



# Antecedents of Behavioral Intention and Continuance Usage of Mobile Payment Users in Indonesia During the Covid-19 Pandemic

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**Abstract.** Before 2020, the willingness of the Indonesian people to use mobile payment services was low or it could be said that it was still in the introduction stage. In 2020, due to the Covid-19 pandemic, the level of mobile payment usage in Indonesia increased dramatically, especially the OVO mobile payment, which in 2021 was named the most popular mobile payment in Indonesia. Over time, the number of Covid-19 cases in Indonesia is getting lower, so some suspect that the Indonesian people's interest in using mobile payments will decrease. Based on this phenomenon, this research aims to examine the factors that influence the Behavioral Intention and Continuance Usage of OVO mobile payment users in Indonesia during the Covid-19 pandemic. The theoretical approach used was the Unified Theory of Acceptance and Use of Technology (UTAUT). Data from this study involved 255 respondents who were analyzed using Structural Equation Modeling (SEM). The results of this study indicate that Performance Expectancy, Facilitating Conditions, Habit, Trust, and Price Saving Orientation have a significant positive effect on Behavioral Intention and, eventually, lead to Continuance Usage.

**Keywords:** Behavioral Intention · Continuance Usage · Unified Theory of Acceptance and Use of Technology

## 1 Introduction

As a country with a large enough area, Indonesia follows the development of internet technology. This is confirmed by Indonesia's fourth position as the country with the largest population of smartphone users in the world in 2020. The development of smartphone and internet technology was followed by the emergence of various applications that affect various sectors, one of which is the financial services sector. In the past, all financial transactions could only be made using cash and cards and could only be used to make financial transactions on the spot [1]. However, various online applications developed by banks and other financial institutions compete for users. In addition, online payment applications (mobile payments) such as OVO, Gopay, Dana, Shopeepay, and others have also emerged.

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One of the growing services in Indonesia is mobile payment. Mobile payment refers to financial services that can be used via a smartphone and functions as a means of non-cash payment [2]. Several years later, the willingness of the Indonesian people to use mobile payment services was still low or still in the introduction stage for using mobile payments [3]. One of the exciting things to examine in this phenomenon is how the continuance intention to use OVO is formed. Several previous studies used the theoretical basis of the Unified Theory of Acceptance and Use of Technology (UTAUT) to explain behavioral intentions and continuance intentions.

However, there are differences in the results of several previous studies [1, 4, 5]. Different results occur in the effect of effort expectancy, social influence, and hedonic motivation on behavior intentions. Some studies produce a significant effect, while other research shows the opposite. This study aims to analyze the antecedents that drive behavioral and continuance intentions in using OVO during the Covid-19 pandemic through the relationships between the variables that shape them.

This study used the Unified Theory of Acceptance and Use of Technology approach with antecedents of performance expectancy, effort expectancy, social influence, facilitating conditions, Hedonic Motivation, Habit, Trust, and Price Saving. Performance Expectancy is a person's perception that technology can help achieve maximum work performance [4, 6]. If the community feels that the system is useful, then it is highly likely that the community will adopt or use it [7, 8]. Therefore, the hypothesis proposed is:

H1. Performance Expectancy has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

Effort Expectancy is the level of ease that a person feels when using the system [6, 9]. The easier it is for users to use mobile payments, the higher their motivation to adopt mobile payments will be [3]. Especially in the early stage, consumers will want to use technology services if they are easy to use and users do not need to spend much energy to use the service [10]. Therefore the hypothesis proposed is:

H2. Effort Expectancy has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

The social influence shows individual perceptions about others, such as family, friends, friends, and communities who think the new system must be used [11]. Information and encouragement provided by people around the user can influence the user's awareness and intention to use the latest technology [12]. Therefore the hypothesis proposed is:

H3. Social Influence has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

Facilitating Conditions is defined as the user's belief that the infrastructure and technical organization exists to assist the user when they want to use the new system whenever and wherever it is needed [6, 13]. If operational infrastructure is available, it

will automatically increase user intentions in adopting mobile payments [14]. Therefore, the hypothesis proposed is:

H4. Facilitating Conditions has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

Hedonic motivation is the pleasure one gets when using technology [1]. The user's intention to continue using technology will increase when the user has a pleasant experience using the technology service. Therefore, the hypothesis proposed is:

H5. Hedonic Motivation has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

According to Khuong & Son [1], habit is the level of a person's tendency to carry out activities or behaviors automatically due to a continuous learning process. Habits have also been shown to be an effective indicator for influencing the behavior of using communication and information technology in adults and the elderly. Therefore, the hypothesis proposed is:

H6. Habit has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

Trust is a person's willingness and belief to rely on and depend on a reliable exchange partner [15]. If consumers already have high trust in technology, this can reduce perceived risk and positively impact behavioral intention [16]. Therefore the hypothesis proposed is:

H7. Trust has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

Price Saving Orientation refers to a person's ability to obtain economic benefits through reduced prices to save more [17]. In various contexts, Price Saving Orientation is applied as a predictor of information system use, one of which is a mobile payment that provides benefits for users, such as various discounts and cashback compared to cash payments [18]. Therefore the hypothesis proposed is:

H8. Price Saving Orientation has a positive effect on the Behavioral Intention of OVO mobile payment users in Indonesia during the Covid-19 pandemic.

Behavioral intention is a person's subjective possibility to perform certain behaviors. According to Bhattacharjee [19], Continuance Usage is the user's intention to continue using a system after experiencing or using the system for the first time [20]. Users who feel the benefits after using the system tend to continue using it. It is important for service providers of the latest technology to understand user intentions to use services because it can maintain user motivation to continue using technology services such as mobile payments [20]. Therefore the hypothesis proposed is:

H9. Behavioral Intention has a positive effect on the Continuance Usage of OVO mobile payment users in Indonesia during the Covid-19 Pandemic.

## 2 Research Methods

This research replicates previous research and is used to learn more about a phenomenon, so this research is basic research using a causal research approach. This study used interval measurement levels and numerical measurement scales measured by 5-scale levels for each indicator. All measurement indicators were adapted from previous studies [1].

The target population in this study was all OVO mobile payment customers. The characteristics of the respondents used in this study were having used OVO mobile payments during the Covid-19 pandemic or in the past year, being at least 17 years old, domiciled in Indonesia, and having at least a high school education/equivalent. The target sample for this study was 255 samples.

## 3 Results and Discussion

The results of the validity and reliability tests show that all indicators are acceptable and proceed to the next stage. All indicators are valid with standardized loading  $\geq 0.5$ . The average variance extracted results show  $\geq 0.5$  and construct reliability  $\geq 0.7$ .

After the measurement model, data processing is continued with a structural model to test the hypothesis. The results of the structural model test showed adequate goodness of fit with a CMIN/DF of 1.383 and a GFI of 0.825. Overall, this structural model can be said to be good.

Respondents who participated in this study were 255 respondents. After the test results, from 9 hypotheses, 6 hypotheses were declared supported, and 3 hypotheses were declared unsupported. The research model is shown in Fig. 1.

Interestingly, this study shows that effort expectancy, social influence, and hedonic motivation do not affect behavioral intention. These three variables do not affect the intention to use OVO mobile payments, while habit has the strongest influence.

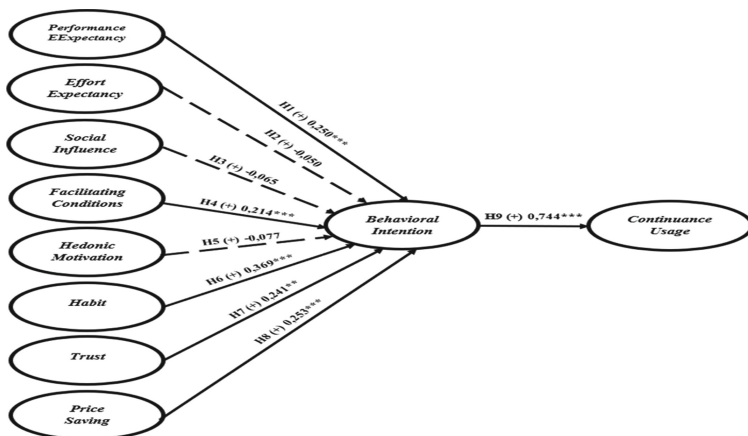


Fig. 1. The Results of the Hypothesis Testing

This could be because this research was conducted during a pandemic, so the need for mobile payments was very high. The use of mobile payments is not only for buying hedonic products but also for everyday products.

## 4 Conclusions and Recommendations

This study shows that Performance expectancy, Facilitating Conditions, Habit, Trust, and Price Saving affect the intention to use OVO as a mobile payment. On the other hand, effort expectancy, habit, and social influence have no effect on the intention to use OVO.

These results provide a new insight that is useful for further model development. The pandemic has forced humans to adopt new habits as consumers. These habits include shopping behavior, payments, and other social interactions.

The study results show that habit plays a significant role in forming the intention to continue using a particular payment method. This has implications that companies must pay attention to habits that develop in society; even if necessary, companies can build new habits. The limitation of this research is that the context was carried out during the pandemic. Nevertheless, the results of this study can contribute to the development of a model, especially in dealing with major changes that may occur due to other force majeure in the future.

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