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FACTORS INFLUENCING THE INTENTION OF BEHAVIOR IN USING GOPAY MOBILE PAYMENT

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ABSTRACT

At present, the development of technology and the internet is advancing rapidly and continues to grow from year to year. The number of smartphone and internet users is also increasing, leading to more frequent use of mobile payment applications. The use of mobile payment applications has several advantages, such as accelerating transactions and facilitating cashless payments. One of the applications used for mobile payment is GoPay, alongside other options such as OVO, Shopee, Dana, and other mobile payment platforms. The researcher aims to analyze the perception of the community towards GoPay as an electronic payment method using the Unified Theory of Acceptance and Use of Technology (UTAUT) approach, which explains user behavior toward information technology based on social influence, performance expectancy, effort expectancy, and facilitating conditions. Each determinant is then tested against behavioral intention. This study has four hypotheses that will be tested, and the data collected for this research is obtained through respondent answers from questionnaires. The data is analyzed using Partial Least Square (PLS) analysis with Smart-PLS software, and the research results indicate that all variables have a positive and significant influence on behavioral intention.

Keywords: *Mobile payment, social influence, performance expectancy, effort expectancy, facilitating condition, behavioral intention*

1. INTRODUCTION

In the current era of globalization, technological and information developments are progressing rapidly. It is undeniable that these technologies have a significant influence on human activities. Electronic media has become one of the main tools for communication and business, and with the advancement of technology, people in Indonesia can easily access the internet. The internet has become an essential aspect of Indonesian society, allowing people to quickly search for data and information. It is also used for daily activities and can be easily accessed through mobile phones or computer devices. The continued growth of internet usage has led to all industries being involved in the development wave. According to a report by Google and Temasek Holdings in Singapore in 2016, internet user growth in Southeast Asia is the fastest compared to other regions, with 124,000 new users every day. The number of active internet users in Indonesia is approximately 150 million, or about 56% of the total population at the beginning of 2019. It is known that there are approximately 142.8 million active mobile internet users, accounting for about 53% of the total population of Indonesia. According to qwords.com (2018), the distribution of internet users in Indonesia is concentrated on the island of Java, accounting for 55%.

The rapid development of technology and information, the widespread availability of internet services, and the increasing influence of smartphones have made Indonesia one of the countries with the potential for the development of online-based applications. Information technology will only be used if its speed and benefits are available to support user activities (Puspita, 2019). One of the technologies being used is mobile payment, which is a system of electronic financial transactions based on mobile devices (Safitri et al., 2019). Digital

payment is a technology that provides a new perspective for the public on non-cash payments that are more practical and secure in transactions (Sagayarani, 2017). Some people recognize digital payment as a digital wallet or mobile money that can be used for various transactions (Indah & Henri, 2019).

According to dailysocial.id (2018), GoPay, a mobile payment service, has the highest dominance in terms of usage among the Indonesian population. From the data above, we can see that GoPay has 10 million users, while OVO has 7 million users. This indicates that the usage of mobile payment in Indonesia is still below expectations, as out of 142.8 million mobile internet users, only 10 million and 7 million users are utilizing GoPay and OVO respectively as their mobile payment methods. The use of electronic wallets for payment methods can potentially enable greater efficiency in financial services compared to cash payment.

Users of the Gopay application are not only from the upper class, but also from the middle to lower class who can enjoy the services available in the application. However, the usage process is not easy. Consumers need to be provided with socialization on how to use the payment method in order for the company to accelerate the adoption of mobile payment among the public. Despite the increasing number of smartphone users in society, it does not necessarily mean that the public can immediately adapt to the development of mobile payment applications. This poses a challenge for mobile payment companies to help the public adapt to mobile payment methods.

User comfort is a crucial aspect of the success of a technology. If the Gopay application can attract a lot of users and make Gopay the largest social network, then it is likely to have a successful adoption by users. The more people use technology, the more successful it can be considered. The performance will improve when technology provides features and speed support that can be associated with tasks (Puspita, 2019). According to Chen (2008), perceived transaction speed is the extent to which users perceive that digital payment enhances transaction speed. Gopay has a sufficiently competitive competitor in OVO, which has been in the fintech industry for a long time and dominates the market. Therefore, Gopay must continue to innovate and provide continuous promotions to remain competitive with its competitors. Gopay also has a payment method similar to its competitors, using QR codes for mobile payments. In addition, the method for topping up Gopay balance is also similar to its competitors, using transfers from banks or other media. Gopay also collaborates with retail outlets so that consumers can pay using the mobile payment GOPAY, making it easier for the public to make payments.

Technology acceptance is the level of user acceptance towards a technology. There are many technology acceptance models that can be used, such as the UTAUT (Unified Theory of Acceptance and Use of Technology) model. UTAUT is a model used to explain user behavior toward information technology. According to Venkatesh et al. (2003), UTAUT is formulated with four core determinants of intention and usage, namely social influence, performance expectancy, effort expectancy, and facilitating conditions. Then each determinant affects behavioral intention. In the concept of community adoption of technological developments, education is needed about the behavioral intentions of each targeted consumer. Behavioral intentions can be defined as a measure or level that can be used to see and measure how willing an individual is to perform an action (Takhur, 2014).

There are four hypotheses in this study:
H1: There is a positive influence of social influence on behavioral intention to use mobile payment Gopay.
H2: There is a positive influence of performance expectancy on behavioral intention to use mobile payment Gopay.
H3: There is a positive influence of effort expectancy on behavioral intention to use mobile payment Gopay.
H4: There is a positive influence of facilitating conditions on behavioral intention to use mobile payment Gopay.

2. RESEARCH METHOD

The population in this study is all final-semester students or job seekers. The sampling technique used is nonprobability sampling with a convenience sampling method, with a total of 134 respondents. The data collection method used in this study is a questionnaire. The questionnaire was distributed in digital form to respondents who met the predetermined criteria.

In this study, the Likert scale used consists of five points ranging from "strongly disagree" (1) to "strongly agree" (5). Each variable is defined operationally in Table 1 as follows:

Table 1. Operationalization of Variables

Variable	Research Statement	Reference
Social Influence	People who influence my behavior influence me to use mobile payment Gopay.	Venkatesh et al. (2012)
	People who are important to me (such as family, friends, and partners) encourage me to use mobile payment Gopay.	
	People whose opinions I trust recommend me to use mobile payment Gopay.	
Performance Expectancy	Using mobile payment Gopay has benefits in completing my payment process	Venkatesh et al. (2012)
	Using mobile payment Gopay will expedite my payment process.	
	Using mobile payment Gopay simplifies, assists, and supports my work.	
	Using mobile payment Gopay will improve my performance.	
Effort Expectancy	I am capable and clearly understand how to use mobile payment Gopay.	Venkatesh et al. (2012)
	It is easy for me to become skilled in using mobile payment Gopay.	
	Mobile payment Gopay is easy to use.	
	Learning to operate mobile payment Gopay will be easy for me.	
Facilitating Condition	I have the resources/facilities (such as a smartphone, internet connection with 3G/4G/5G network support, and merchants with mobile payment options) needed to use mobile payment Gopay.	Venkatesh etal. (2012)

	I have the necessary knowledge to use mobile payment Gopay.	
	Mobile payment Gopay is compatible with other systems I use.	
	I can get help from others when I have difficulty using mobile payment Gopay.	
Behavioural Intention	I will use mobile payment Gopay in the future.	(Thakur & Srivastava, 2014)
	I plan to continue using mobile payment Gopay repeatedly.	
	I will continue to use mobile payment Gopay in my daily activities.	

The outer model testing was conducted using the structural equation modeling (SEM) technique, which includes validity analysis and reliability analysis. The validity analysis was divided into two, convergent validity analysis and discriminant validity analysis.

For convergence validity analysis was measured by the AVE (Average Variance Extracted). The result showed that behavioral intention obtained an AVE value of 0.647, effort expectancy of 0.672, facilitating condition of 0.564, performance expectancy of 0.561, and social influences of 0.545. This indicates that the AVE values of each variable in this study are all above 0.5, so it can be concluded that the variables above have met the criteria.

which resulted in the finding that the variables used in this study met the requirements. The loading factor approach was also used to measure all variables in this study, and the results showed that all indicators used to measure the variables met the predetermined requirement of above 0.7 (> 0.7).

The dependability test also demonstrates the instrument's precision in measuring the build. Composite reliability is used in the reliability test. With the requirement that the value must be greater than 0.7, combine reliability (Hair et al., 2014).

Table 2. Composite Reliability Test Results

Variable	Composite Reliability
Behavioral Intention	0.846
Effort Expectancy	0.804
Facilitating Condition	0.838
Performance Expectancy	0.836
Social Influences	0.780

Source: SmartPLS 3 Data Processing Results

It can be concluded that all data utilized in this study are reliable due to its composite reliability values being over 0.7.

For the inner model which is an element that contains construct, this study applied an R-square test, namely the coefficient of determination, to assess how much influence the independent has on the dependent. If the R-square value is 0.75, the value is considered strong, 0.5 is considered moderate, and if the value is 0.25, it is considered weak (Hair et al., 2014).

Table 3. R-square Test Results

Variable	R Square Adjusted	Results
Behavioral Intention	0.374	weak

Source: SmartPLS 3 Data Processing Results

Based on the data above, with the provisions that the R-square value> 0.25 and lower than 0.5 is considered weak.

Hypothesis Testing

To ascertain whether the study's hypothesis is plausible or not, hypothesis testing needs to be done. The test uses the significant level of the research model from the t value. The test is considered significant if the t value is above 1.96 (Hair et al., 2020), and the F-square measurement test has a guideline value of 0.02 which means a small effect, 0.15, which means a medium, and 0.35 which means a large effect. The F-square test measures how much of an impact the construct has on the endogenous construct (Hair et al., 2014).

Table 4. Hypothesis Test Results

	Original Sample	t-statistics	p-value	f^2	Results
Effort Expectancy -> Behavioral Intention	0.283	3.640	**0.000**	0.103	Positive, Significant, Moderate Effect
Facilitating Condition -> Behavioral Intention	0.220	2.720	**0.007**	0.052	Positive, Not Significant, Small Effect
Performance Expectancy -> Behavioral Intention	0.167	1.968	**0.050**	0.032	Positive, Significant, Small Effect
Social Influences -> Behavioral Intention	0.152	0.166	**0.074**	0.025	Positive, Significant, Small Effect

Source: SmartPLS 3 Data Processing Results

Since the p-value is less than 0.05 and the hypothesis testing t-statistic value is over 1.96 based on the aforementioned data, it is deemed significant. Then f-Square is to determine how much effect is produced and the original Sample to determine the positive or negative effect.

3. RESULTS AND DISCUSSIONS

In this study, there were 194 respondents who had completed all statements provided by the researcher and all of them were GoPay mobile payment users. The respondents in this study consisted of 72 male respondents (37%) and 122 female respondents (63%). The majority of the respondents, 66 of them, were aged between 17 and 26 years old. Most respondents (69%) were domiciled in Jakarta, with 36% of respondents earning between IDR 3,000,000 to IDR 10,000,000 per month.

Based on the respondents' feedback on the social influence statement provided by the researcher, the majority of the respondents agreed that the perception of others could influence their decision to make mobile payments. Furthermore, most respondents felt that the use of mobile payment technology, in this case GoPay, would provide significant benefits to their performance. Most of the respondents also agreed that the company provided opportunities for skill application and potential for respondents' application value, which was shown by the majority of respondents' agreement that the company could provide opportunities for the application of such skills. Based on the survey results, it was also revealed that respondents were ready and supported by all the necessary devices to make payments with GoPay without having to do anything else. Finally, the respondents expressed their desire to continue using mobile payments through GoPay.

Based on the results of the first hypothesis test, it was found that social influence has a positive effect with a path coefficient value of 0.152, which indicates a positive relationship. Social influence has a significant effect with a p-value of 0.041, which is below the maximum limit of 0.05 (< 0.05). Social influence also has an f-square value of 0.025, which has a small effect on behavioral intention. It can be concluded that H1 in this study is supported. These findings are consistent with previous research conducted by Choi (2013), which showed that the influence of peers, family, and media affects individuals in making decisions to adopt mobile commerce. Similarly, research conducted by Karahanna et al. (1999) stated that social influence not only serves as a critical construct in understanding adoption behavior, but empirical findings also reveal a significant relationship between social influence and behavioral intention in mobile payment transactions.

Furthermore, the second hypothesis test shows that performance expectancy has a positive effect with a path coefficient value of 0.167, indicating a positive relationship. Performance expectancy also has a significant effect with a p-value of 0.05, which is below the maximum limit of 0.05 (< 0.05). Performance expectancy also has an f-square value of 0.032, which means it has a significant effect on behavioral intention in using GoPay mobile payment. Therefore, it can be concluded that H2 in this study is also supported. These findings are consistent with the opinion expressed by Lu et al. (2005) in their study, which adopted a UTAUT-based study through 1,432 respondents in China and found that performance expectancy significantly influences individuals to use mobile services. These findings are also supported by the research of Kim et al. (2007), which found that performance expectancy is one of the most significant factors in behavioral intention to use mobile payment.

In the third hypothesis test, it was found that effort expectancy has a positive effect with a path coefficient value of 0.283, indicating a positive relationship. Effort expectancy also has a significant effect with a p-value of 0.000, which is below the maximum limit of 0.05 (< 0.05). Performance expectancy also has an f-square value of 0.103, which means it has a moderate effect on behavioral intention in using GoPay mobile payment. Therefore, it can be concluded that H3 in this study is supported. The results of the third hypothesis test are also consistent with the opinion expressed by Venkatesh et al. (2003), where study concluded that effort expectancy refers to the ease with which individuals use the system. These findings are also supported by the research of Hayashi (2014), which found that, unlike traditional payment alternatives, users require more time and effort to download, input multiple accounts, and learn how to use mobile payment applications. Empirical findings from Choi (2013) and Kim et al. (2007) have also confirmed the impact of educational technology research design.

Finally, the hypothesis testing for the fourth hypothesis showed that facilitating conditions have a positive influence with a path coefficient value of 0.220, which means positive. Facilitating conditions also have a significant influence with a p-value of 0.007, which is below the maximum limit of 0.05 (< 0.05). Facilitating conditions also have an f-square value of 0.052, which means they have a large effect on behavioral intention. Therefore, it can be concluded that H4 in this study is supported. These findings are consistent with Chen's (2013) opinion, which found that facilitating conditions are positively related to the behavioral intention of NFC mobile applications through 189 respondents. Facilitating conditions characterize users with complete skills, such as configuring and operating phones to access wireless internet. The construct basically means that users who have operational skills in configuring and operating mobile payment devices will ultimately lead to behavioral intention. In the context of mobile payment, Hayashi (2014) has further explained that mobile payment devices will eradicate the inconvenience of carrying multiple plastic cards by allowing users to link payments to their card accounts. Chen's (2008) study further supports that the convenience of having a single payment device to replace multiple payment alternatives contributes to the benefits of mobile payment. Thus, it is not surprising that many studies support a positive relationship between perceived transaction convenience and innovation adoption.

4. CONCLUSIONS AND SUGGESTIONS

Based on the above research results, it can be concluded that: (1) There is a positive and significant influence between social influence on behavioral intention to use mobile payment Gopay; (2) There is a positive and significant influence between performance expectancy on behavioral intention to use mobile payment Gopay; (3) There is a positive and significant influence between effort expectancy on behavioral intention to use mobile payment Gopay; and (4) There is a positive and significant influence between facilitating condition on behavioral intention to use mobile payment Gopay.

It is suggested that mobile payment providers like Gopay should consider these four factors when promoting and developing their services to increase users' intention to adopt their services. Social influence, performance expectancy, effort expectancy, and facilitating conditions should be emphasized in their marketing and user education programs. For example, they could use influencers or social media campaigns to highlight the social aspects of using mobile payment services. They could also focus on making the user experience easy and convenient, such as providing clear and simple instructions for how to use the app and ensuring that the app is user-friendly. Additionally, they could offer incentives and rewards for users who regularly use their mobile payment services to improve facilitating conditions. By paying attention to these factors, mobile payment providers like Gopay can increase user adoption and achieve greater success in the market.

REFERENCES

Chen, L. D. (2013). A model of consumer acceptance of mobile payment. *InternationalJournal of Mobile Communications*, vol. *6.* no,1, 32-52.

Choi, G, Chung, H (2013) Applying the Technology Acceptance Model to social networking sites (SNS): Impact of subjective norm and social capital on the acceptance of SNS. International Journal of Human-Computer Interaction 29(10): 619–628.

Hair Jr, J., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European business review*, *26*(2), 106-121.

Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, *109*, 101-110.

Hayashi, Fumiko., dan Terri Bradford. 2014. *Mobile Payments: Merchants' Perspectives*. Economic Review, Issue Q II, pp. 33-58.

Karahanna, E., Straub, D. W., and Chervany, N. L. (1999). Information Technology Adoption across Time: A cross-sectional comparison of preadoption and post-adoption beliefs, MIS Quarterly 23(2): 183–213.

Kim, C., Jahng, J., and Lee, J. (2007). An Empirical Investigation into the Utilization-Based Information Technology Success Model: Integrating task-performance and social influence perspective, Journal of Information Technology 22(2): 152–160.

Lu, J., Yao, J. E., and Yu, C. (2005). Personal Innovativeness, Social Influences and Adoption of Wireless Internet Services via Mobile Technology, Journal of Strategic Information Systems 14(3): 245–268.

Puspita, Yuanita Candra. (2019). Analisis kesesuaian teknologi penggunaan *digital payment* pada aplikasi OVO. *Jurnal Manajemen Informatika*. Vol. 9(2): 121-128.

qwords.com. Jumlah Pengguna Internet di Indonesia. (2018). Retrived from qwords.com, https://qwords.com/blog/jumlah-pengguna-internet-di-indonesia/

Safitri, Ernita Oktiviana, Yusi Tyroni Musityo, & Niken Hendrakusma Wardhani (2019). Analisis perilaku penggunaan mobile payment aplikasi OVO menggunakan technology acceptance model (TAM) termodifikasi. *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer*.Vol.3(8):8184-8189.

Sagayarani, Dorothy. (2017). Digital Payments in India. *IOSR Journal of Business and Management (IOSRJBM.* Vol.1(2):28-33.

Thakur, R. (2018). Customer engagement and online reviews. *Journal of Retailing and Consumer Services*, *41*, 48-59.

Thakur, R., & Srivastava, M. (2014). Adoption readiness, personal innovativeness, perceived risk and usage intention across customer groups for mobile payment services in India. *Internet Research*, *24*(3), 369-392.

Tren Perkembangan Mobile Payment di Indonesia. (2018). Retrieved from dailysocial.id: https://dailysocial.id/post/perkembangan-mobile-payment-indonesia.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, pp. 425-478.