

# Is Behavioural Intention of Using OVO as Mobile Payment driven by UTAUT 2?

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**Abstract.** The purpose of the study is to analyze the adoption of mobile payment service of OVO in the City and Regency of Bogor. A quantitative research method was applied under a primary data that is generated from questionnaires. Amounted to 251 respondents as usable questionnaire and further proceed to be analyzed. Using the modified version of acceptance and use of technology model, namely UTAUT 2. The study revealed price value, performance expectancy, and habit have a positive significant effect on behavioral intention using OVO, while effort expectancy, social influence, and hedonic motivation have positive insignificant effect. Facilitating condition has a negative insignificant effect on Behavioral Intention using OVO. There are various valuable insights appear in the study to provide contribution to the government and society in Bogor.

**Keywords:** UTAUT 2, Mobile payment, OVO, Bogor

## 1 Introduction

Technology and digital advancements in a short space of time can bring significant changes, especially in the financial sector, creating mobile payment (m-payment) as consumers insist on turning traditional financial transactions into digital. Mobile payment is an alternative payment method [1] that uses mobile media to perform payment transactions [2]. It is estimated that around 1 billion people will use m-payments in 2020 and reach 1.15 billion people in 2021 [3]. The rise in popularity of m-payments is happening not only because of the comfort and convenience [4] from its use but also from a security standpoint because the consumer's mobile phone is a security tool that moves random codes in every transaction [5].

In Indonesia, the number of m-payment users will reach 176.7 million users in 2020 and estimated to reach 202.1 million users in 2021. Although the use of m-payments is quite high in Indonesia, in reality, there are Indonesians who have not experienced the use of m-payment methods in shopping transactions [6]. Several factors why m-payments are not used as a payment method are due to diverse demographics, trust in transactions, difficulty to understand technology, and technology security [7]. Therefore, we need an analytical method to identify and

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define the determinants of an individual enthusiasm on mobile payment adoption, that may influence an individual to accept and adopt m-payment as an advanced payment technology in Indonesia [8]. Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2) [9] is the extended version of UTAUT [10] with more complex established model and some moderator variables. This study will use the modified version of UTAUT 2 as the method to measure an individual willingness to utilize a particular technology.

PT Visionet Internasional (OVO), one of the most popular m-payment among society in Indonesia, has become a daily necessity in carrying out activities. A collaboration between OVO, Grab, and Tokopedia has led OVO in expanding their business up to ±500,000 offline outlets in 2019 [11]. It proves a rapid growth of performance and highly demanded among society due to lifestyle change. OVO has been widely adopted among society in Jakarta [12], while the governments of the City and Regency of Bogor are still trying to get their people to adopt m-payments [13]. One of the efforts made by the Ministry of Communication and Information of the Republic of Indonesia at the Bogor City and Regency to catch up with current m-payment technology was by holding an activity called “Grebek Pasar”. This program is to provide facilities to MSMEs to conduct payment receipt transactions using m-payments such as OVO [14].

Therefore, a gap exists between the rapid development of m-payment and the people (users) at Bogor city and regency. The government pays attention and concern to its local citizen to leverage the behavioral intention to use m-payment. However, the local citizens are not familiar with it and still trying to catch up with the current trend of cashless payment. It is necessary to research this area to find out the determinants of people's behavioral intention on a mobile payment utilization. In addition, the study would like to figure out the approach of how the public responds to receive and use advanced technology, especially in terms of mobile payment acceptance. The study results also aim that the Bogor city and regency people may become technology-responsive citizens, not technology-savvy citizens.

## **2 Literature Review and Hypotheses Development**

### **2.1 Performance Expectancy on Behavioural Intention to Use**

Performance Expectancy positively affect the interest in using mobile technology [15],[7], [16]. This positive effect occurs because consumers believe that using mobile technology provides benefits and make them able to complete work more quickly and efficiently so that it positively affects the interest in using mobile technology. As the research has OVO m-payment as the study objective, the hypothesis is therefore drawn as:

**H1.** PerExp positively affect the BehInt to use OVO.

### **2.2 Effort Expectancy on Behavioral Intention to Use**

Effort Expectancy positively affect on interest in using mobile technology [17],[18], [19]. Consumers believe they can use mobile technology. After all, the use of mobile technology is clear, easy to understand, and easy to use. Previous research also indicated that the ease in using mobile technology felt by consumers would have an impact on the decision of mobile technology acceptance.

**H2.** EffEx positively affect the BehInt to use OVO.

### **2.3 Social Influence on Behavioral Intention to Use**

Prior studies [16], [15], [18] pin-point their research result of an individual behavioral intention on the mobile technology utilization is defined by the influence obtained by them from their environment. Consumers feel the benefits of using mobile technology, so they invite people around them to use it by telling them the benefits or advantages of the technology by word of mouth. Social Influence proved to which consumers think that the closest people and most important to them must use a certain technology.

**H3.** SocInf positively affect the BehInt to use OVO.

### **2.4 Facilitating Condition on Behavioral Intention to Use**

Several studies [15], [16], [20] signified an individual behavioural intention to utilize advance technology is measured by a proper facilitating condition felt by the people. Consumers see the existing resources and facilities as very adequate. This may lead the consumers to have control over the use of mobile technology. Through the assistance of certain people in using this technology, it may lead to an increase in the interest of an individual as a user to adopt mobile technology.

**H4.** FaCons positively affect the BehInt to use OVO.

**2.5 Hedonic Motivations to Behavioral Intention to Use**

Prior studies [21]–[23] have also measured that an individual behavioral intention to utilize mobile technology is depend on the hedonic motivation perceive by the people. The positive effect of enjoyment such as pleasure and comfort in the context of consumers has an effective impact on hedonic motivation. It raises interest in using mobile technology.

**H5.** HeMo positively affect the BehInt to use OVO.

**2.6 Price Value on Behavioral Intention to Use**

Various studies [19], [20], [24] have signified that an individual behavioral intention to utilize mobile technology is determined by a price value. The increased benefits and perceived usefulness of using mobile technology are greater than the costs incurred for using the technology. Therefore, consumers have an interest in using mobile technology. Previous research has also indicated that the decision to use mobile technology happened as the benefits received is more than the costs incurred.

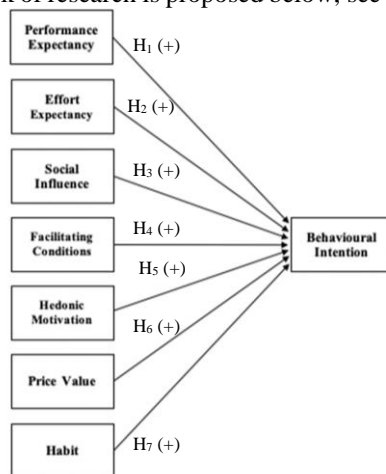
**H6.** Priva positively affect the BeHint to use OVO

**2.7 Habit on Behavioral Intention to Use**

Prior studies [7], [20] results shows that an individual behavioral intention to utilize mobile technology is measured by the people habit. Most consumers have used mobile technology for the past six years ago, which has made the use of this technology a habit in the last two years. Therefore, it increases the consumer interest in using mobile technology.

**H7.** Hab positively affect the BeHint to use OVO.

The conceptual framework of research is proposed below, see **Figure 1.** Conceptual Framework



**Fig. 1.** Conceptual Framework.

**3 Methodology and Data Analysis**

The research applied the quantitative research method and primary data as a source of the research. The data were collected under the distribution of questionnaires. A sample size shall be

> 30 and < 500 samples [25], or 5-10 times the number of variable indicators [26]. Therefore, 251 samples were produced over 18 days. Samples of the questionnaire results distribution were processed and analyzed with SPSS version 26 to generate data. The questionnaires that were distributed online by google form and used a 5-point Likert scale and a nominal scale to measure the respondents' answers. It was marked with 1 as strongly disagree up to 5 as strongly agree. Before the questionnaire was widely disseminated, the study applied a pilot test by taking the first 30 samples to test the validity and reliability [27]. The respondents should be living in the City and Regency of Bogor and active users of OVO.

## 4 Research Result and Discussion

### 4.1 Validity and Reliability test

SPSS analytical tool was used to measure the reliability and validity test of the study. The reliability test was analyzed on the value of Cronbach's Alpha. It was found that the Cronbach Alpha value of PerExpp, EffEx, SocInf, FaCons, HeMo, PriVa, Hab, and BehInt was greater than the threshold of .7, so all variables can be called reliable and used in the research. The validity test was run and analyzed to compare the r-table and r-count. If r-count > r-table, the indicator in the survey variable can be said to be "valid". After knowing the significance level and the degree of freedom, the value of the r-table in this study is .1239. Thus, it was found that every variable fulfilled the threshold of having the r-count value above the r-table value.

### 4.2 Classic Assumption Test

Normality test, Heteroscedasticity, and multicollinearity were applied to do the classic assumption test. This study applied Kolmogorov-Smirnov to conduct normality test with the criteria for the asymptotic significance > 0.05. It reveals that the asymptotic significance value in this study of 0.200, which is greater than the criteria, so the regression model in this study was normally distributed. Spearman's Rank Correlation conducted for heteroscedasticity and the significance value should be > 0.05 to be classified as homoscedastic (no heteroscedasticity issue). All significance values of variables used proved greater than 0.05. It can be concluded that PerExpp, EffEx, SocInf, FaCons, HeMo, PriVa, Hab, and BehInt were homoscedastic. Tolerance and VIF value were used to conduct multicollinearity test. The independent variables can be said to have no multicollinearity if the tolerance value is bigger than .10 and the VIF value is less than 10. Based on the tolerance and VIF results, it reveals that there were no correlation among independent variables.

### 4.3 Multiple Linear Regression

The T-table used in the study is equal to 1.969. Table IV revealed that the t-count for the PerExpp, PriVa, and Hab showing the values of t-count > t-table. Three variables significantly affect the dependent variable. In addition, EffEx, SocInf, FaCons, and HeMo indicated an insignificant value. It occurs because of the value of the t-count < t-table.

The P-value of PerExpp, Priva, and Hab significance values are less than 0.05. Therefore, the three respective variables mentioned above affect the dependent variable and thus support the hypotheses. Meanwhile, EffEx, SocInf, FaCons, and HeMo, did not affect the dependent variable because the significance value was greater than the threshold and thus hypotheses were not supported.

**Table 1.** Hypotheses Development Test

Attributes	Coef	T-Stat	P-Values	Results
PerExpp → BeHint	0.136	2.627	0.009	Supported
EffEx → BeHint	0.010	0.196	0.845	Not Supported
SocInf → BeHint	0.025	0.520	0.604	Not Supported
FaCons → BeHint	-0.036	-0.683	0.495	Not Supported

HeMo → BeHint	0.079	1.325	0.187	Not Supported
PriVa → BeHint	0.333	7.541	0.000	Supported
Hab → BeHint	0.477	8.931	0.000	Supported

#### 4.4 R-Square Analysis

R-Square analysis was applied to measure the effect given by the exogenous variables to the endogenous variable. It has functions to determine the extent of the proposed endogenous variable are determined by the exogenous variables. Thus, the study revealed that 75.1% of the endogenous (dependent) variable was measured by the exogenous (independent) variables. In addition, the remaining 24.9% was measured from the excluded variables in this study.

### 5 Implication and Suggestion for Future Research

The study showed that having transaction speed and increasing productivity can affect the behavioral intention to use OVO at Bogor City and Regency. It also indicates that low administrative costs, transparency of activities, and positive promotions can affect the people's behavioral intention to use OVO at Bogor City and Regency. OVO has become a habit, need, necessity, and a part of life as a means of payment that can affect the interest in using OVO. On the other hand, the ease of learning to use and use OVO was not able to affect the behavioral intention to use OVO at Bogor City and Regency. The consumers were aware of technological developments so that using m-payment technology has become a familiar thing. However, the rejected hypotheses were in line with prior research showing that Effort Expectancy positively but insignificant effect to behavioral intention to use OVO as m-payment [7], [15], [16], [28].

Advice and support from family, friends, and the surrounding environment has a less strong impact on the customers' willingness to the mobile payment technology acceptance. It happens as a result of the people at Bogor City and Regency used to update the technological developments. The people were up to date with technology trend in their surroundings. Therefore it support prior research that social influence positively but insignificant effect on the behavioral intention to use OVO [17], [19], [28].

Facilitating conditions such as smartphones and the internet are easy to find at the current time. The resources and knowledge of the people are quite good about m-payment technology. However, it seems that the absence of technology or people assistance relate to difficulties faced during the use of OVO brought an impact to the consumer interest in using new technology. Hence, prior research were supported, facilitating condition has a negative insignificant [7]. OVO m-payment can speed up the time in payment transactions, but it is not comparable to the joy and comfort of consumers in shopping. We agreed the prior research that hedonic motivation positively affect but insignificant towards behavioral intention to use OVO as m-payment [7], [20].

The research limitations may be drawn into 3 ideas: (a) the research was only conducted on OVO users; (b) The research objective were the people reside at Bogor City and Regency, therefore the study does not reflect the perception of OVO users as a whole; (c) The study used seven independent variables to describe the behavioral intention to use OVO, while some other various factors or variables can describe the behavioral intention to use m-payment technology.

The future research is suggested to take larger samples so that it can reflect the perceptions of OVO users to produce factual and accurate research results. It is also possible to employ other independent variables such as trust and perceived regulatory support to describe the behavioral intention to use OVO m-payment. Last, but not least, further research is expected to research other m-payments such as Dana, T-cash, Go-pay, ShopeePay, and many others.

It is expected that the study may contribute and assist in both theoretical and practical to the local government at Bogor City and Regency. The study concern that it may provide contribution to the educational field for students and researchers. Lastly, the study may bring new insight to

the business' activity such as E-Commerce, social media marketing, and financial technology companies. It is also important that updated financial literacy is necessary to boost the financial admittance, which can be reflected in m-payment usage.

**Acknowledgments.** We are thankful to anonymous reviewers for their insightful suggestions to improve this manuscript and to Bina Nusantara University for their financial support.

## 6 Reference

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