

From Innovation and Compatibility to the Intention to Adopt Mobile Payment with User Expectations as the Mediating Factor

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Abstract: With the rapid growth of mobile payment transactions in Indonesia, it is imperative to understand the factors influencing user acceptance to optimize product development and marketing strategies. This study seeks to examine these factors through the lens of the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2) framework, specifically investigating the effects of effort expectancy (EE), performance expectancy (PE), social influence (SI), hedonic motivation (HM), compatibility (Comp), and innovation (Innv) on behavioral intention (BI). This study employs a quantitative methodology with purposive sampling, gathering data through online surveys from residents of Indonesia, resulting in a sample of 325 respondents who have utilized mobile payment systems. Data analysis employed Partial Least Squares (PLS) using SmartPLS software. The results indicate that EE significantly influences BI, while PE, SI, and HM do not. Additionally, Comp and Innv were found to positively impact PE, EE, and BI. A noteworthy finding is that Comp significantly influences BI, with EE acting as a mediator. **Keywords:** Behavioral Intention; Mobile Payment; User Expectancy.

INTRODUCTION

In an era of rapid and modern industrial and technological development, many daily habits of people have changed, especially since the start of the COVID-19 pandemic in 2020. This pandemic has driven people to shift numerous activities from face-to-face interactions to online platforms. Nowadays, the majority of people around the world rely on the Internet for their daily activities. This digital transformation has been particularly beneficial in the financial sector through mobile payments (Ramadhani & Azizah, 2022). According to Adji, Muhammad, Akrabi, and Noerlina (2023), the use of mobile payments in Indonesia continues to increase, both for personal and corporate purposes. Smartphones have now become the primary tool for mobile payments and play a crucial role in daily life, aligning with the country's economic growth.



Electronic Money Transactions, Value in IDR Trillions, Indonesia, 2016-2022

Figure 1. The Increase in e-Money Transactions in Indonesia Source: (Mordor Intelligence, 2023)

Mobile payment methods are increasingly developing in Indonesia, as evidenced by the growth in transaction volumes and the number of companies involved. According to Mordor Intelligence (2023), the use of mobile payments has consistently increased



based on data obtained from Bank Indonesia. This trend is measured through the value of digital currency transactions occurring in Indonesia. In 2016, the transaction value was only 30.87 trillion rupiahs, but it has continued to rise each year, reaching 357.7 trillion rupiahs in 2022. There are two widely used types of mobile payments: mobile banking and financial technology (fintech).

The study aims to examine the factors influencing the use of mobile payments, to contribute to companies' innovation and development in line with these influencing factors to increase user adoption. The research also tests the mediation effects of the PE and EE variables, which potentially impact the use of mobile payments. Technological innovations such as new features and enhanced security (Innv), as well as compatibility with users' needs and preferences (Comp), can enhance users' perception that the technology improves their performance. Convenience and efficiency are the key benefits that users expect, therefore it makes sense to utilize them as tests. As such, they should be investigated in conjunction with the variables Innv and Comp. A user-friendly interface and simpler registration process, along with technology that is compatible with existing devices and systems, can make users believe that the technology is easy to use. High levels of PE and EE lead users to be more likely to plan to make constant use of the technologies. In similar previous studies, the direct influence of Comp and Innv variables on UTAUT2 variables has shown a significant positive effect. However, in previous research, it is rare to find studies that test indirect (mediation) effects using PE and EE to measure the influence of Comp and Innv on BI.

Mobile payment methods involve a payment procedure in which at least one transaction stage is carried out using a mobile device with wireless capabilities that can securely execute financial transactions over a network. According to Lin, Wang, and Chen (2019), mobile payments represent a shift from conventional payment methods or cash to fund transfers using mobile devices. Candy, Shellyna, Justyanita, and Kristiani (2022) state that BI refers to the extent to which an individual has planned to perform or not perform a specific action in the future, particularly in the context of technology. BI is a primary determinant that can influence a person's behavioral decision to take or not take a particular action, as well as to design programs that can positively influence intentions and actions (Marto, Gonçalves, Melo, Bessa & Silva, 2023).

The UTAUT2 theoretical framework aims to enhance the understanding of individuals' acceptance and use of technology (Blut, Chong, Tsiga, and Venkatesh, 2021). Given the increasing need to analyze the determinants of technology adoption among consumers, UTAUT2 was published as an extension of the original UTAUT theory (Migliore, Wagner, Cechella & Liébana-Cabanillas, 2022). According to Sudarsono, Kholid, Trisanty, Shidiqie, and Suseno, (2022), UTAUT was developed into the UTAUT2 framework by incorporating three additional perspectives: price value, hedonic motivation, and habit. The goal is to explain the reasons behind the behavioral use of technological products. Research by Lin, Wang, and Chen (2019) found that the UTAUT2 theory has strong explanatory factors. In general, the research variables are significantly correlated with BI. Therefore, this study analyzes consumer BI towards mobile payments based on the UTAUT2 theory.

PE measures how much a person thinks utilizing a specific technology would improve their performance (Al-Saedi, Al-Emran, Ramayah & Abusham, 2020). According to the research findings by Butarbutar, Lie, Bagenda, Hendrayani, and Sudirman (2022) and Marto et al. (2023), PE has a significant positive impact on BI. PE is the most important factor influencing consumer BI to use mobile payments (Joshi, 2024). The results obtained by Migliore et al. (2022), Patrik and Lady (2022), Sari et al. (2024), Islam, Tamanna, and Islam (2024), Alam, Ahmed, Kokash, Mahmud, and Sharnali (2024), Salifu, Aheto, and Vondolia (2024), Suhail, Adel, Al-Emran, and AlQudah (2024) indicate



that PE has a significant positive effect on BI. However, several studies show different results. Research by Alfiana and Rikumahu (2020), Andrianto (2020), Lin, Lin, and Ding (2020), Ramadhani and Azizah (2022), and Suharto, Salim, Sumiati and Rofoq (2021) explains that BI is not significantly influenced by PE. Thus, the following is how the hypothesis is put forth:

H1: Performance expectancy has a significant positive influence on behavioral intention to use mobile payments.

According to Migliore et al. (2022), Octaviani, Sucherly, Prabowo, and Sari (2024), EE refers to the assessment of how convenient it is for users to use a particular technology. EE is defined as the perceived ease of using technology, making users feel more practical (Sari et al., 2024). EE is a factor that has a direct and significant influence on motivating consumers to become users of mobile payments (AI-Saedi et al., 2020). Research by Salifu, Aheto, and Vondolia (2024), Alam et al. (2024), Islam, Tamanna, and Islam (2024), Patrik and Lady (2022), Subawa, Widhiasthini, and Mimaki (2020) shows that EE significantly impacts BI. However, Winata and Tjokrosaputro (2022) found that effort expectancy does not significantly influence user intention. Therefore, the hypothesis is formulated as follows:

H2: Effort expectancy has a significant positive influence on behavioral intention to use mobile payments.

SI refers to the impact of individuals around a person who are considered important and inspire them to use a particular technology (Khasawneh & AlBahsh, 2024; Migliore et al., 2022). Mobile users often seek opinions from peers and relatives regarding mobile payments due to the prevalence of social media (Moorthy, T'ing, Yee, Huey, In, Feng, & Yi, 2020). Previous research has revealed that SI has a significant and positive effect on BI (Yu, Chao, Chang, Chen, Chen, and Liu, 2021). Studies by Suhail, Adel, Al-Emran, and AlQudah (2024), Salifu, Aheto, and Vondolia (2024), Islam, Tamanna, and Islam (2024) and Al-Saedi et al., (2020) have shown that SI significantly impacts BI for adopting new technologies. Notably, Salifu et al. (2024) found that SI is the dominant factor in influencing BI. However, some studies present differing results. Research by Chua, Lim, and Lim (2020), Andrianto (2020), Chaveesuk, Khalid, and Chaiyasoonthorn (2021), Lin, Wang, and Chen (2019), Moorthy et al. (2019) indicates that BI is not significantly influenced by SI. Therefore, the hypothesis is formulated as follows:

H3: Social Influence has a significant positive influence on Behavioral Intention to use mobile payments.

HM is defined by Migliore et al. (2022) as the level of enjoyment derived from utilizing a technology. Research findings by Alfiana and Rikumahu (2020) indicate that HM's using mobile payment methods can encourage consumers to continue using mobile payments. Findings by Ramadhani and Azizah (2022) show that using a system or technology can enhance satisfaction while customers are using it. The results of studies by Suhail, Adel, Al-Emran, and AlQudah (2024), Salifu, Aheto, and Vondolia (2024), Alam et al. (2024), Migliore et al. (2022), Moorthy et al. (2020) also state that HM has a significant positive influence on Bl. However, some studies show different results. Research by Nurkhin, Mukhibad, and Daud (2023), and Suharto et al. (2021) explain that Bl is not significantly influenced by HM. Therefore, the hypothesis is formulated as follows:



H4: Hedonic motivation has a significant positive influence on behavioral intention to use mobile payments.

According to Ramadhani and Azizah (2022), Comp refers to the degree of fit between technological innovation and the lifestyle, experience, and needs of customers. Lin, Wang, and Chen (2019) suggest that when customers perceive that mobile payment methods align with their lifestyle and payment needs, it will enhance their BI to use mobile payments (Nawi et al, 2024). Comp also influences PE and EE, as indicated by the research of Alfiana and Rikumahu (2020). The higher the compatibility, the greater the impact on encouraging someone to use mobile payment methods, as well as the PE and EE towards these methods. In light of these findings, the hypotheses are formulated as follows:

H5: Compatibility has a significant positive influence on performance expectancy.

H6: Compatibility has a significant positive influence on effort expectancy.

H7: Compatibility has a significant positive influence on behavioral intention to use mobile payments.

Lin, Wang, and Chen (2019) state that individuals who are innovative and receptive to updates tend to be among the first to use new technologies, significantly contributing to the success of that technology. The results of the study by Marto et al. (2023) indicate that the variable of innovation (Innv) influences behavioral intention (BI). It is shown that innovation significantly impacts the intention to use new technology, as well as the variables of PE and EE. The higher the users' level of innovation, the more likely they are to find the technology compatible and understand its benefits (Alfiana & Rikumahu, 2020). Therefore, when users exhibit high innovation, their performance expectancy and effort expectancy increase. Thus, the following hypotheses are proposed:

H8: Innovation has a significant positive influence on performance expectancy.

H9: Innovation has a significant positive influence on effort expectancy.

H10: Innovation has a significant positive influence on behavioral intention to use mobile payments.

According to the research by Alfiana and Rikumahu (2020), Lin, Wang, and Chen (2019), and Ramadhani and Azizah (2022), EE is significantly influenced by compatibility (Comp). EE also has a significant positive effect on BI to use mobile payments, as noted by Migliore et al., (2022). Based on these studies, a mediation analysis combining the variables of Comp, EE, and BI is proposed. It is hypothesized that Comp has a significant effect on BI with EE as a mediator. Thus, the following is how the hypothesis is put forth:

H11: Compatibility has a significant positive influence on behavioral intention through the mediation of effort expectancy.

Research by Alfiana and Rikumahu (2020), Lin, Wang, and Chen (2019), and Lin, Lin, and Ding (2020) indicate that EE is significantly influenced by Innv. EE also has a significant and positive impact on BI to use mobile payments according to studies by (Al-Saedi et al., 2020; Subawa et al., 2020). Based on these findings, a mediation analysis combining the variables of Innv, EE, and BI is proposed. It is hypothesized that Innv has a significant effect on BI with EE as a mediator. Thus, the following is how the hypothesis is put forth:

H12: Innovation has a significant positive influence on behavioral intention through the mediation of effort expectancy.

According to research by Alfiana and Rikumahu (2020), Lin, Wang, and Chen (2019), and Ramadhani and Azizah (2022), the Comp variable is influenced by performance PE. PE also has a significant and positive effect on BI to use mobile payments, as evidenced by studies from (AI-Saedi et al., 2020; Butarbutar et al., 2022;



Marto et al., 2023; Migliore et al., 2022). Based on these findings, a mediation analysis that combines the variables of Comp, PE, and BI is proposed. It is hypothesized that Comp has a significant effect on BI with PE as a mediator. Thus, the following is how the hypothesis is put forth:

H13: Compatibility has a significant positive influence on behavioral intention through the mediation of performance expectancy.

According to Lin, Lin, and Ding (2020), the Innv variable is influenced by PE. PE also has a significant and positive effect on BI to use mobile payments, as indicated by research from (AI-Saedi et al., 2020; Butarbutar et al., 2022; Marto et al., 2023; Migliore et al., 2022). Based on these findings, a mediation analysis that combines the variables of Innv, PE, and BI is proposed. It is hypothesized that Innv has a significant effect on BI with PE as a mediator. Thus, the following is how the hypothesis is put forth:

H14: Innovation has a significant positive influence on behavioral intention through the mediation of performance expectancy.



Figure 2. Research Model

Source: Data that has been processed by the author (2024)

METHODS

This study adopts a quantitative research design, relying on primary data as the main data source. The sampling technique utilized is non-probability sampling, specifically employing a purposive sampling method. The research population comprises residents of Indonesia, with the sample specifically drawn from individuals who have previously conducted transactions via mobile payment. Data collection was carried out through online questionnaires, which were designed to align with the research variables. The indicators used for testing all variables were adopted from the work of Lin, Lin, and Ding (2020). Specifically, the variables of innovation (Innv), compatibility (Comp), and effort expectancy (EE) were measured using 4 indicators each, while social influence (SI), hedonic motivation (HM), performance expectancy (PE), and behavioral intention (BI) were measured using 5 indicators each. Following the sampling method suggested by Hair et al. (2021), the sample size was determined by multiplying the number of indicators by 10, resulting in a recommended minimum sample size of 320 respondents. Data analysis was conducted using Partial Least Squares (PLS) methodology, facilitated by the SmartPLS software application.



Variable		Indicator	
Performance	PE1	Using mobile payments can complete financial transactions faster.	
Expectancy	PE2	Using mobile payments saves my time on payments so I can focus	
		on other things.	
	PE3	The use of mobile payments can add convenience to shopping.	
	PE4	The use of mobile payments can shorten the time, effort, and	
		money spent.	
	PE5	Using mobile payments allows me to do activities faster.	
Effort	EE1	Mobile payments are easy to use.	
Expectancy	EE2	The use of mobile payments is clear and easy to understand.	
	EE3	My interactions with mobile payments are clear and	
		understandable	
	EE4	I can easily use mobile payment as a payment method.	
Social Influence	SI1	I believe that using mobile payments can improve my social statu	
	SI2	I think people who use mobile payments look more undated about	
	012	technology	
	SI3	I think the people around me will encourage me to use mobile	
	010	navments	
	SI4	When there are mobile navment-related ads I will try to use them	
	SI5	Friends' advice and recommendations will influence my decision	
	010	to use mobile payments	
Hodonia		Leing mobile payments is fun	
Motivation		Using mobile payments is full. Mebile powerste are fast and visible	
MOUVALION		licing mobile payments is very entertaining	
		Using mobile payments is a special experience.	
		Lom honou when using mehile neuments for transactions	
Compatibility		The use of mobile payments is in line with my doily consumption	
Compatibility	Compi	netterne	
	Compo	pallerns.	
	Comp2	The use of mobile payments is in line with my work style.	
	Comp3	The use of mobile payments is in line with my work style.	
	Comp4	Using mobile payment is as acceptable to the seller as using other	
lass as setting	1	payment methods (For example: pay cash/credit card)	
Innovation	INNV1	Among people my age, I'm usually the first to try new technology.	
	Innv2	I am nappy to try new technology.	
	Innv3	I will keep using mobile payments without being influenced by	
		people around me who never use them.	
	Innv4	I feel like I know more about mobile payments than my friends.	
Behavioral	BI1	I will use mobile payment in the future.	
Intention	BI2	In my daily life, I will continue to use mobile payments.	
	BI3	I am willing to connect my credit card or financial account to mobile	
		payments.	
	BI4	Most of my friends use mobile payments, so I will use them too.	
	BI5	I will use mobile payments more often in the future.	

Table 1. Research Questionnaire

Source: Lin et al. (2020)

RESULTS AND DISCUSSION

The study gathered data from 325 respondents as the research sample. Based on the descriptive characteristics of the sample, it was found that the majority of respondents were female, totaling 173, while the male respondents totaled 152. The age range that most frequently uses mobile payments is between 19 and 30 years old. Most of the respondents who use mobile payments are employed in the private sector, accounting for 54.46%. The average monthly expenditure of the respondents ranges from IDR 3,000,000 to IDR 6,000,000. Additionally, 40.62% of respondents have been



aware of mobile payments for more than 5 years, and the average frequency of mobile payment usage per month is between 11 to 15 times.

Variable	Cronbach's Alpha	Composite Reliability	Result	Code	Loading Factor	AVE	Result
				PE1	0.739	0.552	Valid
				PE2	0.769		Valid
PE	0.798	0.860	Reliable	PE3	0.732		Valid
				PE4	0.731		Valid
				PE5	0.744		Valid
				EE1	0.821	0.585	Valid
EE	0.763	0.849	Reliable	EE2	0.774		Valid
				EE3	0.756		Valid
				EE4	0.703		Valid
				SI1	0.745	0.588	Valid
				SI2	0.738		Valid
SI	0.827	0.877	Reliable	SI3	0.802		Valid
				SI4	0.737		Valid
				SI5	0.810		Valid
				HM1	0.784	0.597	Valid
				HM2	0.729		Valid
HM	0.831	0.881	Reliable	HM3	0.794		Valid
				HM4	0.752		Valid
				HM5	0.803		Valid
				Comp1	0.820	0.605	Valid
Comp	0.784	0.860	Reliable	Comp2	0.789		Valid
				Comp3	0.782		Valid
				Comp4	0.717		Valid
Innv	1.000	1.000	Reliable	Innv2	1.000	1.000	Valid
				BI1	0.796	0.633	Valid
BI	0.807	0.873	Reliable	BI2	0.823		Valid
				BI4	0.810		Valid
				BI5	0.753		Valid

Table 2. Validity and Reliability Test

Source: Data that has been processed by the author (2024)

Convergent validity is assessed through the outer loadings and AVE of each variable. According to Hesniati and Lasmiyanto (2020), and Kurniasari and Lestari (2024), a variable has good validity if it has an outer loading value >0.7 and an AVE value >0.5. Reliability is measured through Cronbach's alpha and composite reliability, with values >0.60 indicating reliability (Hesniati & Lasmiyanto, 2020). The results in Table 1 show that the outer loading and AVE values for each variable are greater than 0.7 and 0.5, respectively, indicating validity. However, the Innv variable only has one questionnaire item due to the inappropriateness of other indicators, resulting in a value of 1.000, which is valid. The reliability results show that each variable has a value greater than 0.60, indicating reliability for each variable tested.



Hypothesis	Influence among Variables	Coefficient	P-Values	Result	
H1	PE→BI	0.122	0.167	Rejected	
H2	EE→BI	0.184	0.018	Accepted	
H3	SI→BI	0.022	0.711	Rejected	
H4	HM→BI	0.139	0.096	Rejected	
H5	Comp→PE	0.429	0.000	Accepted	
H6	Comp→EE	0.389	0.000	Accepted	
H7	Comp→Bl	0.409	0.000	Accepted	
H8	Innv→PE	0.126	0.032	Accepted	
H9	Innv→EE	0.181	0.002	Accepted	
H10	Innv→BI	0.257	0.000	Accepted	
Source: Data that has been processed by the author (2024)					

Table 3. Hypothesis Test (Direct Effect)

Hypothesis Testing Results

The hypothesis test assessing the impact of PE on BI yielded a p-value of 0.167. indicating that the expectation of enhancing performance through mobile payments does not significantly influence BI, leading to the rejection of H1. The analysis reveals that EE has a significant effect on BI, with a p-value of 0.018, thus supporting H2. SI does not exhibit a significant effect on BI in the context of mobile payments, evidenced by a pvalue of 0.711, resulting in the rejection of H3. The test for the influence of HM on BI produced a p-value of 0.096, exceeding the 0.05 threshold, suggesting that HM does not significantly affect BI, leading to the rejection of H4. Furthermore, the examination of the effect of Comp on PE demonstrated a p-value of 0.000, signifying a significant positive effect, thereby accepting H5. The findings also indicate that both Comp and EE exert a significant positive effect, with a p-value of 0.000, confirming H6. Hypothesis 7 is validated with a p-value of 0.000, underscoring that Comp significantly positively impacts BI, thus accepting H7. The test examining the effect of Inny on PE revealed a p-value of 0.032, which is below 0.05, thereby accepting H8. Additionally, the analysis shows that Innv has a significant positive effect on EE, with a p-value of 0.002, leading to the acceptance of H9. The relationship between Innv and BI is characterized by a significant positive effect, evidenced by a p-value of 0.000, resulting in the acceptance of H10.

Table 4. Hypothesis Test (Indirect Effect)

Hypothesis	Relationships Between Variables	Coefficient	P- values	Result		
H11	Comp→EE→BI	0.071	0.023	Accepted		
H12	Innv→EE→BI	0.034	0.102	Rejected		
H13	Comp→PE→BI	0.053	0.195	Rejected		
H14	Innv→PE→BI	0.015	0.269	Rejected		
Courses Date that has been presented by the south on (000.1)						

Source: Data that has been processed by the author (2024)

The analysis of the effect of Comp on BI mediated by EE produced a p-value of 0.023. Given that the p-value is less than 0.05, Comp has a significant and positive effect on BI through EE, resulting in the acceptance of H11. The test examining the effect of Innv on BI mediated by EE yielded a p-value of 0.102. Consequently, H12 is rejected as the p-value exceeds the 0.05 threshold. The evaluation of the effect of Comp on BI through PE indicated a p-value of 0.195, leading to the rejection of H13 due to the p-value being greater than 0.05. The relationship between Innv and BI through PE is deemed



insignificant, with a p-value of 0.269, which surpasses the 0.05 threshold. Therefore, H14 is also rejected.



Figure 3. Data Processing Result Source: Data that has been processed by the author (2024)

The structural equation model (SEM) examines the connections between multiple latent variables and how they affect BI. Key factors such as Comp, Innv, SI, and HM are assessed using observable indicators and are associated with PE and EE, which in turn influence BI. The path coefficients reflect the strength of these relationships, with PE and EE being essential. This model demonstrates how factors combine to shape people's intentions to adopt or continue using a technology or system.

The Effect of Performance Expectancy on Behavioral Intention

Consistent with the research by Alfiana and Rikumahu (2020), which indicates that PE does not have a significant effect on BI, similar findings are reported by Andrianto (2020), Lin, Lin, and Ding (2020), Ramadhani and Azizah (2022), Suharto et al. (2021), who demonstrate that PE does not significantly impact BI. This result suggests that users of mobile payments do not solely consider performance or benefits when using mobile payments but are also driven by other factors to meet their needs.

The Effect of Effort Expectancy on Behavioral Intention

The hypothesis test of EÉ on BI for using mobile payments shows a significant and positive effect. This aligns with the studies by AI-Saedi et al. (2020), Migliore et al. (2022), Islam, Tamanna, and Islam (2024), Alam et al. (2024), and Salifu, Aheto, and Vondolia (2024), which explain that ease of use encourages users to continue using mobile payments. This outcome is in line with Subawa et al., (2020), which indicate that a user-friendly interface and easy-to-navigate payment application are likely to increase the intent to use mobile payments. In this context, mobile payments can enhance ease of use through simple menu displays and easily understandable icons, thereby improving the BI to use mobile payments.



The Effect of Social Influence on Behavioral Intention

The results are consistent with previous studies by Andrianto (2020), Chaveesuk et al. (2021), Lin, Wang, and Chen (2019), and Moorthy et al. (2019), which indicate that SI does not significantly impact BI. The influence of those around does not determine whether someone wants to use mobile payments. This is attributed to the fact that the sample tested consists of a generation that frequently uses technology daily, thus reducing the need for SI to foster the intention to use mobile payments.

The Effect of Hedonic Motivation on Behavioral Intention

Research by Andrianto (2020) found similar results, indicating that HM does not significantly affect BI. This finding is consistent with studies by Nurkhin, Mukhibad, and Daud (2023); and Suharto et al. (2021). The pleasure experienced by users is not a primary factor in the usage of mobile payments; however, companies can leverage this aspect to provide additional value and enhance the user experience with mobile payments.

The Effect of Compatibility on Performance Expectancy

These results are consistent with the research by Lin, Wang and Chen (2019) and Ramadhani and Azizah (2022). The findings indicate that higher levels of Compatibility lead to higher expectations of mobile payment performance, aligning with studies by Alfiana and Rikumahu (2020). Therefore, if users perceive that mobile payments can meet their financial needs, it will result in higher transaction efficiency as the service can be used at any time. This implies that higher Comp will enhance users' perception of mobile payment performance. In this context, companies can improve performance by reducing transaction times in mobile payments to better meet user needs.

The Effect of Compatibility on Effort Expectancy

The testing findings demonstrate that Comp has a strong and good impact on EE, consistent with research by Alfiana and Rikumahu (2020), Lin, Wang, and Chen (2019), and Ramadhani and Azizah (2022). The outcome explains that the perceived ease of use increases when mobile payments are aligned with daily activities. Thus, companies can enhance the quality and simplicity of mobile payment systems to provide a more user-friendly experience.

The Effect of Compatibility on Behavioral Intention

The testing results show that Comp significantly and favorably affects BI. This finding is consistent with research conducted by Alfiana and Rikumahu (2020), Butarbutar et al. (2022), Lin, Lin, and Ding (2020), Ramadhani and Azizah (2022), and Nawi et al. (2024). The perception of Compatibility enhances the intention to continue using mobile payments in daily activities. This result explains that the higher the level of Comp of mobile payments with user needs, the greater the BI to continue using it. Therefore, companies must provide fast and user-friendly services, as users do not desire inefficient solutions.

The Effect of Innovation on Performance Expectancy

The hypothesis proposed is that Innv has a significant positive effect on PE, and the test results support this hypothesis. This result is in line with the study carried out by Lin, Lin, and Ding (2020). The more innovations focus on enhancing the efficiency and effectiveness of mobile payment usage, the more users will rely on this technology and perceive it as valuable and efficient. This implies that if companies introduce new



innovations, such as better systems in relation to time, users will experience the benefits and performance of mobile payments and regard this technology as highly effective.

The Effect of Innovation on Effort Expectancy

These results align with studies by Alfiana and Rikumahu (2020), which indicate that Innv has a significant and positive effect on EE. It can be explained that innovations aimed at simplifying the use of mobile payments will make users find it easier to use. If payment innovations continue to improve by simplifying interfaces and procedures, users will experience increased ease of use.

The Effect of Innovation on Behavioral Intention

The results of this test align with research by Alfiana and Rikumahu (2020), and Lin, Lin, and Ding (2020). This indicates that Innv is a strong factor influencing BI to use mobile payments. Innv which offers benefits like convenience, security, and ease of use will motivate people to keep utilizing mobile payments. This finding suggests that companies should develop innovations that are user-friendly, secure, and time-efficient, as this will enhance users' intention to continue using mobile payment services.

The Effect of Compatibility on Behavioral Intention through Effort Expectancy

This test shows a significant and positive effect. The variable EE successfully mediates the effect of Comp on BI. When Comp aligns with user habits, it leads to increased ease of use, thereby enhancing users' intention to continue using mobile payments. Therefore, companies are advised to improve the quality of mobile payments to better match users' needs and habits, such as frequently used financial transaction services like payments and balance checks. This will enhance users' perception of ease, encouraging them to continue using mobile payments.

The Effect of Innovation on Behavioral Intention Through Effort Expectancy

The results indicate that EE does not successfully mediate the effect of Innv on BI. Higher levels of Innovation do not lead to increased ease of use that would encourage consumers to keep making mobile payments. According to Mercurio and Tundang (2023), the quality of innovation in Indonesia is still inadequate. New features are often incomplete and not sufficiently advanced. Moreover, security aspects are frequently lacking, with many applications vulnerable to cyberattacks and fraud. User experience is also suboptimal, with confusing interfaces and complicated registration processes hindering users' use of these services.

In Indonesia, cultural factors and local preferences cause many people to remain comfortable using cash and traditional bank transfers. Infrastructure issues and technical support, such as poor internet connectivity in rural areas, also hinder the adoption of mobile payments. Additionally, low levels of digital literacy contribute to a lack of understanding of how to use mobile payment applications. Many users are unsure how to operate the applications or are concerned about the security of online transactions.

The Effect of Compatibility on Behavioral Intention through Performance Expectancy

It can be inferred that PE does not effectively mediate the impact of Comp on BI. This suggests that a high level of Comp does not result in users perceiving significant benefits or performance improvements that would motivate the continued use of mobile payments. Factors contributing to this issue include a lack of awareness and digital literacy education, security and risk concerns, and the complexity of application usage. In Indonesia, users do not find mobile payment technology to offer substantial added value in enhancing efficiency and performance (Deloitte, 2020).



The Effect of Innovation on Behavioral Intention Through Performance Expectancy

Thus, this hypothesis is also not significant. The results indicate that PE does not successfully mediate the effect of Innv on BI. Higher levels of Innv do not lead users to experience benefits or performance improvements that drive them to continue using mobile payments. According to Osei (2024), the impact of innovation becomes insignificant when internet infrastructure remains problematic. Data from the World Bank shows that only 62% of the Indonesian population has internet access. Additionally, the quality of internet connectivity varies significantly by location.

CONCLUSION

After conducting the analysis of the effects among variables influencing the behavior of individuals to use mobile payments, the results can be summarized as follows: EE positively and significantly influences BI, and Comp and Inny have significant and positive effects on PE, EE, and BI. Conversely, PE, SI, and HM do not significantly impact BI. A key finding that distinguishes this study from others is that Comp has a significant and positive effect on BI in mobile payment usage, with EE acting as a mediator. The application of UTAUT2 in this study was focused solely on mobile payment usage, while UTAUT2 can be applied to other technology adoption contexts. Future research suggestions include exploring additional variables from the UTAUT2 theory, such as Facilitating Conditions, Habit, and Price Value. Further investigations could also measure contextual variables, such as gender, age, and experience, as control or moderating variables. Mobile payment companies should focus on improving the ease of use and efficiency of mobile payment systems, as these factors significantly influence user adoption. Additionally, considering factors such as facilitating conditions, habits, price value, and demographic insights can help tailor strategies to better meet user needs and encourage wider adoption. Applying these insights to other technology adoption contexts may also yield beneficial results.

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