

## **Adoption Model of Mobile Payment Use in Non-Metro Area**

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### **Abstract**

*Until 2020, mobile payments in Indonesia, especially m-wallet, are growing, with the frequency of m-Wallet transactions increasing from 18% before COVID-19 to 25% after COVID-19. Supported by the growth in the number of new digital consumers in Indonesia with an increase of 37%, 56% of the number came from non-metro areas, penetration opportunities in non-metro areas are highly increasing. Despite this development, research on the behavior of mobile payment users in the non-metro area is still minimal. Therefore, this research aims at studying the behavior of mobile payments usage, especially m-wallet in the non-metro area. The variables studied will be based on the UTAUT2 model. This study uses a mix-method method where qualitative data is processed and analyzed using content analysis, and quantitative data from the model will be tested using PLS-SEM in order to explain the relationship between variables. The results obtained indicate that facilitating conditions, habit, and price value significantly and positively affect behavioral intention. Meanwhile, the variable that influences usage behavior with a positive significance is only the facilitating condition variable. Therefore, it can be concluded that facilitating conditions or the availability of facilities and knowledge are significant factors to predict the behavior of using m-wallet in non-metro areas.*

#### **Research purpose:**

*This research aims at studying the behavior of mobile payments usage, especially m-wallet in the non-metro area focusing on the factors that influence consumer intentions to use mobile payments in non-metro areas, factors that influence the use of mobile payments in non-metro areas and the influence of these factors on consumer intentions to use mobile payments and the behavior of using mobile payments in non-metro areas.*

#### **Research motivation:**

*Most of the previous studies on mobile payment usage in Indonesia are limited to metropolitan areas or core cities and their supporting cities. Meanwhile, with the rapid growth of the mobile payment sub-sector in Indonesia and with the government's efforts to create a cashless society, there has not been much research on the behavior of mobile payment adoption in non-metro areas.*

#### **Research design, approach and method:**

*This research is mix-method research consisting of two stages: the first stage is a quantitative research that aims to test the UTAUT2 model on a sample of consumers from non-metro areas. At this stage, a model test will be conducted using PLS-SEM and MRA to test the proposed hypothesis. The second stage was followed by qualitative analysis by content analysis. The results of the qualitative study will then be used to support the results of the model test carried out since there is only limited literature discussing the mobile payment usage behavior of consumers in non-metro areas*

#### **Main findings:**

*The results obtained indicate that facilitating conditions, habit, and price value significantly and positively affect behavioral intention. Meanwhile, the variable that influences usage behavior with a positive significance is only the facilitating condition variable. Therefore, it can be concluded that facilitating conditions or the availability of facilities and knowledge are significant factors to predict the behavior of using m-wallet in non-metro areas.*

#### **Practical/managerial implications:**

*It is important for companies to develop applications that are easy to learn and use by consumers if they want to penetrate the market of the non-metro area. Companies can develop applications that are compatible with most devices used by consumers in non-metro areas since sophistication and value of the application will not affect consumer interest or decisions in using m-wallet when the existing application is not compatible with the device used.*

**Keywords:** behavioral intention, mobile payment, non-metro, PLS-SEM, UTAUT2

## 1. INTRODUCTION

The use of m-wallet in Indonesia is growing, driven by the growth of technology-based industries, primarily e-commerce, whose number of users has doubled in 2019. It is stated that until 2020 the development of Digital Payment Gross Transaction Value (GTV) in the region of Southeast Asia increased by 3% from 2019 and is predicted to increase by 15% in 2025. At the same time, there is a 44% increase in mobile banking users in Indonesia. The frequency of e-Wallet transactions also increased from 18% before COVID-19 to 25% post-COVID-19, indicating a massive shift from one payment method to another. In addition, as a result of the covid-19 pandemic, the number of new digital consumers in Indonesia has increased relatively high, with an increase of 37%, of which 56% of this figure comes from non-metro areas<sup>[1]</sup> (Davis et al., 2020).

The growth of digital consumers in Indonesia, which mostly come from non-metro areas or areas outside big cities, is an excellent opportunity for the government to accomplish a cashless society in Indonesia and is a perfect opportunity for the mobile payment industry stakeholders to penetrate the market of non-metro areas. However, further study is needed to learn about the consumer behavior of mobile payment in non-metro areas with this opportunity.

Most of the research done is limited to metropolitan areas or core cities and their supporting cities. Meanwhile, with the rapid growth of the mobile payment sub-sector in Indonesia and with the government's efforts to create a cashless society, there has not been much research on the behavior of mobile payment adoption in non-metro areas. Different behavior can be found in consumers with differences in demographics, lifestyle, facilities or infrastructure, and even culture in non-metro areas.

Of the many studies on the adoption model of mobile payment technology in Indonesia, only one study specifically addresses consumers in non-metro areas, namely Jember Regency. Feril (2020) conducted a study entitled "Analysis of Interest and Behavior in Using Electronic Money in OVO Application Services in Jember Regency Using the UTAUT2 Method". Then it was found that the factors of Performance Expectations, Business Expectations, Hedonism Motivation, Price Value, facilitating conditions, habits significantly affect behavioral intention<sup>[2]</sup>. However, the research is still limited to one non-metro area, so that the research has not been able to discuss the general behavior of consumers outside the metropolitan area.

Therefore this research has the aim of

1. Knowing the factors that influence consumer intentions to use mobile payments in non-metro areas.
2. Knowing the factors that influence the use of mobile payments in non-metro areas.

3. Analyzing the influence of these factors on consumer intentions to use mobile payments and the behavior of using mobile payments in non-metro areas.

In this research, the respondent will be limited to the user of application-based mobile payment such as Gopay, OVO, DANA, LinkAja, ShopeePay, etc.

The two most popular models used in research on mobile payments consumer behavior are the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT)<sup>[5]</sup> (Teoh et al., 2020). First, Venkatesh developed the Unified Theory of Acceptance and Use of Technology (UTAUT) by integrating eight models of technology acceptance and use, namely Theory of Reasoned Action, Theory of Planned Behavior, Technology Acceptance Model, Combined TAM, and TPB, PC Usage Model, Innovation Diffusion Theory, Motivation Model, and Social Cognitive Theory. Venkatesh then summarizes four perspectives through empirical analysis, namely performance expectations, effort expectations, social influence, facilitation conditions, and four distraction variables, namely gender, age, experience, and volunteerism.

The UTAUT model was then further developed into the UTAUT2 model. According to UTAUT, Venkatesh et al. (2012) developed the theoretical framework of UTAUT2 and combined three perspectives, hedonic motivation, price value, and habits, to explain the general consumer use behavior of technology products. In addition, the voluntary interference variable has been removed to allow UTAUT2 to provide a more accurate explanation. Therefore, there are few variables analyzed in the UTAUT2 model, which are performance expectancy (PE), effort expectancy (EE), social influences (SI), facilitating condition (FC), hedonic motivation (HM), price value (PV), and habit (HT) as independent variables and behavioral intention (BI) and usage behavior (UB) as dependent variables.

## 2. METHODOLOGY

This research is mix-method research consisting of two methods: the first method is a quantitative research that aims to test the UTAUT2 model on a sample of consumers from non-metro areas. A model test will be conducted using PLS-SEM and MRA to test the proposed hypothesis. The second method is a qualitative research by analyzing the interview of users. The results of these study will then be used to support the model test carried out since there is only limited literature discussing the mobile payment usage behavior of consumers in non-metro areas.

### 2.1 Data collection

Data collection in this study was carried out cross-sectional, where data was collected only once at a certain time<sup>[3]</sup> (Sekaran, 2016). Data were collected using

semi-structured interviews and online surveys. The questionnaire used a rating scale that describes the level of agreement with the statements on the questionnaire. The sample used is residents who live in Tasikmalaya City, Cianjur Regency, and Kuningan Regency, aged 18-40 years. The sampling technique used is non-probability sampling with snowball sampling. According to Hulland (2010), the minimum sample used for PLS-SEM analysis is at least 20-100 samples. Therefore in this study, the respondents used were 100 respondents<sup>[4]</sup>.

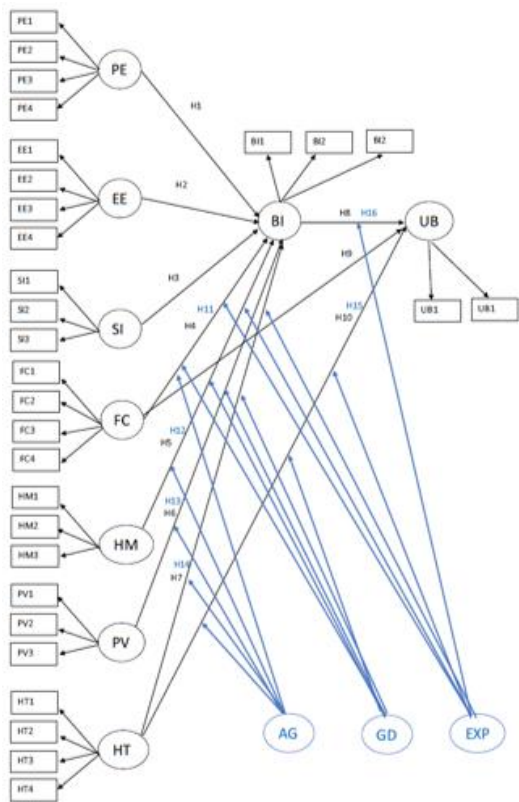
**2.2 Empirical Model**

Data collected will then be processed using the PLS-SEM method to test the main model of the relationship between variables with behavioral intention and usage behavior. First, there will be outer model analysis to make sure the data used was valid and reliable and then followed by inner model analysis to explain the model relationship. Data processing carried out using SmartPLS software. Then to analyze the moderating effect, the moderating regression analysis method or interaction test was used with the help of SPSS software. In the qualitative study, the data obtained from the interview analyzed both conceptually and relationally.

There are total of 16 hypotheses based on the UTAUT model. The hypotheses given in Table 1 while The model proposed is displayed in figure 1.

**Figure 1. Proposed model based on UTAUT2**

|     |   |
|-----|---|
| H1  | Performance Expectancy (PE) has a positive effect on Behavioral Intention (BI)                          |
| H2  | Effort Expectancy (EE) has a positive effect on Behavioral Intention (BI)                               |
| H3  | Social Influence (SI) has a positive effect on Behavioral Intention (BI).                               |
| H4  | Facilitating Condition (FC) has a positive effect on Behavioral Intention (BI)                          |
| H5  | Hedonic Motivation (HM) has a positive effect on Behavioral Intention (BI)                              |
| H6  | Price value (PV) has a positive effect on Behavioral Intention (BI)                                     |
| H7  | Habit (H) has a positive effect on Behavioral Intention (BI)  |
| H8  | Behavioral Intention has a positive influence on use behavior   |
| H9  | Facilitating Condition has a positive influence on use behavior   |
| H10 | Habit has a positive influence on use Behavior.   |
| H11 | Experience, age and gender will moderate the effect of facilitating conditions on behavioral intentions |
| H12 | Experience, age and gender will moderate the influence of hedonic motivation on behavioral intentions   |
| H13 | age and gender will moderate the influence of Price value on behavioral intentions                      |
| H14 | Experience, age and gender will moderate the effect of habits in behavioral intentions                  |
| H15 | Experience, age and gender will moderate the effect of habit on the use of technology                   |
| H16 | Experience will moderate the effect of Behavioral Intention to Use Behavior.                            |



**3. RESULTS AND DISCUSSION**

**3.1 Respondent Characteristic**

From the 100 samples collected, 43 samples came from Tasikmalaya City, 38 samples came from Cianjur Regency, and 19 samples came from Kuningan Regency. The sample is dominated by female respondents with 61% and male respondents as much as 39%. Most of the respondents are students (31%), with other respondents working as private workers, teachers, civil servants, nurses, entrepreneurs, and housewives. With respondents who students dominate, the percentage of respondents with expenditures below 1 million rupiahs is quite in line with the number which is 35% of the respondent. However, the largest expenditure group is respondents with a monthly expenditure of 1-2 million, with 40% of the total respondents. While the most used m-wallet brand by respondents is OVO with 34%, followed by ShopeePay users as much as 28% and then GoPay, DANA, and LinkAja. Meanwhile, a group of

respondents who uses the five brands asked as much as 6% of the total respondents. It can be seen that the most preferred m-wallet brand by respondents is the OVO brand

**3.2 Outer Model Analysis**

An outer model analysis is used to measure whether the latent variable used can describe the manifest variable well or not. The values that need to be considered are convergent validity and discriminant validity, with the following conditions<sup>[5]</sup> (Ghazali, 2014).

**Table 1. Outer Model Analysis Criteria**

| Output                | Criteria  |
|-----------------------|---|
| Convergent Validity   | The factor loading value must be more than 0.70   |
|                       | AVE value must be more than 0.50  |
|                       | Cronbach Alpha value more than 0.7  |
|                       | The composite reliability value is more than 0.7  |
| Discriminant Validity | The loading value of the latent variable with its block indicator must be higher than the other variables |

In the first processing, the FC4 and HM3 variables did not meet the required criteria, so that these variables were removed from the model. After removing FC4 and HM3, the model re-tested and resulted in all variables loading factors above 0,7.

Cronbach's Alpha, AVE, and composite reliability values are shown below.

**Table 2. Cronbach Alpha, AVE and Composite reliability value**

| Variable | Cronbach's Alpha | AVE   | Composite Reliability |
|----------|------------------|-------|-----------------------|
| PE       | 0,796            | 0,619 | 0,867                 |
| EE       | 0,857            | 0,701 | 0,904                 |
| SI       | 0,831            | 0,747 | 0,880                 |
| FC       | 0,848            | 0,767 | 0,906                 |
| HM       | 0,864            | 0,880 | 0,936                 |
| PV       | 0,840            | 0,758 | 0,904                 |
| HT       | 0,856            | 0,699 | 0,902                 |
| BI       | 0,845            | 0,763 | 0,906                 |
| UB       | 0,745            | 0,787 | 0,880                 |

With all these numbers, each variable has met the required criteria so that the data can be called reliable.

Furthermore, the cross-loading number also shows the latent variable's correlation value (loading value), with the block indicator being higher than the other latent variables. Therefore, the existing data can be concluded as valid and reliable.

**3.3 Inner Model Analysis**

After the model is confirmed to be reliable and valid, inner model analysis is carried out to see the relationship between variables. The inner model analysis has several values that need to be considered with certain criteria as follows.

**Table 3. Inner Model Analysis Criteria**

| Output   | Criteria   |
|----------|--|
| VIF      | <ul style="list-style-type: none"> <li>• There may be a collinearity problem if <math>VIF \geq 5</math></li> <li>• There may be a collinearity problem if the VIF is 3–5</li> <li>• Ideal value <math>&lt; 3</math></li> </ul> |
| p-value  | P value $< 0.05$ or t-statistic $> 1.96$   |
| R-square | 0.75 – strong model structure<br>0.50 – moderate model structure<br>0.25 – weak model structure  |
| f-square | 0.02 – little effect<br>0.15 – medium influence<br>0.35 – big influence  |
| Q-square | $> 0$ – the model has predictive relevance<br>Values higher than 0, 0.25, and 0.50 represent small, medium, and large predictive accuracy of the PLS path model  |

From the data processing results, the VIF value of most latent variables is below three so that there is no collinearity problem with these variables. Only HT4 variable which has a VIF value of 3,198 where the number is still classified as a value that is safe with the possibility of collinearity problems that can still be tolerated<sup>[6]</sup> (Hair, 2017)

**Table 4. Path Analysis result**

| Path     | Path coefficient | p-value | significance       |
|----------|------------------|---------|--------------------|
| PE -> BI | 0,122            | 0,203   | not significant    |
| EE -> BI | -0,092           | 0,383   | not significant    |
| SI -> BI | 0,091            | 0,358   | not significant    |
| FC -> BI | 0,177            | 0,045   | <b>significant</b> |
| HM -> BI | -0.009           | 0,925   | not significant    |
| PV -> BI | 0,232            | 0,023   | <b>significant</b> |
| HT -> BI | 0,396            | 0,000   | <b>significant</b> |
| BI -> UB | -0,093           | 0,492   | not significant    |
| FC -> UB | 0,389            | 0,000   | <b>significant</b> |

|          |       |       |                 |
|----------|-------|-------|-----------------|
| HT -> UB | 0,210 | 0,100 | not significant |
|----------|-------|-------|-----------------|

The result of the path analysis shows that there are only three variables that had a significant effect on behavioral intention, which are facilitating condition, price value, and habit, while there is only one variable that had a significant value on usage behavior which is facilitating condition.

Table 5. R-square value

|                      |          |
|----------------------|----------|
|                      | R square |
| Behavioral intention | 0,535    |
| Usage Behavior       | 0,217    |

From these values, it can be seen that the behavioral intention variable relationship model has a moderate model structure, but the usage behavior model has a weak model structure.

Table 6. f-square value

|          |                |
|----------|----------------|
| Path     | f <sup>2</sup> |
| FC -> BI | 0,034          |
| PV -> BI | 0,051          |
| HT -> BI | 0,211          |
| FC -> UB | 0,140          |

The f-square value shows that the effect of the habit on behavioral intention and the facilitating condition on usage behavior has a moderate effect. In contrast, the effect of facilitating condition on behavioral intention and the effect of price value on behavioral intention has a small effect.

Table 7. Q-square value

|                      |                |
|----------------------|----------------|
| Variabel             | Q <sup>2</sup> |
| Behavioral Intention | 0,376          |
| Usage Behavior       | 0,142          |

Q<sup>2</sup> or predictive relevance is an indicator of the predictive power or predictive relevance of the out-of-sample model. In the structural model, a Q<sup>2</sup> value greater than zero for a particular reflective endogenous latent variable indicates the predictive relevance of the path model for a particular dependent construct. From the value above, the model of the relationship between the independent variable and the behavioral intention variable has a moderate predictive accuracy, while the relationship model of the variables that make up usage behavior has a small predictive accuracy. This is because the existing variables have not been able to predict behavior intention and usage behavior well.

**3.4 MRA Analysis**

Next, MRA analysis is conducted to identify the moderating effect of gender, age, and experience on the relationship between FC, PV, and HT to BI and the relationship between FC and UB. Before analyzing the effect, the variable of age, gender, and experience need to be identified first whether they had a moderating impact on the model or not.

Therefore, each variable is tested into 3 kind of model which are:

$$Y = a + b1X1 + e (1)$$

$$Y = a + b1X1 + b2X2 + e (2)$$

$$Y = a + b1X1 + b2X2 + b3X1X2 + e (3)$$

If the coefficients b2 from model (2) had no significant effect on Y and coefficient b3 from model (3) had a significant effect on Y, then the X2 (moderating variable) is a pure moderator on X1 to Y relationship<sup>[7]</sup> (Solimun, 2011)

Each variable is then analyzed, resulting in only one moderating variable, age, on the relationship between facilitating condition and behavioral intention. Other variables didn't found to have any moderating effect. With these results, to see the moderating effect, the multiple regression test was carried out again with the following model:

$$Y = a + b1(FC) + b2(FC*Usia)$$

From the model tested, the R-square value obtained is 0.535, which means that 53.5% of the behavioral intention variables can be explained by facilitating conditions and the interaction variable facilitating conditions with age.

The Anova test or the F test of this model produces a calculated F value of 19.467 with a significance level of 0.000. With a significance of less than 0.05, it can be concluded that this regression model can be used to predict behavioral intention

While the t-test result is shown below

**Coefficient**

| Model        | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
|              | B                           | Std. Error | Beta                      |        |      |
| 1 (Constant) | 3.947                       | .961       |                           | 4.108  | .000 |
| FC           | .510                        | .083       | .609                      | 6.151  | .000 |
| FC*Usia      | -.004                       | .002       | -.214                     | -2.162 | .033 |

**a. Dependent Variable: BI**

So that the final model of the relationship facilitating conditions on behavioral intention is obtained with moderation from age as follows:

$$BI = 3.947 + 0.51FC - 0.004(FC*Age)$$

It can be seen that the age variable has a negative effect on the FC relationship with BI. Thus, the higher a person's age, the less influence the facilitating condition has on behavioral intention.

The facilitating condition variable is proven to have a significant positive effect on behavioral intention and the habit and price value variables. The facilitating condition variable has an original sample coefficient of 0.177, or it can be interpreted that a change in one unit of the facilitating condition variable can provide a 17.7% increase in behavioral intention. Then, the price value variable has an original sample coefficient of 0.232, or a change of one unit from the price value variable will increase the behavioral intention variable by 23.2%. The habit variable has the largest coefficient value with the number 0.396, which means that a change of one unit of the habit variable will affect the increase in behavioral intention by 39.6%. Thus, the habit variable can be said to have the greatest influence among other variables that affect behavioral intention.

The influence of these variables on behavioral intention can also be seen from the value of  $f^2$ . The effect size of the habit variable on behavioral intention has the highest value with 0.211, the price value on behavioral intention with 0.051, and facilitating conditions on behavioral intention with 0.035. This finding is more or less in line with the main journal from Venkatesh (2012), where the results of the UTAUT2 test in Venkatesh's research also give results where the habit variable has the largest effect on behavioral intention with 0.32 while the price value and facilitating conditions are only 0.16 and 0.14<sup>[8]</sup>. The habit variable can be said to be consistent as the variable that has the greatest influence on the behavioral intention of consumers to adopt technology, one of which is mobile payment.

In the test model, the interaction between the age variable and the facilitating condition variable has a negative coefficient of 0.004, or it can be interpreted that an increase of one unit of the age variable can reduce the prediction of the behavioral intention variable by 0.4%. Thus, although it has a significant influence, the moderating effect of the age variable cannot have too big a role in reducing the effect of facilitating conditions on behavioral intention. So it can be said, the effect of facilitating conditions on the behavioral intention of older consumers will be smaller than that of younger consumers.

### 3.5 Content Analysis

Based on the interview results, performance expectancy influences interest in using m-wallet. Among them are the benefits of m-wallet in managing the finances of consumers and the practical benefits provided when using m-wallet. This finding is in line with the statement of the informants when asked what factors influence their interest in using m-wallet.

"Because if I hold cash, I tend to be a spendthrift. And the

second because (if I use m-wallet) it's more practical" (R, male, 19 years old)

The majority of the interviewee then stated that m-wallet was quite easy to use. Still, they did not state that the ease of use of m-wallet or effort expectancy was a factor that influenced their interest in using m-wallet. The results are in line with the previous quantitative analysis, which shows that effort expectancy has no significance in influencing consumers' behavioral intention in using m-wallet.

Like effort expectancy, from the interview results obtained, consumers do not consider social influence as a factor influencing consumer interest in using m-wallet. Most of the informants gained knowledge about the use of m-wallet not from their environment but from exposure to promotions from existing media.

"In the past, (I started to use m-wallet) after seeing advertisements. There is no influence from friends. I was more interested because of the advertisement and tried it because there was a promotion." (W, male, 20 years old)

After being analyzed, based on the results of interviews, the facilitating condition variable can be said to be quite influential on consumer interest in using m-wallet. Consumers clearly will not have an interest in using m-wallet when the technology they have cannot facilitate the use of m-wallet. In this case, smartphone compatibility, available memory to install m-wallet application, and internet network must be available when consumers use m-wallet.

It was found that consumers do feel pleasure when using m-wallet. However, it turns out that this pleasure does not arise because of the use of m-wallet but because of the benefits that consumers get. So consumers feel the pleasure of using m-wallet after getting various benefits such as lower transaction fees, getting convenience and practicality, and saving money by using m-wallet. Therefore, hedonic motivation was not a factor influencing customer behavioral intention to use m-wallet.

In the interview context, the m-wallet usage fee was defined as the admin fee used when transacting. In general, the interviews show that the price value variable influences consumer interest in using m-wallet. In several interviews, the interviewees clearly stated that the low admin fee was why they used m-wallet.

"From me, (the reason for using m-wallet) because (when making transactions) there is no admin fee. Because most of my transactions are to transfers are to BRI or Mandiri banks, I use LinkAja to avoid additional admin fee" (S, female, 25 years old)

To get the same type of service, consumers prefer to use m-wallet to spend lower costs.

Respondents who are accustomed to using m-wallet tend to choose transactions using m-wallet for their daily activities. Especially for digital product transactions, consumers prioritize the use of m-wallet.

Moreover, with so many online services integrated with m-wallet, consumers automatically choose to use m-wallet by themselves.

"(Are you used to using m-wallet for anything?) I usually use it to pay at the marketplace, also to pay for eating out" (R, male, 19 years old)

Judging from this statement, consumers who are used to using m-wallet automatically prefer m-wallet in their transactions. Therefore, it can be said indirectly, their interest in using m-wallet will also be higher. This finding is also quite in line with the results of the quantitative analysis, which states that habit has a significant influence on behavioral intention.

The interview then asked what factors most influence consumers' decisions to use m-wallet. Then, of the three variables in the UTAUT2 model that can predict the use of technology, namely behavioral intention, facilitating conditions, and habits, these three variables appear in the interview results. However, other factors also appear, such as discounts, cashback, and promotions, or it can be said that the variables of promotional activities. Nevertheless, from the interviews obtained, conclusions cannot be drawn about what factors most influence consumer decisions when using m-wallet in transactions.

### 3.6 Discussion

Of the many variables that can predict consumer interest and actual use based on the UTAUT2 model, after being tested on a sample of consumers living in non-metro areas, it was found that only a few variables had a significant effect on consumer interest in using m-wallet, which are facilitating conditions, price values, and habits.

The significant effect of facilitating conditions on behavioral intention is supported by the results of the qualitative analysis, which show that device compatibility and availability affect consumer interest in using m-wallet. Likewise, with the price value variable, the results of the qualitative analysis show that price value is the main factor that drives consumer interest in using m-wallet. Lower prices to get similar services when compared to other services cause consumers to prefer to use m-wallet. Consumers who have used m-wallet and have a habit of using m-wallet also naturally choose to use m-wallet compared to other services, which also automatically affects usage interest.

Consumers in non-metro areas do not consider the benefits and conveniences obtained when using m-wallet when considering using m-wallet because the performance expectancy and effort expectancy variables were found not to affect behavioral intention.

The social influence factor also does not influence the interest of consumers in non-metro areas to use m-wallet. From the quantitative and qualitative analysis, social influence was not found to drive their interest in using m-wallet. This behavior is quite significantly

different from the results of research in the metro area. Several studies have shown that social influence has a significant effect on interest in using m-wallet. The results of the IPSOS 2020 survey also offer 50% of the survey respondents first learned about m-wallet products from a friend. Therefore, it can be said that people in non-metro areas do not consider social influences when using m-wallet.

The analysis results also show that the hedonic motivation variable does not have a significant relationship with behavioral intention. From the results of qualitative analysis, the pleasure factor does not arise directly as an effect of using m-wallet but as an effect of the benefits obtained after using m-wallet. After the content analysis was carried out, the hedonic motivation factor also did not become a factor that influenced consumer interest in using m-wallet. This result is quite contrary to previous studies carried out in metro areas where the hedonic motivation variable is a variable that is often found as a variable that has a significant effect on interest in using m-wallet. Therefore, it can be said that the consumer behavior of metro and non-metro areas is very different regarding the use of m-wallet based on hedonic motivation. Non-metro people do not use m-wallet products based on pleasure.

The results of the analysis of the usage behavior model as the dependent variable found that only the facilitating condition variable had a significant influence on consumers' behavioral intention in non-metro areas. This finding contradicts the theory that underlies the formation of the UTAUT model, where the role of behavioral intention as a predictor of behavior is critical and has been well established in the context of information systems and related disciplines (Venkatesh, 2003)<sup>[9]</sup>. The behavioral intention should be a cognitive antecedent for behavior, in this case, the actual use of m-wallet. However, after being tested, the results do not show that behavioral intention significantly affects user behavior. Although contrary to the initial model, behavioral intention results have no effect on user behavior is sometimes found when there is little or no variance in behavioral intention and behavior variables<sup>[10]</sup> (Ajzen and Fishbein, 2005).

The finding where behavioral intention in using m-wallet does not cause behavior to use m-wallet can also be influenced by situational influences. Situational influences are all those factors particular to a time and place that do not follow from a knowledge of the stable attributes of the consumer and the stimulus and that have an effect on current behavior<sup>[11]</sup> (Mothersbaugh and Hawkins, 2016). One form of situational factor that may influence here is the nature of consumers in non-metro areas who are still more comfortable using cash. This kind of purchase situation where using cash is more comfortable for them. However, though consumers already have an interest in using m-wallet because they have a device and infrastructure and benefits in terms of price, the behavior of using m-wallet does not appear.

From the interview results, consumers often mention other variables that are not included in the UTAUT2 model, namely promotional variables such as discounts and cashback received after making a transaction. Wei (2021) conducted research based on the UTAUT model by adding a promotional activity variable that is directly related to actual usage. It was found that the promotion activity variable had a significant positive effect on actual usage<sup>[12]</sup>. However, the study was conducted in a metropolitan area. So it is necessary to do further research on whether these variables can predict the actual use of m-wallet in non-metro areas.

With these results, it was found that the UTAUT2 model could not be used to predict the usage behavior of m-wallet on consumers in non-metro areas. Although the UTAUT2 model is an extension of the UTAUT model that adds variables that consider the context of using technology as a consumer product, after being tested on consumers in non-metro areas, there are still many variables that have not been included in the model in predicting the behavior of using m-wallet. It can be seen from the results of model strength and model prediction accuracy when applied to consumers in non-metro areas, and the UTAUT2 model only has moderate and weak accuracy.

### 3.7 Implications

Based on the findings of existing research, the following theoretical implications are obtained:

- a. The UTAUT2 model cannot be used to predict consumer behavior in non-metro areas using m-wallet. Thus, further research is needed on models that suit the characteristics of consumers in non-metro areas, especially variables that can predict actual usage to form models with higher predictive abilities.
- b. Price value, habit, and facilitating conditions are variables that predict consumer interest in non-metro areas to use m-wallet. However, the model is not optimal in predict consumer behavior, so it is necessary to re-examine other variables that can be included in the model to predict consumer interest in non-metro areas to use m-wallet. For example, the promotional activity variable.
- c. The significance of the influence of behavioral intention on the usage behavior of m-wallet consumers in non-metro areas needs to be re-examined. Most previous theories state that interest in use is the main antecedent of usage behavior (Ajzen and Fishben, 2005). Possibly caused by situational influences that cause usage behavior does not appear.
- d. Promotional activity factors such as discounts and cashback can be considered as factors that also affect the actual use of m-wallet from consumers in non-metro areas.

While the managerial implications based on the results of the model analysis are as follows:

- a. Companies can develop applications that are easy for

consumers to learn to increase control over the behavior of consumers. Companies need to develop applications that are easy to learn and use by consumers.

- b. Companies can develop applications that are compatible with most devices used by consumers in non-metro areas. Of course, providing sophisticated applications with many features does offer more value for consumers. Still, for non-metro people, this sophistication and value will not affect consumer interest or decisions in using m-wallet when the existing application is not compatible with the device used.

- c. To increase the use of m-wallet in non-metro areas and increase non-cash transactions, the government needs to provide massive infrastructure in the regions by collaborating to provide a GPN payment system with SMEs.

## 4. CONCLUSION

Based on the analysis and discussion that has been delivered, the following conclusions can be drawn:

- a. The variables of Performance Expectancy, Effort Expectancy, Social Influence, and Hedonic Motivation do not significantly influence the behavioral intention of m-wallet from non-metro area consumers. Only the facilitating condition, price value, and habit variables significantly positively affect behavioral intention.
- b. The behavioral intention variable was found to have no significant effect on the usage behavior of consumers in non-metro areas, likewise with the habit variable. Only the facilitating condition variable has a significant positive effect on user behavior or actual use of m-wallet from consumers in non-metro areas.
- c. The habit variable has a moderate effect on behavioral intention, while the facilitating condition and price value variables have a small effect. Likewise, the effect of facilitating conditions on usage behavior. Thus, the finding that behavioral intention does not affect usage behavior can be caused by situational influence factors, which are the biggest factor in the absence of m-wallet usage behavior even though consumers are interested in using it.

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