary to ensure the moderating effect of experience taking into account the rarity of testing, the hypothesis of the moderating effect of experience should be reformulated.

This research is important to do for several reasons. First, this research focuses on mobile payment (DANA) applications that are developing in Indonesia. Several studies have linked mobile payment more has been done by (Alexander, 2019; Danuarta & Darma, 2019; Dianty, 2018; Ferdina & Darma, 2019) some of these studies focus on the Go-Pay and so far, there has been no researchers who examine the users of DANA. Second, some researchers only focus on user acceptance to use technology, especially research on mobile payments (Chandra et al., 2018; Malonda et al., 2020; Sisilia, 2020) and there are still very few studies examining sustainability. Even though the sustainability of use is also important to study to find out how consumers behave after the first use. Third, research on continuance intention still focuses on using the Expectation Confirmation Model (ECM) theory (Park et al., 2017; Salsabilla et al., 2020) even though the UTAUT2 theory can be the theoretical basis for researching continuance intention as studied by Dianty (2018).

This study examines the intentions of sustainable use (continuance intention) and the model used is Extending Unified Theory of Acceptance and Use of Technology (UTAUT2) developed by Venkatesh in 2012. Model UTAUT2 is extending from the Theory of Acceptance and Use of Technology (UTAUT) was developed by Venkatesh in 2003. In contrast to the UTAUT theory which has a research context for organizations or groups, the UTAUT2 model is used for research in an individual context (Venkatesh et al., 2012). The UTAUT2 model has three variables, namely, hedonic motivation, habit, and price value and three moderating variables, namely age, gender, and experience. To fill the research gap above, researchers will focus on examining the continuance intention of mobile payment (DANA) users using the UTAUT2 model as a theoretical basis. The purpose of this study is to see whether the variables of hedonic motivation, price saving orientation, habit, and information quality can affect the intention to continue use (continuance intention), and whether experience will moderate the relationship between hedonic motivation and continuance intention.

2. LITERATURE REVIEW

2.1 Technology adoption concept

Some theories have been developed regarding the factors that influence individual behaviour toward acceptance of new technologies. According to the Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen in 1975, the main determinant of individual behaviour is individual intention, which is influenced simultaneously by attitude toward behaviour and subjective norm (Fishbein & Ajzen, 1975; Tanoglu & Basoglu, 2010; Venkatesh & Morris, 2003). Then in 1991, Ajzen refined the theory known as The Theory of Planned Behaviour (TPB). TPB enhance Theory of Reasoned Action (TRA) by adding the variable of perceived behavioural control as additional variables and determinants of an individual’s behaviour when it will adopt and use technology (Ajzen & Beck, 1991; Venkatesh & Morris, 2003). Several years after the refinement of the model, TPB has been successfully applied to understanding the acceptance and use of various technologies (Harrison & Peter, 1997; Mathieson, 1991; Taylor & Todd, 1995).

In 1989, Davis adapted TRA to develop a model called the Technology Acceptance Model (TAM). This model in-

cludes perceived ease of use and perceived usefulness as two determinants of attitudes toward behavioural intentions and technology use. In TAM, perceived ease of use is defined as the extent to which a person believes that using the system does not require significant effort. Meanwhile, perceived usefulness is defined as the extent to which a person believes that the use of technology systems will improve user performance (Davis, 1989; Venkatesh & Brown, 2005).

In 2003, Venkatesh revisited and developed a theory of technology acceptance, namely the Unified Theory of Acceptance and Use of Technology (UTAUT). UTAUT was developed by comparing eight models of technology acceptance, namely Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behaviour (TPB), Combined TAM and TPB (C-TAM-TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). UTAUT developed to examine the acceptance of technology by groups or organizations by using four constructs, namely performance expectancy, effort expectancy, social influence, and facilitating conditions. age, gender, experience, and voluntariness of use will be used as moderator variables in the UTAUT model (Venkatesh & Morris, 2003).

Although the UTAUT model is quite reliable in understanding the acceptance and use of technology in a group or organizational context. However, there is still a need for systematic research to examine the acceptance and use of technology from an individual or consumer perspective. Therefore, Venkatesh again extended the theory of the UTAUT model in 2012, namely UTAUT2 where this model was made in the context of individual user acceptance. Users are something that is believed to be of very high value due to the increasing development of technology, applications and services targeted at users. Three variables will be added in the UTAUT2 model, namely hedonic motivation, price value, and habit. The UTAUT2 model uses three moderators, namely age, gender, and experience (Venkatesh et al., 2012).

2.2 Continuance intention (CI)

CI is a user's decision to continue using a product or service that has been used before (Han et al., 2018; Lee & Kwon, 2011). CI also refers to the level of strength of a person's intention to continue to perform a certain behaviour (Amoroso & Chen, 2017). The adoption of an information technology is indeed an important first step to achieve the success of an information technology, but the success of information technology is highly dependent on the willingness of users to continue using the information technology (Bhattacharjee & Anol, 2001). CI means that consumers have formed certain expectations of a service before using it. After they use the service, they will decide whether to continue using or stop at the first experience of use (Susanto et al., 2016). Users who use DANA regularly, users who prefer to use DANA compared to m-payment, and users who will suggest using DANA to others, have a greater intention to continue using DANA.

2.3 Research conceptual framework

The focus of this research is to examine continuance intention in using the DANA mobile payment application. There

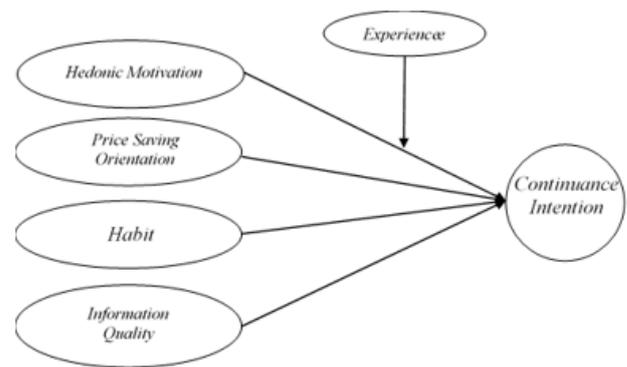


FIGURE 1. framework of thinking

are two variables in the model UTAUT2 (hedonic motivation and habit) and variable modifications or additional variables (price saving orientation, and information quality) to determine the intentions of the sustainability of the use of DANA. Experience moderator variable that will moderate the relationship between hedonic motivation variables on continuance intention. The conceptual framework of the research is presented in Figure 1.

2.3.1 Hedonic motivation (HM) with continuance intention

Hedonic motivation (HM) is pleasure based on experience that comes from the whole process when making transactions. Research by Brown and Venkatesh (2005) has proven that HM plays an important role in determining the use of m-payments (Venkatesh & Brown, 2005). In Putri's research (2018), HM has a positive and significant influence on continuance intention (Dianty, 2018). In this study, pleasure is obtained when users feel the benefits and convenience when transacting using DANA. Therefore, HM is believed to be one of the factors that influence the continuity of use (continuance intention).

H_1 : Hedonic Motivation has a positive and significant effect on Continuance Intention

2.3.2 Price saving orientation (PSO) with continuance intention (CI)

Price saving orientation (PSO) is a price savings obtained by users by using m-payment so that it will increase users (Wen, 2012). In addition, previous studies have included PSO variables in payment application research, such as purchasing products/services through applications whose use does not incur monetary costs for users and users are likely to get lower prices obtained (Jensen, 2012; Rodriguez & Trujillo, 2014) One of the reasons why users use DANA as a transaction tool is to get a lower price compared to using cash. Therefore, the PSO obtained by the user is one of the factors that can affect the user's intention to continue using DANA.

H_2 : Price Saving Orientation has a positive and significant effect on Continuance Intention

2.3.3 Habit (HA) with continuance intention (CI)

Habit (HA) is the extent to which a person uses m-payment automatically because of a learning process so that it will affect user behaviour in the future (Fishbein & Ajzen, 1975; Nguyen et al., 2014). Users who have used m-payment for

a certain period of time tend to continue using it automatically and without thinking about how to do it (Amoroso & Chen, 2017; Amoroso & Lim, 2017; Limayem & Hirt, 2003; Limayem et al., 2007). Previous research has also found that users who already have experience using m-payments have a strong and significant effect on continued use, and early use can significantly influence future repeat use (Cheung & Limayem, 2005; Wilson & Lankton, 2013). In this context, the researcher assumes that users have automation behavior and will tend to stick with DANA.

H_3 : Habit has a positive and significant effect on Continuance Intention

2.3.4 Information Quality (IQ) with Continuance Intention (CI)

Information quality (IQ) is the user's perception of the quality of information, how accurate and complete the information provided by m-payment applications is (Delone & Mclean, 2003; Kuan & Bock, 2008; Park et al., 2017; Rodríguez & Trujillo, 2014). To be able to retain DANA users, DANA must provide quality information so that the application can be trusted and continue to be used (Kim & Ferrin, 2008). Information contained in DANA includes the latest updates on applications and security, product/service promotion information, and transaction information. Therefore, the IQ obtained by the user is one of the factors that can affect the user's intention to continue using DANA. IQ will be moderated by experience.

H_4 : Information Quality has a positive and significant effect on Continuance Intention.

2.3.5 The effect of hedonic motivation with experience moderation

Experience is an individual's opportunity to use technology and is usually operationalized as the passage of time from initial use (Venkatesh et al., 2012). Venkatesh operationalizes the post-use experience of the system initially used within a period of 1 to 3 months later (Venkatesh & Morris, 2003). Hedonic motivation related to user pleasure and profit when making transactions can affect continuance intention (Dianty, 2018; Rodríguez & Trujillo, 2014). In this study, experience will be a moderator in the relationship between hedonic motivation and continuance intention. If the user has a positive experience when using DANA (always feel pleasure and gain), it will strengthen the influence of the hedonic motivation variable on continuance intention.

H_5 : Experience will strengthen the influence of Hedonic Motivation on Continuance Intention

3. METHOD

This research uses quantitative research. Quantitative research is used to determine the relationship between variables in a population. This type of research is descriptive quantitative research, namely research that intends to conduct an investigation by describing and describing the data that has been collected as it is. The population in this study were all DANA users in Malang, East Java. In this study, the population is unknown, so the minimum size of a good sample can be determined by multiplying the number of indicators in the questionnaire by 5 (Bagus, 2016) with the minimum number of samples being 90 samples. Sampling in

this study used a purposive sampling method with the aim of obtaining a representative sample with predetermined criteria or characteristics. Characteristics of respondents to be sampled research, namely: user DANA by gender male and female, user FUNDS who have age ≥ 17 years, and have experience using DANA ≥ 1 month.

The operational definition of the variable is the notion of the variable (which is expressed in the concept definition), operationally, practically, in real terms within the scope of the research object/object under study. The operational definitions of variables in this study are:

- A. Continuance intention (CI) (Y) is a user's decision to continue using a product or service that has been used before Han et al. (2018); Lee & Kwon (2011). The CI indicators are namely (Indrawati & Putri, 2018)
 1. Intend to continue using DANA
 2. Will Continue to use DANA regularly as it is now
 3. Have a goal to continue to make payments using DANA instead of using any alternative
 4. Would suggest others to use DANA
- B. Hedonic motivation (HM) (X1) is based on the experience derived pleasure from the whole process when conducting a transaction (Venkatesh & Brown, 2005). HM indicators are (Venkatesh et al., 2012):
 1. Using DANA is fun
 2. Using DANA is very profitable
 3. Using DANA is very happy
- C. Price saving orientation (PSO) (X2) the price savings to be gained when one transaction using a technology (Wen, 2012). PSO indicators are (Dianty, 2018):
 1. Can save money in DANA
 2. Can get cheap offers through the DANA application
 3. DANA offers various valuable Promotions for users
- D. Habit (HA) (X3) is the extent to which a person uses technology automatically because of a learning process that will affect user beliefs and behaviour in the future (Fishbein & Ajzen, 2005; Nguyen et al., 2014; Venkatesh et al., 2012):
 1. Must use DANA to Transact
 2. Addicted to using DANA
 3. Using DANA as a Transaction Tool has become a habit
- E. Information quality (IQ) (X4) is the user's general perception of how accurate and complete the information in the application used is (Kuan & Bock, 2008; Rodríguez & Trujillo, 2014). IQ indicators are (Kuan & Bock, 2008):
 1. DANA provides accurate information that users need
 2. DANA provides sufficient information needed in transaction process
 3. The information provided by Dana is very helpful in my transaction process
 4. DANA providers the latest information
- F. Experience (Z) Experience is an individual's opportunity to use technology and is usually operationalized as the passage of time from initial use (Venkatesh et al., 2012). Venkatesh operationalizes the post-use experience of the system initially used within a period

of 1 to 3 months later (Venkatesh & Morris, 2003). The experience variable uses an ordinal scale where user experience will be divided from having experience ≤ 1 month to ≥ 3 months.

4. RESULTS AND DISCUSSION

4.1 Description of respondents characteristics

Respondents obtained in accordance with the characteristics needed in this study were 100 samples, this sample had met the minimum number of samples, namely 90 samples. The majority of respondents are women with a total of 63 people with ages between 17-25 years, student status, income of Rp.1,000,001 - Rp.5,000,000, and having experience of more than 3 months. That is, women aged 17-25 years and their experience of more than 3 months proves to use DANA more than men. Women prefer to shop by transacting using DANA because it is simpler than using cash, especially if DANA offers a lower price.

4.2 Research instrument test results

4.2.1 Validity test results

Testing the validity of the instrument is done by correlating each item score with the total score using the Pearson Correlation (Product Moment) technique. The test criteria state that if $r_{count} > r_{table}$, it means that the questionnaire item is declared valid or able to measure the variables it measures, so that it can be used as a data collection tool.

The results of testing the validity are the items that are valid but have a low value compared with other items (X2.3, X5.2, X5.5), the investigator decided not to use the item. Thus, all items except the three items with low scores will still be included in this study.

4.2.2 Reliability test results

Variable reliability testing is intended to determine the reliability and consistency of the research instrument as a tool to measure the variables it measures. Reliability testing using Cronbach's Alpha technique. Testing criteria stated if the coefficient Cronbach's Alpha $\geq r_{table}$ means that the item questionnaire otherwise reliable or consistent in measuring variable were measured. The results of reliability testing showed that the variable continuance intention, hedonic motivation, habit produces a value of Cronbach's Alpha ≥ 0.60 , with such items statement on the variable is declared reliable or consistent in measuring the variables.

4.3 Classic assumption test results

4.3.1 Normality test results

Testing the normality assumption aims to determine whether in the regression model the residual variables are normally distributed or not. To test whether the residuals are normally distributed or not, it can be known through the Kolmogorov-Smirnov test. Testing criteria stated if the probability resulting from Kolmogorov-Smirnov test, the significance of ≥ 0.05 , then the residual is expressed in normal distribution. The results of the normality assumption test show that the Kolmogorov Smirnov test statistic is 0.157. The test results indicate that the significance ≥ 0.05 . Thus, the residuals are declared to be normally distributed. This means that the assumption of normality is fulfilled.

4.3.2 Multicollinearity test results

Multicollinearity test aims to test whether the regression model found a correlation (strong relationship) between independent variables. The test criteria state that if the Tolerance value ≥ 0.10 and the VIF value ≤ 10 , it means that there is no multicollinearity symptom in the regression model. The multicollinearity test resulted in a Tolerance value ≥ 0.10 and a VIF value ≤ 10 . Thus, the regression model stated that there were no symptoms of multicollinearity and fulfilled the classical assumption test.

4.3.3 Heteroscedasticity test

Heteroscedasticity test is a test that assesses whether there is an inequality of variance from the residuals for all observations in the linear regression model. If the significance value (Sig.) ≥ 0.05 , it means that there is no symptom of heteroscedasticity in the regression model, and vice versa.

The significance value in table 4 shows that the habit variable is ≥ 0.05 , meaning that the model is declared to have no heteroscedasticity symptoms, while the hedonic motivation variable is ≤ 0.05 , which means that the model is declared to have heteroscedasticity symptoms. To treat the symptoms of heteroscedasticity, treatment with the White Test is needed. Basically, this test is done by making the squared residual as the independent variable replacing the dependent variable in the original model. Meanwhile, the independent variable is the independent variable of the original model plus the interaction variable between variables (multiplication between variables) and the square of each variable. From the results of the calculation of the White Test equation, the information needed is the value of R Square (R^2) to find the calculated chi square value (χ^2_{count}). The calculation results produce the value of R^2 , then find the value of χ^2_{count} by: $n \times R^2$ (n is the number of samples). Then find the value of χ^2_{table} with degrees of freedom $k-1$ (k is the number of variables) with a significance of 1%. After getting the two values of χ^2 , then compared with the provisions if the value of $\chi^2_{count} \leq \chi^2_{table}$ then it is stated that there are no symptoms of heteroscedasticity and the classical assumption test can be fulfilled.

The result of analysis shows that the R^2 of 0.058. To find χ^2_{count} , ie $\chi^2_{count} = n \times R^2 = 100 \times 0.058 = 5.8$. To search for χ^2_{table} using the degrees of freedom $k-1 = 2-1$ are known C 2 tables of 6.635 with a significant level of 1%. From the calculation results of the above in mind $\chi^2_{count} (5.8) \leq \chi^2_{table} (6.635)$, meaning that no symptoms of heteroscedasticity and meet the assumptions of classical test.

4.3.4 Classic Assumption Test Results

Testing is partially (t test) is used to determine whether there is a partial influence of independent variables (individual) on the dependent variable. The test criteria state that if $t_{count} \geq t_{table}$ and Sig. ≤ 0.05 . T - table in this study, which is 1.660.

The results of the research t test consisting of 2 hypotheses can be described as follows:

- a. Hipotesis 1 state that there is positive and significant correlation between hedonic motivation against the continuance intention. The test results show $t_{count} (6.345) \geq t_{table} (1.660)$ and Sig. ≤ 0.05 (0.000). This means that hypothesis 1 is tested and the results of

TABLE 1. Hedonic Motivation and Experience Regression Test on Continuance Intention

Model	B	t	Sig.
Constant	8,386	8,461	0.000
Hedonic Motivation (X1)	0.540	6,354	6,354
Experience (Z)	-0.037	-0.161	0.872

Note: R² = 0.291

this study state that there is a positive and significant relationship between hedonic motivation and continuance intention, the more pleasure users get when transacting with DANA, the more users will increase their intention to continue using DANA. The large influence of hedonic motivation on continuance intention is seen from the R Square value, which is 0.291 or 29.1% while the remaining 70.9% is influenced by other factors not examined in this study.

- b. Hipotesis 2 states that there is positive and significant correlation between habit against continuance intention. The test results show $t_{count} (3.724) \geq t_{table} (1.660)$ and $Sig. \leq 0.05 (0.000)$. This means that hypothesis 2 is tested and the results of this study state that there is a positive and significant relationship between habit and continuance intention, the more accustomed users are to using DANA as a transaction tool, the user will increase their intention to continue using DANA. The influence of habit on continuance intention is seen from the R Square value, which is 0.124 or 12.4% while the remaining 92.3% is influenced by other factors not examined in this study.

4.3.5 Moderation Test Result

The results of the moderation test will show whether the moderator experience will strengthen or weaken the relationship between hedonic motivation and continuance intention. According to the rules of Baron and Kenney (1986), which test the effect of moderating only do if significant difference between the variables independent to variable dependent (Willy & Hartono, 2015). The influence of the moderator will be seen through the comparison of the R Square value, if the R Square value increases, it means that the moderator has succeeded in strengthening the relationship of the independent variable to the dependent variable, and vice versa.

It is known that the results of hedonic motivation regression on continuance intention with a t value of 6.354 $\geq 1.948 (t_{table})$ and a significance level of 0.00 (≤ 0.05) . This means that there is an effect of hedonic motivation on continuance intention, the large effect is seen from the R Square value, which is 0.291 (29.1%) this influence is considered very low because it is far from 1 (100%). Results of regression experience on continuance intention to t is $-0.161 \leq 1.948 (t_{table})$ and a significance level of 0, 872 (≥ 0.05) . This means that there is no effect of experience as an independent variable on continuance intention.

In Table 2, it is known that the regression results of the interaction variable between hedonic motivation and experience (X1.Z) have a negative coefficient (-0.439) which means that the experience moderator variable does not moderate the relationship between the hedonic motivation variable and continuance intention. The resulting t value

TABLE 2. Interaction (X1.Z) Regression Test on Continuance Intention

Model	B	t	Sig.
Constant	-5.818	-0.882	0.380
Hedonic Motivation (X1)	1,784	3.105	0.003
Experience (Z)	4,975	2,163	0.033

Note: R² = 0.325

also has a negative value (-2.189) so it is said that this interaction variable has no effect on continuance intention even though the result is significant (0.031). The resulting R Square only increased 3.4% where this correlation is still relatively low because it is far from 1 (100%). From the two regression tests that have been carried out, analysis can be carried out to identify the type of experience moderating variable through regression equation 2 and regression 3:

$$(2) Y = \alpha + \beta_1X_1 + \beta_2Z + e$$

$$(2) Y = 8,386 + 0,540 X_1 - 0,037Z + e$$

$$(3) Y = \alpha + \beta_1X_1 + \beta_2Z + \beta_3X_1Z + e$$

$$(3) Y = -5,818 + 1.784X_1 + 4,9750 - 0,439X_1Z + e$$

Corresponding regression equation above, it is known that the value of the variable experience (β_2) is not significant, that is 0.872. Value interaction variables (β_3) significant, is 0,031. In accordance with the type of moderator variable, the experience variable is included in the Pure Moderator type (Z is a pure moderator variable).

4.4 Discussion

4.4.1 The Effect of Hedonic Motivartion on Continuance Intention

The results of the study stated that hedonic motivation has a positive and significant effect on continuance intention. This shows that the more pleasure users get when transacting with DANA, the more users will increase their intention to continue using DANA. In this study, hedonic motivation is the variable that has the highest influence among other variables. The results of this study have the same results as the research conducted by Indrawati & Putri (2018) where in her research hedonic motivation has a positive and significant effect on continuance intention and has the highest influence among other variables (Dianty, 2018).

In this study, the effect of hedonic motivation on continuance intention is low. This effect can be interpreted that the pleasure in transacting does not affect the user's intention to continue using DANA in the long term. These results are the same as the results of Escobar's (2014) study where in his research, the hedonic motivation variable has a weak influence on the intention to continue use (Rodríguez & Trujillo, 2014). Meanwhile, several studies say that hedonic motivation directly affects the acceptance and use of technology (Hans, 2004; Thong et al., 2006; Venkatesh et al., 2012). The difference from this study is caused by the existence of different research objects. Pleasure when using technology or making transactions has a stronger impact on people who are new to technology or who have made transactions for the first time compared to people who have done it often. Users who have often used the DANA application will not be too concerned with the fun they get but more concerned with other factors such as the

benefits that will be obtained when transacting using DANA, practicality in transactions, and also time efficiency.

4.4.2 Influence of Habit on Continuance Intention

The results of the study stated that habit had a positive and significant effect on continuance intention. The influence of habit is classified as very low in influencing continuance intention. In contrast to the research conducted by [Indrawati & Putri \(2018\)](#), the results of the two researchers say that habit has a very large influence on the intention to continue use ([Dianty, 2018](#); [Rodríguez & Trujillo, 2014](#)). Habit is a trait possessed by someone who has done something repeatedly. The use of technology that is too frequent will become a habit so that when the person already knows and is able to use technology, then that person will have no difficulty in doing so. According to the researcher, this difference does not lie in a person's habit when using the technology but lies in the subject used, namely DANA. DANA is growing in Indonesia, followed by its competitors who have already emerged and developed in Indonesia. Go-Pay and OVO which emerged at the end of 2016 and 2017 as well as Link-Aja and Jenius which developed in tandem with DANA. Someone who has a habit of making cashless transactions will easily change applications. This is also supported by the absence of a limit on how many applications are used by the user, meaning that the user can freely have many payment applications.

Judging from the indicators on the habit variable, it is stated that users must use DANA when making transactions. This is not in accordance with the existing phenomenon because users will adjust where they will make transactions because not all stores can use DANA as a transaction tool, and users will use payment applications in accordance with the offers provided, such as cashback promos or discount promos for goods.

4.4.3 Effect of Experience Moderating Variables

The results of the study stated that the experience variable could not moderate the relationship between hedonic motivation variables and continuance intention. The large number of users with more than 3 months experience actually proves that user experience does not affect the intention to continue using so that experience is no longer relevant to be used as a moderating variable. In his research, Venkatesh says that as experience increases, the attractiveness that contributes to the hedonic motivational effect on technology use will diminish and consumers will use technology for more pragmatic purposes, such as gains in efficiency or effectiveness. Thus, hedonic motivation will play a less important role in determining technology use with increasing experience ([Venkatesh et al., 2012](#)). The experience variable belongs to the pure moderator type where this type is a variable that moderates the relationship between the independent variable and the dependent variable where the pure moderator variable interacts with the independent variable without being an independent variable (cannot be an independent variable).

5. CONCLUSION

The results of this study indicate that the price saving orientation and information quality variables cannot be analysed because the statement items are not reliable. The hedonic motivation variable has a positive and significant effect on

continuance intention with a relatively low effect. Continuance intention means that users already have a deal repeatedly, then users who had often used applications DANA not too concerned with the pleasure gained but is more concerned with other factors such as the gains when trading using DANA, practicality in the transaction, as well as efficiency. Habit has a positive and significant effect on continuance intention. This means that users are getting used to using DANA as a transaction tool, so that users can increase their intention to continue using DANA. The influence of habit on continuance intention is very low, the user's habit of using technology will make it easier to adopt technologies such as new applications that appear. DANA is growing in Indonesia not alone but many similar competitors. Users' habit in the use of technology so that it will be easier to keep changing according to the needs and applications in accordance with the provisions of the means of payment in some stores. The experience variable cannot moderate the relationship between hedonic motivation variables and continuance intention.

The experience variable does not make a significant contribution in the hedonic motivation relationship to continuance intention because the increase in experience makes users no longer think about pleasure but think more about the efficiency and benefits obtained when making transactions using DANA. The experience variable is a pure moderator where the experience variable cannot be an independent variable and can only affect when it becomes an interaction variable.

The implications of this research are useful for the DANA application management to prioritize security, convenience, and provide profitable offers to increase user loyalty because hedonic motivation is not too noticed by users who have made transactions many times. Based on the habit analysis, it is recommended to develop transaction and service features so that users always transact with the DANA application even though they already have the habit of using other mobile payment applications. Future research is expected to examine the continuance intention of use (continuance intention) it is recommended to modify the UTAUT2 model by using independent variables that are in accordance with the existing phenomena, and can use the experience variable as a moderating variable, so that further research can continue and explain in detail about sustainability intentions. use of mobile payments.

References

- Ajzen, & Beck. (1991). Predicting dishonest actions using the theory of planned behavior. *Journal of research in personality*, 25(3), 285-301.
- Alexander. (2019). The Effect of Price Promotion, Trust, Perceived Usefulness, and Perceived Ease of Use towards the Customer Continuance Intention to Use GO-PAY. *iBuss Management*, 7(3).
- Amoroso, & Chen. (2017). Constructs Affecting Continuance intention in consumers with mobile financial apps: a dual factor approach. *Journal of Information Technology Management*, 28(3), 1-24.
- Amoroso & Lim. (2017). The Mediating Effects Of Habit On Continuance Intention. *International Journal of Information Management*, 37(6), 693-702.

- Babita, & Subhasish. (2008). Adoption of ICT in a government organization in a developing country: An empirical study. *The Journal of Strategic Information Systems*, 17(2), 140-154. doi: <https://doi.org/10.1016/j.jsis.2007.12.004>
- Bagus, G. (2016). Teknik Sampling dan Penentuan Jumlah sampel.
- Bhattacharjee & Anol. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS quarterly*, 25, 351-370. doi: <https://10.2307/3250921>
- Chandra, Y. U., Kristin, D. M., Suhartono, J., Sutarto, F. S., & Sung, M. (2018). Analysis of Determinant Factors of User Acceptance of Mobile Payment System in Indonesia (A Case Study of Go-Pay Mobile Payment). Paper presented at the 2018 International Conference on Information Management and Technology (ICIMTech).
- Cheung, & Limayem. (2005). The role of habit in information systems continuance: examining the evolving relationship between intention and usage. *ICIS 2005 Proceedings*, 39.
- Danuarta, & Darma. (2019). Determinants of Using Go-Pay and Its Impact on Net Benefits. *International Journal of Innovative Science and Research Technology*, 4(11), 173-182.
- Davis. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340
- Delone, & McLean. (2003). The DeLone and McLean model of information systems success: a ten-year update. *Journal of management information systems*, 19(4), 9-30.
- Dianty, P. (2018). Analyzing Factors Influencing Continuance Intention of E-Payment Adoption Using Modified UTAUT 2 Model.
- Ferdiana, & Darma. (2019). Understanding Fintech Through Go-Pay. *International Journal of Innovative Science and Research Technology*, 4(2), 257-260.
- Fishbein, & Ajzen. (1975). *Intention and Behavior: An introduction to theory and research*: Addison-Wesley, Reading, MA.
- Fishbein, & Ajzen. (2005). The influence of attitudes on behavior. *The handbook of attitudes*, 173(221), 31.
- Han, & al, e. (2018). A model and empirical study on the user's continuance intention in online China brand communities based on customer-perceived benefits. *Journal of Open Innovation: Technology, Market, and Complexity*, 4(4), 46.
- Hans. (2004). User acceptance of hedonic information systems. *MIS quarterly*, 695-704
- Harrison, & Peter. (1997). Executive decisions about adoption of information technology in small business: Theory and empirical tests. *Information systems research*, 8(2), 171-195.
- Hedman & Henningsson. (2015). *The new normal: Market cooperation in the mobile payments ecosystem*. *Electronic Commerce Research and Applications*, 14(5), 305-318.
- Im. (2011). An international comparison of technology adoption: Testing the UTAUT model. *Information & Management*, 48(1), 1-8. doi:<https://doi.org/10.1016/j.im.2010.09.001>
- Indrawati & Putri, D. A. (2018, 3-5 May 2018). Analyzing Factors Influencing Continuance Intention of E-Payment Adoption Using Modified UTAUT 2 Model. Paper presented at the 2018 6th International Conference on Information and Communication Technology (ICoICT).
- Jensen. (2012). Shopping orientation and online travel shopping: The role of travel experience. *International Journal of Tourism Research*, 14(1), 56-70.
- Kim, & Ferrin. (2008). A Trust-Based Consumer Decision-Making Model in Electronic Commerce: The Role of Trust, Perceived Risk, and Their Antecedents. *Decision Support Systems*, 44, 544-564. doi: <https://10.1016/j.dss.2007.07.001>
- Kuan & Bock. (2008). Comparing the effects of website quality on customer initial purchase and continued purchase at e-commerce websites. *Behaviour & IT*, 27, 3-16. doi: <https://10.1080/01449290600801959>
- Lee & Kwon. (2011). Intimacy, familiarity and continuance intention: An extended expectation-confirmation model in web-based services. *Electronic Commerce Research and Applications*, 10(3), 342-357
- Lew, & al, e. (2019). Usability factors predicting continuance of intention to use cloud e-learning application. *Helvion*, 5(6), e01788.
- Liébana-Cabanillas, F., Sánchez-Fernández, J., & Muñoz-Leiva, F. (2014). Antecedents of the adoption of the new mobile payment systems: The moderating effect of age. *Computers in Human Behavior*, 35, 464-478.
- Limayem & Cheung. (2007). How habit limits the predictive power of intention: The case of information systems continuance. *MIS quarterly*, 31(4).
- Limayem & Hirt. (2003). Force of Habit and Information Systems Usage: Theory and Initial Validation. *Journal of the Association for Information Systems*, 4(1), 3.
- Limayem, Hirt, & Cheung. (2007). How Habit Limits The Predictive Power of Intention: The Case of Information Systems Continuance. *MIS quarterly*, 705-737.
- Malonda, & al, e. (2020). The Effect Of Technology Acceptance Model, Perceived Trust, Security, And Attitude Toward Ovo Usage. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 8(1).
- Mathieson. (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. *Information systems research*, 2(3), 173-191.
- Mondego. (2018). Understanding the influence of trust on mobile payment systems adoption: A literature review. 8, 1-5.

- Nanggong. (2018). Perilaku Pasca-Adopsi Teknologi Personal Terhadap Intensi Sustainable Behavior. *Journal of Technology Management*, 17(1), 10–26.
- Nguyen et al. (2014). Acceptance and use of e-learning based on cloud computing: the role of consumer innovativeness. Paper presented at the International Conference on Computational Science and Its Applications.
- Park et al. (2017). Understanding Mobile Payment Service Continuous Use Intention: An Expectation-Confirmation Model and Inertia. *Quality Innovation Prosperity*, 21(3), 78–94.
- Park & Kim. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. *International journal of retail & distribution management*.
- Prabowo & Nugroho. (2019). Factors that Influence the Attitude and Behavioral Intention of Indonesian Users toward Online Food Delivery Service by the Go-Food Application. Paper presented at the 12th International Conference on Business and Management Research (ICBMR 2018).
- Putra & Ariyanti. (2014). Pengaruh Faktor-Faktor dalam Modified Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) terhadap Niat Prospective Users untuk Mengadopsi Home Digital Services PT. Telkom di Surabaya. *Jurnal Manajemen Indonesia*, 14(1), 59–76.
- PwC, P. (2019). Global Consumer Insights Surveys 2019 (pp. 6).
- Rodriguez & Trujillo. (2014). Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model. *Tourism Management*, 43, 70–88.
- Salsabilla et al. (2019). Aplikasi Pembelian Tiket Pesawat: Memahami Determinan Niat untuk Melanjutkan Penggunaan. *Esensi: Jurnal Bisnis dan Manajemen*, 9(1), 57–68.
- Sisilia, K. (2020). Analisis Penerapan Model Unified Theory Of Acceptance And Use Of Technology2 (Utaut2) Pada Adopsi Penggunaan Dompot Digital Ovo Dayeuh Kolot Bandung (Studi kasus pada Generasi Z sebagai pengguna OVO). *Jurnal Menara Ekonomi: Penelitian dan Kajian Ilmiah Bidang Ekonomi*, 6(1).
- Sofuroh. (2019). 50% Pengguna DANA Setia Meski Tanpa Iming-Iming Promo. detik.com. Retrieved from <https://inet.detik.com/cyberlife/d-4787167/50-pengguna-dana-setia-meski-tanpa-iming-iming-promo>
- Son, M. (2011). Beyond the technology adoption: Technology readiness effects on post-adoption behavior. *Journal of Business Research*, 64(11), 1178–1182.
- Susanto et al. (2016). *Determinants of continuance intention to use the smartphone banking services*. Industrial Management & Data Systems.
- Tanoglu & Basoglu. (2010). Exploring technology diffusion: Case of information technologies. *International Journal of Information Technology & Decision Making*, 9(02), 195–222.
- Taylor & Todd. (1995). Understanding information technology usage: A test of competing models. *Information systems research*, 6(2), 144–176.
- Thong, Hong, & Tam. (2006). The effects of post-adoption beliefs on the expectation-confirmation model for information technology continuance. *International Journal of Human-computer studies*, 64(9), 799–810.
- Tsourela & Roumeliotis. (2015). The moderating role of technology readiness, gender, and sex in consumer acceptance and actual use of Technology-based services. 26(2), 124–136.
- Venkatesh & Brown. (2005). Model of adoption of technology in households: A baseline model test and extension incorporating household life cycle. *MIS quarterly*, 29(3).
- Venkatesh & Morris. (2003). *User Acceptance of Information Technology: Toward a Unified View* (Vol. 27).
- Venkatesh, Thong, & Xu. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 36(1), 157–178.
- Wen, I. (2012). An Empirical Study of an Online Travel Purchase Intention Model. *Journal of Travel & Tourism Marketing*, 29(1), 18–39. doi: [10.1080/10548408.2012.638558](https://doi.org/10.1080/10548408.2012.638558)
- Widiyanto. (2010). *SPSS For Windows untuk analisis data statistik dan penelitian*. BP-FKIP UMS.
- Willy, A., & Hartono. (2015). *Partial Least Square (PLS): alternatif structural equation modeling (SEM) dalam penelitian bisnis*. Penerbit Andi, 22, 103–150.
- Wilson & Lankton (2013). Effects of prior use, intention, and habit on it continuance across sporadic use and frequent use conditions.
- Wiratna. (2014). *SPSS untuk Penelitian*. Penerbit Baru.
- Xiaoyu, X. (2014). Understanding users' continued use of online games: An application of UTAUT2 in social network games. Paper presented at the The Sixth International Conferences on Advances in Multimedia.
- Zhou, et al. (2018). What influence users'e-finance continuance intention? The moderating role of trust. *Industrial Management & Data Systems*.
- Zhou, T. (2011). An empirical examination of users' post-adoption behaviour of mobile services. *Behaviour & Information Technology*, 30(2), 241–250.