# Analysis of the Acceptance and Use of Mobile Banking Services Using the Unified Theory of Acceptance and Use of Technology (Case Study of Bank Jatim Pasuruan Branch)

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*Abstract*— *The increase in smartphone users over the past 5 years has caused lifestyle changes, where customers are demanding cheaper, more effective and efficient banking services and transactions. One solution is through a mobile banking application. PT. Bank Pembangunan Daerah Jawa Timur Tbk (Bank Jatim) launched the Bank Jatim Mobile Banking application to facilitate customers making banking transactions via smartphones. Bank Jatim Mobile Banking received a positive response from customers as indicated by an increase in the number of users reaching 59.7%. Therefore, it is necessary to analyze the factors that drive customer acceptance in using Bank Jatim Mobile Banking services using the Extended The Unified Theory of Acceptance and Use of Technology (UTAUT2) model. This study aims to determine the effect of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habits on behavioral intention and use behavior of Bank Jatim Mobile Banking applications. Data were obtained using a questionnaire instrument which was distributed to 130 customers of Bank Jatim Mobile Banking selected through purposive sampling. Data analysis uses SPSS Version 22.0. The results showed that performance expectancy, effort expectancy, hedonic motivations, price value, and habits had a significant effect on behavioral intention, meanwhile facilitating conditions and social influence had no effect on behavioral intention. The results also showed that habit and behavioral intention significantly influence use behavior, while facilitating conditions do not affect use behavior.*

*Keywords*— *Behavioral Intention, Mobile Banking, UTAUT2, Use Behavior.*

## I. INTRODUCTION

Based on the study of the Jenius Finacial Study, the number of saving customers in Indonesia over the past 5 years grew from 23% in 2014 to 36% in 2018 [1]. The increasing number of saving customers is directly proportional to the challenges faced by banks in providing various facilities so that transactions become cheap, effective, and efficient [2]. The challenge is increasing along with the growth of smartphone users that continued to increase in the last 5 years, namely from 19% in 2014 to 56% in 2018 [3]. The rapid growth of smartphone users is directly proportional to the customers of mobile banking users. Based on the Jenius Finacial Study, the number of customers using mobile banking grew from 28% in 2014 to 30% in 2018. Mobile Banking is a service provided by banks to support the ease, effectiveness and efficiency of

customer activities in conducting various transactions compared to Automated Teller Machines (ATM) and branch offices in various regions [4]. The high interest of customers in mobile banking services is because mobile banking is more practical so that customers do not need to come to the Bank / ATM to check balances or other transactions, so that transactions become faster [5].

PT. Bank Pembangunan Daerah Jawa Timur Tbk (Bank Jatim) launched the Bank Jatim Mobile Banking application in 2016. Bank Jatim Mobile Banking is a banking application that aims to facilitate Bank Jatim customers in transacting via smartphones using SMS and internet [4,5]. This is indicated by an increase in the number of users up to 59.7%. On the other hand, Bank Jatim Mobile Banking has been complained by consumers including transaction notification not showing up and transaction notification via SMS cutting customer credit fees. These complaints reduce customer confidence in Bank Jatim Mobile Banking services [2,4]. Therefore, to increase consumer confidence again, it is necessary to analyze the factors that encourage customer acceptance in using Bank Jatim Mobile Banking services. These factors can be analyzed using the Extended The Unified Theory of Acceptance and Use of Technology (UTAUT2) model.

UTAUT2 is a technology acceptance model that aims to explain a person's willingness to accept or use a technology information system [6]. In the UTAUT2 model there are seven independent variables that directly influence behavioral intention towards technology. The seven variables are performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habit. Previously, various research on behavioral intention had been done. Wardani and Hidayatullah's research results [3] show that behavioral intention variables are positively related to performance expectancy variables and social influence variables, but negatively related to effort expectancy variables. Dewayanti et al. [1] shows that customer interest in using the BRI Mobile Banking service is influenced by perceived financial cost, facilitating conditions, performance expectancy, perceived self efficacy, social influence, and effort expansion, but not influenced by perceived credibility. While the results of Dzulhaida and Giri's [7] research show that the perceived trust variable is the main factor influencing people's interest to

use e-money services in Indonesia. In addition, the results of Dewayanti et al [1] showed that a person's interest in using the BRI Mobile Banking service is influenced by perceived financial costs, facilitating conditions, performance expectancy, perceived self-efficacy, social influence, effort expansion.

Based on the previous studies, previously there has never been any research on using the UTAUT2 model to analyze the acceptance and use of the Bank Jatim Mobile Banking application. Therefore researchers intend to conduct a study entitled "Analysis of Acceptance and Use of Mobile Banking Services Using Unified Theory of Acceptance and Use of Technology (Case Study of the East Java Branch of Pasuruan Bank)". This study aims to determine the effect of performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habits on behavioral intention and use behavior of Bank Jatim Mobile Banking applications.

## II. METHODOLOGY

### A. Research Design

This research is a quantitative research. According to Sugiyono [8], quantitative research is research based on the philosophy of positivism to examine populations or certain samples. The sampling technique in this study is generally carried out randomly. In addition, data collection using research instruments and data analysis is quantitative e in order to test the hypothesis that has been set. Research also includes correlation research. Correlation research is research conducted to determine the level of relationship between two or more variables, without making changes, additions, or manipulations of the data obtained [9].

### B. Research Variable

The independent variables in this study includes:

1. Performance Expectancy (X1): Performance expectancy is defined as the extent to which consumers believe that using the system will help them to achieve benefits in job performance. Performance expectancy is the strongest predictor of intention [7]. The indicators include: perceived usefulness, extrinsic usefulness, job fit, relative advantage, and outcome expectations.
2. Effort Expectancy (X2): Effort expectancy is defined as the level of convenience for consumers in using the system [6]. The indicators include: perceived ease of use, complexity, and ease of use.
3. Social Influence (X3): Social Influence is defined as the degree to which consumers feel that those they consider important suggest using a system [6]. The indicators include: subjective norm, social factors, and image.
4. Facilitating Conditions (X4): Facilitating conditions are defined as the level of consumers believing that the existing organizational and technical infrastructure supports the use of the system [6]. The indicators include: perceived behavioral control, facilitating conditions, and compatibility.
5. Hedonic Motivations (X5). Hedonic motivations are defined as the pleasure obtained from using a technology

[6]. The indicators include: adventure shopping, gratification shopping, and role shopping.
6. Price Value (X6): Price value is defined as the level of consumer awareness of the perceived benefits of using technology and the costs of using technology [10]. The indicators include: affordability of prices, conformity with product quality, price competitiveness, suitability of prices with product benefits, prices affect consumer purchasing power, and prices can influence consumers in making decisions.
7. Habit (X7): Habit is defined as the level of consumer tendency to conduct behavior automatically by learning it [10]. The indicators include: habits, addictions, and experiences

The dependent variables in this study include:

1. Behavioral Intention (Y1): Behavioral intention is the level of consumer confidence to use the Bank Jatim Mobile Banking application in the future [11]. The indicators include: intention to continue to use in the future, intention to use if making a transaction, recommending it to others
2. Use Behavior (Y2): Use behavior is defined as real conditions for using systems and technology [10]. The indicators are: usage.

### C. Data Types and Sources

This research uses quantitative data types, with primary and secondary data sources. Primary data obtained from customers directly using the interview method and the distribution of closed questionnaires (with Likert scale 1-5 where score 1 means strongly disagree and score 5 means strongly agree) distributed to 130 customers of Bank Jatim Mobile Banking users [12]. Respondents were selected using a purposive sampling technique. This sampling technique is to choose consumers based on certain criteria established by researchers [9]. The criteria set in this study are: respondents are customers of Bank Jatim, customers use the Bank Jatim Mobile Banking application, and respondents are domiciled in East Java. While the secondary data in this study were obtained from literature studies that support or are related to this research [12].

### D. Data Analysis

1. Descriptive Analysis: Descriptive analysis is a description of respondents' answers to the questionnaire related to performance expectancy (X1), effort expectancy (X2), social influence (X3), facilitating conditions (X4), hedonic motivations (X5), price value (X6), and habit (X7), towards behavioral intention (Y1) and use behavior (Y2)
2. Research Instrument Test: Test for normality, validity and reliability using the SPSS Version 22.0 program [13], heteroskedasticity test, and multicollinearity test
3. Data Analysis: Multiple linear regression test, path coefficient test [14], and t-test [13].

## III. RESULTS AND DISCUSSION

### A. Description of Respondents

Respondents in this study consisted of 69 men (53.1%) and 61 women (46.9%). In addition, respondents dominated by clients aged 30-42 years were 48 people (36.9%), and customers aged 43-55 years were 40 people (30.8%). Based on employment, the majority of respondents' jobs, namely Civil Servants (PNS) were 61 people (46.9%). In terms of recent education, as many as 4 respondents (3.1%) were educated until elementary / junior high / high school, 15 respondents (11.5%) have a diploma (D1-D4), 100 respondents (76.9%) have a bachelor's degree, and the remaining 11 respondents (8.5%) have a masters or PhD degree.

### B. Distribution of Respondents' Answers

1. Performance Expectancy (X1)

Distribution of respondents' answers based on 5 indicators of performance expectancy variables (perceived usefulness, extrinsic usefulness, job fit, relative advantage, and outcome expectations) can be seen in Table I.

TABLE I. Descriptive Statistics of Performance Expectancy Variables (X1)

| Code | Statement | Mean | Category |
|---|---|---|---|
| X1.1 | I use Bank Jatim Mobile Banking, because it is easily accessed anywhere. | 3,98 | Agree |
| X1.2 | Using Bank Jatim Mobile Banking always requires a long time in its operation. For example: input data on electricity bill payments. | 3,92 | Agree |
| X1.3 | I can understand the interaction (display) of Bank Jatim Mobile Banking services easily and clearly. | 4,01 | Agree |
| X1.4 | I believe that it is easy to use Bank Jatim Mobile Banking to match what I expect Example: to make a transfer between banks. | 4,02 | Agree |
| X1.5 | The use of Bank Jatim Mobile Banking is in accordance with all aspects of my work. | 4,04 | Agree |
| X1.6 | I think that Bank Jatim Mobile Banking fits my way of doing activities. | 3,98 | Agree |
| X1.7 | Bank Jatim Mobile Banking users according to my work style. | 4,02 | Agree |
| X1.8 | By using Bank Jatim Mobile Banking, it will allow me to do banking transactions faster. | 4,02 | Agree |
| X1.9 | By using Bank Jatim Mobile Banking, it will increase my comfort in the transaction because I can access it for 24 hours. | 4,08 | Agree |
| X1.10 | By using Bank Jatim Mobile Banking, I can manage my savings. | 3,89 | Agree |
| X1.11 | By using Bank Jatim Mobile Banking, it will increase my effectiveness in transactions. | 4,20 | Agree |
| X1.12 | By using Bank Jatim Mobile Banking, it will make it easier for me to make transactions. | 4,13 | Agree |
| X1.13 | I feel Bank Jatim Mobile Banking is beneficial for me. | 4,08 | Agree |
| | **Total Mean** | **4,03** | **Agree** |

Based on Table I, overall the item performance expectancy statement (X1) received a positive or agreed response from the respondent. This can be seen from the total mean of 4.03 which is greater than 3.40. Of the 13 items in the questionnaire statement, statement X1.11 "By using Bank Jatim Mobile Banking, it will increase my effectiveness in transactions" shows the highest mean value of 4.20. This shows that statement X1.11 was perceived most positively by respondents.

2. Effort Expectancy (X2)

The distribution of respondents' answers based on 5 indicators of effort expectancy variables (perceived ease of use, complexity, and ease of use) can be seen in Table II.

TABLE II. Descriptive Statistics of Effort Expectancy Variables (X2)

| Code | Statement | Mean | Category |
|---|---|---|---|
| X2.1 | The use of Bank Jatim Mobile Banking has no effect on the transactions I make. | 3,31 | Neutral |
| X2.2 | The use of Bank Jatim Mobile Banking significantly can improve the quality of transaction results because it does not take a long time. | 3,33 | Neutral |
| X2.3 | The use of Bank Jatim Mobile Banking can accelerate payments. For example: payment of utility bills, train ticket payments, credit card payments, etc. | 3,28 | Neutral |
| X2.4 | The use of Bank Jatim Mobile Banking has helped me to refill. For example: Top up, PLN Top Up, etc. | 3,32 | Neutral |
| X2.5 | The use of Bank Jatim Mobile Banking makes it easy for me to find out info for example: balance info, mutation info, etc. | 3,25 | Neutral |
| X2.6 | The use of Bank Jatim Mobile Banking increased my effectiveness in trading because it was practical. | 3,11 | Neutral |
| X2.7 | I always use Bank Jatim Mobile Banking as often as possible because it is easy to use. | 3,03 | Neutral |
| | **Total Mean** | **3,24** | **Neutral** |

Based on Table II, overall the item effort expectancy statement (X2) gets a neutral or doubtful response from the respondent. This can be seen from the total mean of 3.23 (neutral). From the 7 item statement in the questionnaire, statement X2.2 "The use of Bank Jatim Mobile Banking significantly can improve the quality of transaction results because it does not take a long time" showing the highest mean value of 3.35. This shows that statement X2.2 was perceived most positively by respondents, but considered neutral meaning that there were still respondents who had difficulties in making transactions, so it took a long time.

3. Social Influence (X3)

The distribution of respondents' answers based on 3 indicators of social influence variables (subjective norm, social factors, and images) can be seen in Table III.

Based on Table III, overall social influence statement items (X3) received positive or agreed responses from respondents. This can be seen from the total mean of 3.52, which means agree. Of the 10 items in the questionnaire statement, statement X3.3 "People who are familiar with me think, that I should use Bank Jatim Mobile Banking" shows the highest mean value of 3.82. This shows that statement X3.3 was perceived most positively by respondents.

TABLE III. Descriptive Statistics of Social Influence Variables (X3)

| Code | Statement | Mean | Category |
|------|-----------|------|----------|
| X3.1 | People who advised me, that I should use Bank Jatim Mobile Banking. | 3,28 | Neutral |
| X3.2 | People who influence me think that I should use Bank Jatim Mobile Banking. | 3,08 | Neutral |
| X3.3 | People who are familiar with me think that I should use Bank Jatim Mobile Banking. | 3,82 | Neutral |
| X3.4 | I use Bank Jatim Mobile Banking because my coworkers use it. Saya menggunakan *Bank Jatim Mobile Banking* karena teman kerja saya menggunakannya. | 3,48 | Agree |
| X3.5 | My boss (leader) helped me in using Bank Jatim Mobile Banking. | 3,60 | Agree |
| X3.6 | My family support using Bank Jatim Mobile Banking. | 3,72 | Agree |
| X3.7 | People in my environment use Bank Jatim Mobile Banking, have high social status. | 3,63 | Agree |
| X3.8 | Bank Jatim Mobile Banking is a characteristic in my environment. | 3,58 | Agree |
| X3.9 | The use of Bank Jatim Mobile Banking is more effective when compared to traditional banking. | 3,50 | Agree |
| X3.10 | The use of Bank Jatim Mobile Banking can increase the quantity of transaction results with the same business. | 3,51 | Agree |
| **Total *Mean*** | | **3,52** | **Agree** |

### 4. Facilitating Conditions (X4)

Distribution of respondents' answers based on 3 indicators of facilitating conditions variables (perceived behavioral control, facilitating conditions, and compatibility) can be seen in Table IV.

TABLE IV. Descriptive Statistics of Variable Facilitating Conditions (X4)

| Code | Statement | Mean | Category |
|------|-----------|------|----------|
| X4.1 | I have control over the use of Bank Jatim Mobile Banking. | 4,01 | Agree |
| X4.2 | The use of Bank Jatim Mobile Banking increases my productivity because I am capable of doing various transactions at home. | 3,97 | Agree |
| X4.3 | The existence of evidence on each transaction that is completed with the time of the transaction is one proof of transaction security. | 3,95 | Agree |
| X4.4 | When I use Bank Jatim Mobile Banking, I am certain that my transactions are guaranteed. | 3,97 | Agree |
| X4.5 | I am certain that the banking environment is safe when I use Bank Jatim Mobile Banking. | 3,97 | Agree |
| X4.6 | I believe that my information is kept confidential when I use Bank Jatim Mobile Banking. | 3,83 | Agree |
| X4.7 | I believe that there is no one that can access my private account when I use Bank Jatim Mobile Banking. | 3,80 | Agree |
| **Total *Mean*** | | **3,93** | **Agree** |

Based on Table IV, overall the facilitating conditions (X4) statement items received positive or agreed responses from respondents. This can be seen from the total mean of 3.93 which means agree. From the 7 item statement in the questionnaire, statement X4.1 "I have control over the use of Bank Jatim Mobile Banking." Shows the highest mean value of 4.01. This shows that statement X4.1 was perceived most positively by respondents.

### 5. Hedonic Motivations (X5)

The distribution of respondents' answers based on 3 indicators of hedonic motivations variables (adventure shopping, gratification shopping, and role shopping) can be seen in Table V.

TABLE V. Descriptive Statistics of Hedonic Motivations Variables (X5)

| Code | Statement | Mean | Category |
|------|-----------|------|----------|
| X5.1 | I feel glad when using Bank Jatim Mobile Banking services. | 3,65 | Agree |
| X5.2 | I feel entertained when using Bank Jatim Mobile Banking services. | 4,08 | Agree |
| X5.3 | Bank Jatim Mobile Banking services is interesting for me. | 4,23 | Strongly Agree |
| **Total *Mean*** | | **3,99** | **Agree** |

Based on Table V, overall hedonic motivations (X5) statement items received positive or agreed responses from respondents. This can be seen from the total mean of 3.99 which means agree. Of the 3 statement items in the questionnaire, statement X5.3 "Bank Jatim Mobile Banking Services is interesting for me." shows the highest mean value of 4.23. This shows that statement X5.3 was perceived most positively by respondents.

### 6. Price Value (X6)

Distribution of respondents' answers based on 3 price value variable indicators (price affordability, conformity with product quality, price competitiveness, price suitability with product benefits, prices affect consumer purchasing power, and prices can influence consumers in making decisions) can be seen in Table VI.

TABLE VI. Price Value (X6) Variable Statistics

| Code | Statement | Mean | Category |
|------|-----------|------|----------|
| X6.1 | I can save time in doing transactions using Bank Jatim Mobile Banking. | 4,02 | Agree |
| X6.2 | I always use Bank Jatim Mobile Banking for every transaction that I do. | 3,51 | Agree |
| X6.3 | I can save cost because I do not need to come to the Bank Jatim branch. | 4,59 | Strongly Agree |
| X6.4 | I have a chance to get a prize (a form of appreciation for using Bank Jatim Mobile Banking). | 4,69 | Strongly Agree |
| X6.5 | I have a smartphone that is suitable for operating Bank Jatim Mobile Banking. | 3,45 | Agree |
| X6.6 | By using Bank Jatim Mobile Banking, I have no objection regarding the cost incurred for internet subscription. | 4,37 | Strongly Agree |
| X6.7 | The cost of using Bank Jatim Mobile Banking, such as for checking the balance does not burden me. | 4,04 | Agree |
| **Total *Mean*** | | **4,10** | **Agree** |

Based on Table VI, overall the Price Value (X6) statement item received a positive or agreed response from the respondent. This can be seen from the total mean of 4.10 which means agree. Of the 7 statement items in the questionnaire, statement X6.4 "I have a chance to get a prize. (a form of appreciation for using Bank Jatim Mobile Banking)." shows the highest mean value of 4.69. This shows that statement X6.4 was perceived most positively by respondents.

7. Habit (X7)

The distribution of respondents' answers based on 3 indicators of habit variables (habits, addictions, and experiences) can be seen in Table VII.

TABLE VII. Descriptive Statistics of the Habit Variable (X7)

| Code | Statement | Mean | Category |
|------|-----------|------|----------|
| X7.1 | I have the knowledge needed to use Bank Jatim Mobile Banking. | 3,07 | Neutral |
| X7.2 | There is a guidebook for using Bank Jatim Mobile Banking. | 2,92 | Neutral |
| X7.3 | I control Bank Jatim Mobile Banking well. | 2,99 | Neutral |
| X7.4 | I can operate Bank Jatim Mobile Banking if there is no one who emulates it. | 3,00 | Neutral |
| | **Total *Mean*** | **2,99** | **Neutral** |

Based on Table VII, overall the habit statement item (X7) received a neutral response from respondents. This can be seen from the total mean of 2.99 (neutral). From the 4 item statements in the questionnaire, statement X7.1 "I have the knowledge needed to use Bank Jatim Mobile Banking" shows the highest mean value of 3.07. This shows that statement X7.1 was perceived as the most neutral by respondents.

8. Behavioral Intention (Y1)

Distribution of respondents' answers based on 3 indicators of behavioral intention variables (intention to continue to use in the future, intention to use if transacting, and recommending to others) can be seen in Table VIII.

TABLE VIII. Behavioral Intention Descriptive Variable Statistics (Y1)

| Code | Statement | Mean | Category |
|------|-----------|------|----------|
| Y1.1 | I intend to continue to use Bank Jatim Mobile Banking services in the future. | 3,92 | Agree |
| Y1.2 | I will use Bank Jatim Mobile Banking services if I want to do transactions. | 3,91 | Agree |
| Y1.3 | I will recommend Bank Jatim Banking to other people. | 3,84 | Agree |
| | **Total *Mean*** | **3,89** | **Agree** |

Based on Table VIII, overall behavioral intention statement items (Y1) get positive or agreed responses from respondents. This can be seen from the total mean of 3.89 which means to agree. From the 3 item statements in the questionnaire, statement Y1.1 "I intend to continue to use Bank Jatim Mobile Banking services in the future" shows the highest mean value of 3.92. This shows that statement Y1.1 was perceived as the most neutral by respondents.

9. Use Behavior (Y2)

Distribution of respondents' answers based on 3 indicators of use behavior variables can be seen in Table IX.

TABLE IX. Descriptive Statistics of Variable Use Behavior (Y2)

| Code | Statement | Mean | Category |
|------|-----------|------|----------|
| Y2.1 | There are certain people and community for helping me when there are difficulties in using Bank Jatim Mobile Banking | 3,88 | Agree |
| Y2.2 | I am able to carry out transactions with Bank Jatim Mobile Banking without help from other people | 4,14 | Agree |
| Y2.3 | I am able to use Bank Jatim Mobile Banking even though I have never used it beforehand. | 4,14 | Agree |
| | **Total *Mean*** | **4,05** | **Agree** |

Based on Table IX, overall the use behavior (Y2) statement item received a positive or agreed response from the respondent. This can be seen from the total mean of 4.05, which means agree. From the 3 statement items in the questionnaire, statements Y2.1 and Y2.2. are the highest mean that equals to 4.14. This shows that statements Y2.1 and Y2.2. perceived most positively by respondents.

B. Validity and Reliability Tests

Validity test uses the product moment correlation formula with the help of SPSS Version 22.0. The results of this calculation are then compared with the critical value in the correlation table r with a significance level of 5% and a sample size of 30 respondents (r table = 0.1723). If the result of calculating the correlation score of an item is greater than the critical value, the instrument is declared valid. Conversely, if the item score correlation is less than the critical value, then this instrument is declared invalid. This is evidenced from the calculated r-value being greater than the value of r table (0.1723). The results of the validity analysis showed that all variables and items on the questionnaire were declared valid. Based on the results of the reliability test, performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivation, price value, and habits have Cronbach's Alpha values above 0.60 so the instruments in this study are declared valid and reliable.

C. Classic Assumption Test

In the normality test for behavioral intention (Y1), the Kolmogorov-Smirnov One-Sample Test output shows the Asymp value. Sig. (2-tailed) of 0.743> 0.05 which means performance expectancy (X1), effort expectancy (X2), social influence (X3), facilitating conditions (X4), hedonic motivations (X5), price value (X6), Habit (X7) toward behavioral intention (Y1) is normally distributed. In the multicollinearity test, Performance Expectancy (X1), effort expectancy (X2), social influence (X3), facilitating conditions (X4), hedonic motivations (X5), price value (X6), habits (X7) of behavioral intention (Y1) has a VIF value <10, and a tolerance value> 0.1 which means there is no multicollinearity problem. In the scatter plot graph of the heteroskedasticity test (Figure 1 left), it is seen that the points spread randomly both above and below the zero on the axis, thus no heteroskedasticity is stated.
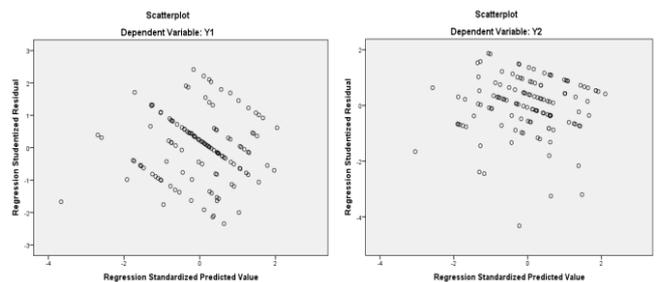


Fig. 1. Scatter plot heteroskedasticity test X1, X2, X3, X4, X5, X6, X7 * Y1 (left) and Scatter plot heteroskedasticity test X4, X7, Y1 * Y2 (right)

In the normality test for use behavior (Y2), the

Kolmogorov-Smirnov One-Sample Test output shows the Asymp value. Sig. (2-tailed) of 0.221> 0.05 which means facilitating conditions (X4), habits (X7), and behavioral intention (Y1) to use behavior (Y2) are normally distributed. In the multicollinearity test, the facilitating conditions variable (X4), Habit (X7), and Behavioral Intention (Y1) on use behavior (Y2) have a VIF value <10, and a tolerance value> 0.1 which means there is no multicollinearity problem. In the

scatter plot of the heteroskedasticity test (Figure 1 right), it is seen that the points spread randomly both above and below the zero on the axis, so that no heteroskedasticity is stated.

### D. Hypothesis Testing Results

Path analysis in this study is used to calculate the direct and indirect effects of the independent variables on the dependent variable. The results can be seen in Figure 2.
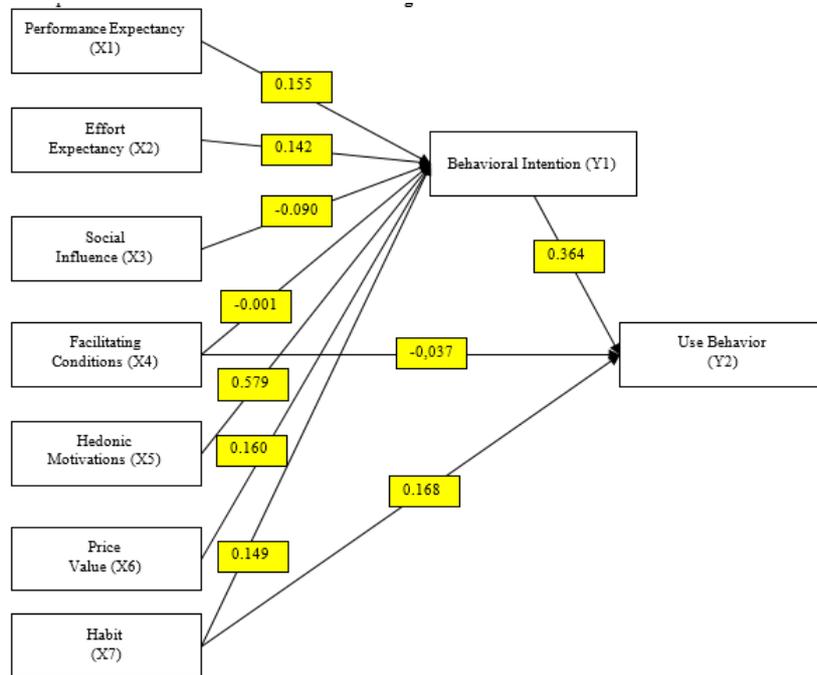


Fig. 2. Path Diagram

Based on the path diagram above, 10 path equations are obtained as follows:

1. Performance Expectancy (X1) variable on Behavioral Intention (Y1) variable = 0.155 (significant)
2. Effort Expectancy (X2) variable on Behavioral Intention (Y1) variable = 0.142 (significant)
3. Social Influence (X3) variable on Behavioral Intention (Y1) variable = -0.090 (non-significant)
4. Facilitating Conditions (X4) variable on Behavioral Intention (Y1) variable = -0,001 (non-significant)
5. Hedonic Motivation (X5) of Behavioral Intention (Y1) variable = 0.579 (significant)
6. Price Value (X6) variable on Behavioral Intention (Y1) variable = 0.160 (significant)
7. Habit (X7) variable on Behavioral Intention (Y1) variable = 0.149 (significant)
8. Behavioral Intention (Y1) variable on Use Behavior (Y2) variable = 0.364 (significant)
9. Faciliating Condition (X4) variable on Use Behavior (Y2) variable = -0,037 (non-significant)
10. Variable Habit (X7) variable on Use Behavior (Y2) variable = 0.168 (significant)

### 1. Multiple Regression Model I

The results of testing the hypothesis using the multiple regression method in model 1 can be seen in Table X.

Based on table X, the R-value is 0.636, which means that there is a strong correlation between performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivations, price value, and habit toward behavioral intention. Adjusted $R^2$ value is 0.370 (37%), which means 37% behavioral intention is influenced by performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivations, price values, and habits. F test results show a significance value of 0,000, which means that together with performance expectancy, effort expectancy, social influence, facilitating conditions, hedonic motivations, price value, and habit affect behavioral intention.

a. Effect of Performance Expectancy on Behavioral Intention

The results of data analysis in Table X show that performance expectancy has a significant effect on behavioral intention, with a t-value of sig. at $0.035 <t$ sig. 0.05 which shows that the first hypothesis was accepted. This shows that the higher the profits obtained by customers when using the Bank Jatim Mobile Banking application, the higher the customer's interest is in using the application. The results of this study are consistent with the results of Wardani and Hidayatullah's research [3], Dewayanti et al. [1], and

Venkatesh et al. [10] that performance expectancy has

a positive effect on behavioral intention.

TABLE X. Multiple Regression Model I

| Model/Variable | R | Adj $R^2$ | $F_{sig}$ | Standardized Coefficients Beta | $t_{sig}$ | Hypothesis |
|---|---|---|---|---|---|---|
| X1,X2,X3,X4,X5,X6,X7*Y1 | 0,636 | 0,370 | 0,000 | | | |
| Performance Expectancy | | | | 0,045 | 0,035 | Accepted |
| Effort Expectancy | | | | 0,046 | 0,046 | Accepted |
| Social Influence | | | | -0,024 | 0,207 | Rejected |
| Facilitating Conditions | | | | 0,000 | 0,987 | Rejected |
| Hedonic Motivations | | | | 0,508 | 0,000 | Accepted |
| Price Value | | | | 0,105 | 0,039 | Accepted |
| Habit | | | | 0,074 | 0,043 | Accepted |
| Dependent Variabel | Behavioral Intention (Y1) | | | | | |
| R | 0,636 | | | | | |
| $R^2$ | 0,405 | | | | | |
| $R^2$ Adjusted | 0,370 | | | | | |
| F hitung | 11,844 | | | | | |
| Probability | 0,000 | | | | | |
| Line Equation | $Y1 = py1x1 + py1x2 + py1X3 + py1X4 + py1X5 + py1X6 + py1X7 + Ɛ1$ | | | | | |
| Result | $Y1 = 0,155X_1 + 0,142X_2 - 0,090X_3 - 0,001X_4 + 0,579X_5 + 0,160X_6 + 0,149X_7$ | | | | | |

b. Effect of Effort Expectancy on Behavioral Intention

The results of data analysis in Table X show that effort expectancy has a significant effect on behavioral intention, with a t-value of sig. of 0.046 <t sig. 0.05 which shows that the second hypothesis is accepted. This shows that the higher the convenience felt by customers when using the Bank Jatim Mobile Banking application, the higher the customer's interest is in using the application. Intensity of use and interaction between users and the system can show ease of use. Therefore, the service system that is used more often shows that the system is better known and easier to operate by its users.

c. The Influence of Social Influence on Behavioral Intention

The results of data analysis in Table X show that social influence has no significant effect on behavioral intention, with a t-value of sig. amounted to 0.207> t sig. 0.05, which shows that the third hypothesis is rejected. This shows that the opinions of others regarding the Bank Jatim Mobile Banking application does not increase customer interest in using the application. The results of this study differ from the research results of Wardani and Hidayatullah [3], Dzulhaida and Giri [7], and Dewayanti et al. [1], that social influence significantly influences behavioral intention.

d. Effect of Facilitating Conditions on Behavioral Intention

The results of data analysis in Table X show that facilitating conditions do not have a significant effect on behavioral intention, with a t value of sig. amounted to 0.987> t sig. 0.05, which shows that the fourth hypothesis was rejected. This shows that the organizational and technical infrastructure that supports the Bank Jatim Mobile Banking application does not increase customer interest in using the application. The results of this study are consistent with the results of

the study of Venkatesh et al. [10], that facilitating conditions do not significantly influence behavioral intention. This is because there is no direct relationship between the two due to external factors such as unstable internet networks, smartphones that do not support applications, and others.

e. Effect of Hedonic Motivations on Behavioral Intention

The results of data analysis in Table X show that hedonic motivations have a significant effect on behavioral intention, with a t-value of sig. of 0,000 <t sig. 0.05, which shows that the fifth hypothesis is accepted. This shows that the higher the pleasure customers feel when using the Bank Jatim Mobile Banking application, the higher the customer's interest in using the application. The results of this study are consistent with the results of the study of Venkatesh et al. [10] that hedonic motivations have a positive effect on behavioral intention.

f. The Effect of Price Value on Behavioral Intention

The results of data analysis in Table X show that price value has a significant effect on behavioral intention, with a t value of sig. of 0.039 <t sig. 0.05 which shows that the sixth hypothesis is accepted. This shows that the higher the level of customer awareness of the perceived benefits and the lower costs incurred to use the Bank Jatim Mobile Banking application, the higher the customer's interest is in using the application. The results of this study are consistent with the results of the study of Venkatesh et al. [10] that price value has a positive effect on behavioral intention.

g. Effect of Habit on Behavioral Intention

The results of data analysis in Table X show that habit has a significant effect on behavioral intention, with a t value of sig. of 0.043 <t sig. 0.05 which shows that the seventh hypothesis is accepted. This shows that the more automated the customer is in using the Bank

Jatim Mobile Banking application, the higher the customer's interest in using the application. The results of this study are consistent with the results of the study of Venkatesh et al. [10] that habits have a positive

effect on behavioral intention.

2. Model II Multiple Regression

The results of testing the hypothesis using the multiple regression method in model 2 can be seen in Table XI.

TABLE XI. Double Regression Model II

| Model/Variable | R | Adj $R^2$ | $F_{sig}$ | Standardized Coefficients Beta | $t_{sig}$ | Hypothesis |
|---|---|---|---|---|---|---|
| X4,X7,Y1 *Y2 | 0,418 | 0,155 | 0,000 | | | |
| Facilitating Conditions | | | | -0,016 | 0,654 | Rejected |
| Habit | | | | 0,101 | 0,047 | Accepted |
| Behavioral Intention | | | | 0,440 | 0,000 | Accepted |
| Dependent Variable | Use Behavioral (Y2) | | | | | |
| R | 0,418 | | | | | |
| $R^2$ | 0,175 | | | | | |
| $R^2$ Adjusted | 0,155 | | | | | |
| F hitung | 8,889 | | | | | |
| Probability | 0,000 | | | | | |
| Line Equation | Y2 = py2x4 + py2x7 + py1Y2 + Ɛ 2 | | | | | |
| Result | Y2 = − 0,037X$_4$ + 0,168X$_7$ +0,364Y$_1$ | | | | | |

Based on table XI, R-value of 0.418 is obtained, which means there is a moderate correlation between facilitating conditions, habits, and behavioral intention on use behavior. The adjusted R2 value is 0.155 (15%) which means that 15% of use behavior is influenced by facilitating conditions, habits, and behavioral intention. F test results show a significance value of 0,000, which means that together facilitating conditions, habits, and behavioral intention influence on use behavior.

a. Effect of Facilitating Conditions on Use Behavior

The results of data analysis in Table XI show that facilitating conditions do not have a significant effect on use behavior, with a t-value of sig. amounted to 0.654> t sig. 0.05, which shows that the eighth hypothesis was rejected. This shows that the organizational and technical infrastructure that supports the Bank Jatim Mobile Banking application does not encourage customers to use the application. The results of this study are consistent with the results of the study of Venkatesh et al. [6], that facilitating conditions do not significantly influence use behavior. This is because there is no direct relationship between the two due to external factors such as unstable internet networks, smartphones that do not support applications, and others.

b. Effect of Habit on Use Behavior

The results of data analysis in Table XI show that habit has a significant effect on use behavior, with a t-value of sig. at 0.047 <t sig. 0.05 which shows that the ninth hypothesis is accepted. This shows that the more automated the customer is in using the Bank Jatim Mobile Banking application, the higher the use of the application. The results of this study are consistent with the results of the study of Venkatesh et al. [10] that habits have a significant effect on use behavior.

c. Influence of Behavioral Intention on Use Behavior

The results of data analysis in Table XI show that behavioral intention has a significant effect on use behavior,

with a t-value of sig. of 0,000 <t sig. 0.05, which shows that the tenth hypothesis is accepted. This shows that the more the customer's interest in using the Bank Jatim Mobile Banking application, the higher the use of the application. The results of this study are consistent with the results of the study of Venkatesh et al. [6,10] that behavioral intention has a significant effect on use behavior and technology use.

## IV. CONCLUSION

The results showed that performance expectancy, effort expectancy, hedonic motivations, price value, and habits had a significant effect on behavioral intention, while facilitating conditions and social influence had no effect on behavioral intention. The results also showed that habit and behavioral intention significantly influence use behavior, while facilitating conditions do not affect use behavior. From this study it has been shown that customers believe that the Bank Jatim Mobile Banking Application will simlify and speed up the transaction process. However, customers believe that using the Bank Jatim Mobile Banking Application is a need that must be fulfilled, attractive, and enjoyable so that customers do not mind to pay internet fees. However, some customers still find it difficult using the Bank Jatim Mobile Banking Application to make transactions, so it takes longer to get used to using the Bank Jatim Mobile Banking Application.

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