

# **Factors Affecting the Use of Mobile Payments During the COVID-19 Pandemic**

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## **Abstract**

The study aims to investigate factors that influencing the use of mobile payments during the COVID-19 pandemic in Indonesia. Due to the COVID-19 pandemic, people's lifestyle has been altered in various ways, including the payment method. Compared to prior years, the use of cashless payment methods has been increased exponentially during the pandemic. Therefore, this study tests several variables to examine the research problem. The tested variables include perceived health risk, government support, promotional benefits, and actual usage as the dependent variable. By applying a convenience sampling technique and PLS SEM approach, this study gathered up to 200 respondents who are active users of mobile payments during the COVID-19 pandemic. The findings of the study show that perceived health risk, government support, facilitating conditions, and payment habits substantially affected behavioral intention, and behavioral intention significantly influenced actual usage. While using mobile payments, it was discovered that promotional benefits have no bearing on behavioral intention.

## **Keywords**

UTAUT, Mobile Payment, Perceived Health Risk, Behavioral Intention, COVID-19

## **1. Introduction**

The technological developments that occur cannot be separated from the community's continuous innovations by utilizing the sophistication of diverse technologies. According to Silvestre and Tirca (2019), innovation occurs through a dynamic process due to several factors that interact with each other, which then produce changes and develop over time. The growing technological innovation will make it easier for people to adapt to the conditions that occur. This includes the outbreak of the Coronavirus Disease 2019 (COVID-19), which has been going on for over two years in Indonesia, where these conditions cause various changes and have an influence on people's unpreparedness to face the harmful impacts. One of the activities that have experienced a significant change is making payment transactions. In the beginning, many people continued to make payments with cash, credit cards, or debit cards. However, those payment transactions are viewed as illustrations of media or objects contributing to viruses' spread. Therefore, as opposed to using other payment methods during this pandemic, people frequently use mobile payments to complete

financial transactions. The intensity of public use of mobile payments has been shown to have significantly increased compared to the circumstances before the pandemic.

Before the pandemic, the conversion of payments from physical money to digital money had been gaining popularity with the general public. According to Bank Indonesia (BI) report, there was 167 million electronic or digital money in circulation in 2018 and 292 million in 2019. Following the discovery of the first incidence of COVID-19 in Indonesia, the quantity of digital money in circulation surged considerably to 432 million by 2020. This upward trend continued in 2021. The amount of digital money in circulation in January was 443 million, up from 559 million in November (Bank Indonesia, 2021). With the growing numbers from year to year, digital money payment methods offer highly promising potential for facilitating public transactions. In Indonesia, there are several transaction service providers for mobile payments, including Go-pay, OVO, ShopeePay, DANA, and LinkAja.

During the current pandemic, people's behavioral intentions influence the community's increasing inclination on using mobile payments for transactions. The community considers a wide range of factors that can influence the community's behavioral intentions. Health risks are one of the factors influencing people's behavioral intentions when using mobile payments in a pandemic like the one we currently have. This is because, in some cases, the COVID-19 virus can kill those with health issues by attacking the human respiratory system (WHO, 2020). Therefore, it increases public awareness of health issues that might pose a risk to the neighbourhood during the current pandemic. In accordance with WHO guidelines, the government is also vigorously encouraging cashless transactions to prevent the COVID-19 virus transmission.. WHO (World Health Organization) advises people to lessen direct contact with physical money and make better use of digital currency in their payment systems (Aji et al., 2020). According to Aji et al. (2020), government support influences mobile payment uses intentions.

The condition of people's behavioral intentions in using mobile payments can be facilitated and made easier by good infrastructure. Numerous facilities or public locations, including restaurants, shops, recreational areas, and public transportation, have adopted mobile payment methods to prove that this infrastructure is available. According to Musyaffi et al., (2021) contend that the community's behavioral intentions are influenced by the presence of infrastructure that facilitates conditions. People's behavioral intentions to use mobile payments are growing in addition to the availability of adequate infrastructure because of the numerous discounts, cashback, loyalty points, free e-coupons, and other financial benefits their users can enjoy. These financial advantages may impact behavioral intentions (Aydin and Burnaz, 2016).

According to Khatimah et al. (2019), payment habits are another factor that influences people's behavioral intentions on mobile payments usage, in which if people have felt the benefits when using mobile payments, this will later to habits in using mobile payments. Habit is also a powerful predictor of people's behavioral intentions when it comes to using mobile payments as payment transaction instruments (Gupta and Arora, 2019). To conduct a more in-depth analysis and identify variables that influence people's intention to use mobile payments, the theoretical model was integrated for the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Unified Theory of Acceptance and Use of Technology 2 (UTAUT2). Thus, new information will be obtained based on public perceptions of perceived health concerns, government support, facilitating conditions, promotional benefits, and payment habits concerning behavioral intentions towards mobile payment used during the pandemic. In this study, the researchers want to link perceived health risks to behavioral changes carried out by the community. This is because the researchers see these factors as one of the main factors that cause changes in people's behavior during a pandemic like today. This is backed by Shin and Kang (2020), stating that perceived health risk demonstrates the danger a community perceives to their physical health due to uncontrollable occurrences, such as pandemics, terrorism, natural catastrophes, and political crises. That way, health risk factors are differentiators from conditions before the pandemic, where factors that influence changes in people's behavior at that time are product performance risk, convenience risk, financial risk, and financial risk related to the use of technology or the Internet (Forsythe and Shi, 2003). In addition, there is relatively little research that examines perceived health risks toward the relationship between behavioral intention and actual use of mobile payments. There is also limited research that links perceived health risk with the UTAUT variable regarding mobile payments. From the majority of previous studies, perceived health risks are more associated with the hospitality and health industries (Shin and Kang, 2020; Yu et al., 2021).

This study investigates the factors that influence the use of mobile payment during the COVID-19 pandemic by determining factors that substantially affect mobile payment use. Among them, by connecting the factors from perceived health risk, government support, facilitating conditions, promotional benefits, payment habits, and

behavioral intentions, which are mediation variables, the researchers can find out more deeply about the significance of the influence of mobile payments usage. The results can serve to discover what factors can be developed by mobile payment service providers so that they can continue to adapt and make continuous innovations in the changes that occur.

### **1.1 Objectives**

The purpose of this study is to analyze the impact of perceived health risk factors, government support, facilitation conditions, promotional benefits, payment habits, and behavioral intentions which are mediating variables in the use of mobile payments during the COVID-19 pandemic. There are several limitations in this study, such as only testing mobile payment users who are domiciled in the Greater Jakarta area.

## **2. Literature Review**

### **2.1 Mobile Payment**

Digital payment methods, also known as m-payments, have been gaining popularity in recent years and are significantly continuing to experience an increase in users of the payment method. One of the triggering factors is that mobile payments are always attached to a smartphone, so it can affect the socio-economic aspect to encourage economic growth in a certain region and country (Karsen et al., 2019). Mobile payment is an innovative technology that facilitates the public to transfer money and process payment transactions. Besides that, it can be a driving force for the emergence of various new business models that are more innovative for products and services. For example, the role played by e-commerce can be used as an opportunity for mobile payment or e-commerce to improve their service systems, especially in terms of payment transactions. Previously, money storage and payment services were controlled by both traditional and automated banks such as ATMs and e-banking. The presence of m-payment is intended to be another alternative for the community. In addition, the payment method through m-payment offers value on the technical functional side initially, so the customer perspective becomes important to understand the characteristics of the technology that affect customer acceptance of m-payment (Noreen et al., 2021).

The success of a community's use of digital mobile payment services cannot be separated from the perceived convenience, whereby individuals only exert little effort throughout the payment transaction process. In addition, people believe that using mobile payments can help improve their performance and productivity (Nguyen and Huynh, 2018). The availability of adequate infrastructure can also facilitate the adoption of a mobile payment system. This condition helps the community to gain better experience and knowledge to be more familiar with mobile payments (Kwateng et al., 2019). Consequently, frequent use of mobile payments will create a new habit, and people will unconsciously use the payment methods. Then, these conditions can encourage behavioral intentions from the community to make mobile payments their main payment method and increase the intensity of the community's use of it.

### **2.2 Technology Acceptance Theory**

UTAUT is a theory that explains the determinants that facilitate the adoption of new technology systems. These factors consist of performance expectancy, effort expectancy, social influence, and facilitating conditions as the determinants (Zhao and Bacao, 2021). As a theoretical model, UTAUT can demonstrate its effectiveness in the acceptance of the previously investigated platform system with digital illustrations (Phuong et al., 2020). According to Mondego and Gide (2018), it is explained that UTAUT has become a model used to investigate the adoption of various technology types, such as mobile banking, mobile payment, e-government, e-commerce, and other similar technologies. UTAUT has developed into a second version, namely UTAUT2, which combines habit, hedonic motivation, and price value factors (Kwateng et al., 2019). According to Santosa et al. (2021), the UTAUT2 model has an increased variance in behavioral intention and technology use in society compared to the first UTAUT model version. Thus, the UTAUT2 model has a better role in explaining behavioral intentions and technology use based on new phenomena and habits in pandemic situations (Santosa et al., 2021).

### **2.3 Actual Usage**

Actual usage can be interpreted as the real condition of an individual using a system, which in this case is the use of mobile payments. According to Pal et al. (2021), actual usage is employed as the dependent variable to research and monitor the individual's intentions and behavior regarding the use of mobile payments. The behavior of these

individuals can be reflected in the frequency and duration of time used when using mobile payments to determine if the system is easy to use and influences increasing productivity (Muntianah et al., 2012).

## **2.4 Behavioral Intention**

Behavioral intention is an intention that arises because it refers to the will, plans, and efforts that encourage actions to achieve a goal (Mohamad et al., 2018). Furthermore, behavioral intention is the best predictor of actual consumer behavior toward new technologies, which is seen through the public's willingness to use mobile (Suebtimrat and Vonguai, 2021). According to Phan et al. (2020) stated that people's intentions in using a technology system have a significant relationship to the behavior of the users, so the higher their intentions, the higher the actual behavior of the users.

## **2.5 Perceived Health Risk**

Perceived risk refers to consumers who already know the risks they will feel when making decisions where the risk arises because of uncertainty that can potentially cause negative consequences (Shin and Kang, 2020). In the context of uncertainty and also the problems in online services, previous researchers have shown several risk aspects, which include time, performance, financial, social, physiological, privacy, and overall (Kamala et al., 2020). According to Aji et al. (2020) introduced an additional risk, illness risk, to make it more relevant to the study's context. Perceived health risk is a subjective evaluation of an individual's likelihood of suffering an unforeseen health condition at a certain time or circumstance (Li and Hu, 2018). In this research, perceived health risk refers to an individual's awareness of the easily transmitted coronavirus through inanimate objects, such as physical money (Aji et al., 2020). Perceived risk becomes an important dimension of a person's decision-making or intentions because perceived risk can encourage further actions to be taken by someone.

## **2.6 Government Support**

According to Kushchu and Kuscu (2003), government support is a condition created by the government to facilitate the community in using certain technological innovations such as strategies to help users, provision of training, policies, and availability of regulations. In other words, the government also has a role as a regulator to prevent potential negative effects of using technology. In addition, the function of government support can help disseminate innovative products or services to the public by establishing more efficient mechanisms (Kim et al., 2018). Regarding mobile payments, government support can be interpreted as support or the role of the government that can be shown in various aspects, ranging from providing various kinds of infrastructure, such as Internet access speed, to providing policies for both service providers and customers, and also providing security guarantees when using digital transactions (Aji et al., 2020). So, in the end, the infrastructure that the government has provided can lead to an increase in the demand for products or services (Jain et al., 2022).

## **2.7 Facilitating Conditions**

According to Kwateng et al. (2019), the availability of a facility that supports a system to become an individual's belief in using innovation is called facilitating conditions. Facilitating conditions are conditions that can increase individual trust in technical infrastructure and organizations in terms of helping to adapt and use a technology system comfortably (Phan et al., 2020). Conditions that can facilitate individuals consist of control of perceived behavior, supportive conditions, and conditions that are compatible with technology and have a degree of relevance to the characteristics of individuals who are users of values and experiences (Wei et al., 2021). Experience leads to increased familiarity with technology uses and, of course, more knowledge, which may help the learning process for people (Kwateng et al., 2019). Meanwhile, according to Suebtimrat and Vonguai (2021), facilitating conditions are conceptualized as the availability of technology on individual perceptions in using payments, namely knowledge, smartphones, and external assistance and support.

## **2.8 Promotional Benefit**

Promotional benefit is how many financial benefits a mobile payment can offer, such as discounts, cashback, loyalty points, free e-coupons, and various other forms of freebies from using mobile payments (Chen et al., 2019). According to Oliveira et al. (2016) stated that the perceived benefits of technology use are higher when the price value is higher, and the perceived monetary costs are lower. The provision of financial benefits is very effective in attracting and

reaching mobile payment users (Sierzchula et al., 2014). Combined with the rapid advancement of mobile payments, providing financial benefits is a factor that persuades people to use mobile payments (Madan and Yadav, 2016).

## **2.9 Payment Habit**

In making payment transactions, habit is an effective indicator of influencing behavioral intentions to use technology (Gupta and Arora, 2019). According to Kwateng et al. (2019), a habit is a pattern of behavior that appears automatically, starting from early learning to regular use of technology. That way, regular use of technology in mobile payments over a long period can develop transactions and become a tradition in the community (Karjaluo et al., 2019).

## **2.10 Hypothesis Development**

Health risk emerged as the public understood the severity of the risk of contracting the COVID-19 virus during the pandemic (Ojo et al., 2022). This risk creates a fear of contracting the COVID-19 virus, so people tend to avoid direct contact when making transactions. The fear here can be interpreted as a situation where people have a sense of anxiety when making direct transactions using cash, which can be the source of virus transmission (Wisniewski et al., 2021). This creates a health risk, resulting in a tendency for people to influence their behavioral intentions to use a cashless means, which in this case is mobile payments for their payment transactions. This aligns with Puriwat and Tripopsakul (2021) statement, stating that health risks in the COVID-19 condition positively influence individual behavioral intentions to decide on using cashless methods because cash could pose a dangerous risk of transmitting the COVID-19 virus. Then, it was discovered in several previous studies that a positive influence occurs between perceived health risk and behavioral intention (Aji et al., 2020; Daragmeh et al., 2021). Based on the statements above, the following hypothesis is formed:

**H1:** Perceived health risk has a significant positive effect on behavioral intention to use a mobile payment method.

Using mobile payments during the current pandemic condition, among others, is influenced by several government policies, which are to reduce direct contact with the public in transactions and the use of cash which can be a source of the COVID-19 virus spread. In the current state of the COVID-19 pandemic, this type of government support could positively influence the community's behavioral intentions to use mobile payments (Aji et al., 2020). Another support provided is by making regulations related to online payment transactions made in Bank Indonesia regulations. Several forms of government support have shown that high support is given to influence the behavioral intentions of the community. Thus, it is projected that more people are likely to use mobile payments if government support is high (Chen et al., 2019). Consequently, the results of several previous studies indicate that the relationship between government support and behavioral intention is positive (Sanchez et al., 2018; Mandari and Chong, 2018). Based on the statements above, the following hypothesis is formed:

**H2:** Government support has a significant positive effect on behavioral intention to use a mobile payment method.

The availability of supporting infrastructure that facilitates mobile payment transactions is a factor that influences people's desire to use mobile payments (Venkatesh et al., 2012). The operational infrastructure supporting the community's usage of mobile payments will boost the community's behavioral intention to use mobile payments (Oliveira et al., 2016). Aligned with Chopdar et al. (2018) and Musyaffi et al. (2021) statement, it is stated that behavioral intention is positively influenced by facilitating conditions. Therefore, the following hypothesis is formed:

**H3:** Facilitating conditions have a significant positive effect on behavioral intention to use a mobile payment method.

Many Indonesians tend to be able to save their money, which makes it easy for people to be attracted to coupons, discounts, or cashback offered by mobile payment services, thus enabling people to spend less than the money they earn. The financial benefits of mobile payments have a very important role in affecting the intention to use mobile payments, meaning users will more frequently use mobile payments (Pham and Ho, 2015). Therefore, promotional benefits positively impact people's behavioral intentions to use mobile payments (Aydin and Burnaz, 2016; Sunny and George, 2018; Prabhakaran et al., 2020). Based on the statements above, the following hypothesis is formed:

**H4:** Promotional benefit has a significant positive effect on behavioral intention to use a mobile payment method.

Regarding mobile payments, payment habits are one of the factors that can influence people's behavioral intentions toward accepting a payment innovation. This is because if the payment transaction habits made by the community tend to be safe, comfortable, and efficient, they will be satisfied and accustomed to using the payment transaction (Khatimah et al., 2019). After people's habits of using mobile payments have been formed, people will tend to act automatically in using mobile payments (Jia et al., 2014). Research conducted by Polites and Karahanna (2012) revealed that the relationship between payment habit and behavioral intention has a positive relationship in terms of using certain technological innovations. This is also consistent with earlier research demonstrating a favorable correlation between payment habits and behavioral intentions (Venkatesh et al., 2012; Kwateng et al., 2019; Gupta and Arora, 2019). Based on the statements above, the following hypothesis is formed:

**H5:** Payment habit has a significant positive influence on behavioral intention to use a mobile payment method.

The use of actual mobile payments is not just a yes or no decision to use it, but it is more related to the extent and how much money must be spent and for what purpose someone makes payments using mobile payments (Zhang et al., 2018). Therefore, behavioral intentions have been frequently recognized as an antecedent to individuals' actual technology usage (Venkatesh et al., 2002). With a high level of behavioral intention from consumers in the face of new products or technologies that have greater potential, they will increase their use and recommend them to others (Sunny and George, 2018). Thus, according to Gupta and Arora (2019) and Wei et al. (2021), behavioral intention has a significant positive influence on the use of technology. Based on the statements above, the following hypothesis is formed:

**H6:** Behavioral intention has a significant positive effect on the use of mobile payments.

### **3. Methods**

This research applied Partial Least Square Structural Modeling (PLS-SEM) to analyse the data because it is an exploratory of existing theories and has a complex structural model (Hair et al., 2011). In this research, the indicator used to measure the results obtained related to the information in the questionnaire is the Likert scale. The Likert scale consisted of 5 points: point 1 means "strongly disagree" and point 5 means "strongly agree". The questionnaire in this study used items adapted from several literature sources to measure the variables studied. To measure the perceived health risk, there were five items adapted from Aji et al. (2020), Daragmeh et al. (2021), and Fihartini (2021). Then, for government support, according to Chen et al. (2019) and Aji et al. (2020), there were five items adopted to measure this variable. In its implementation, five items were adapted to measure the facilitating conditions (Venkatesh et al., 2003; Wei et al., 2021; Puasa et al., 2021). The promotional benefits variable had four items, which were variable measuring tools adapted from Aydin and Burnaz (2016), Chen et al. (2019), Liebana et al. (2015), and Ramanathan et al. (2014). There were four items to measure the payment habit adapted from Gupta and Arora (2019) as well as Pal et al. (2021). Furthermore, five behavioral intention items were adapted from Zhao and Bacao (2021) as well as Daragmeh et al. (2021). For the actual usage item variable used, it was adapted from Tandon (2021), Muntianah et al. (2012), and Pal et al. (2021) which had five items. Based on these instrument items, the questionnaire content needed to be translated into Indonesian to make it easier for the respondents to understand the questions when filling out the questionnaire.

### **4. Data Collection**

The data in this study used a convenience sampling, which was collected by distributing through the online platforms such as Instagram, Facebook, Line, WhatsApp, and Twitter in April 2022. The study's target population was mobile payment users of this technology during the COVID-19 pandemic in Greater Jakarta, which was the area with the highest spread of coronavirus (Fajrian, 2022). To ensure that the sample data is representative and strong enough to be analysed, the sample size must be determined carefully where the appropriate sample size is greater than 30 and smaller than 500 (Mun et al., 2017). Another study recommends that the number of samples can be measured by comparing items with respondents, which must be between 1:4 to 1:10 to get a representative sample size (Chattarjee and Kar, 2020). In this study, we found 33 question items so that the total sample size would be better located between 136 to 340 samples. Therefore, the sample size used in this study was 200 samples. As a result, most of the respondents were women (54%), ages 19-31 (90.5%), an undergraduate education level (67%), students (58%), the frequency of

mobile payment used during the COVID-19 pandemic of 5-15 times (46.5%), and expenses for transactions using mobile payments during the COVID-19 pandemic were less than Rp1,500,000 (66.5%).

## 5. Results and Discussion

### 5.1 Validity and Reliability Test

The validity and reliability tests were conducted using 33 questionnaire items. These items were measured using the Average Variance Extracted (AVE), square roots AVE, factor loading, and composite reliability. The convergent validity was evaluated using AVE and factor loadings. Hair et al. (2011) advised that the value of average variance extracted (AVE) be larger than 0.5, while Bollen (1989) indicated that the value of factor loading is greater than 0.7. Meanwhile, composite reliability is used to measure reliability. According to Hair et al. (2011), the composite dependability value exceeds 0.70. Table 1 represents the results of the last measurement of the variables' corresponding indicators. Table 2 represents Discriminant Validity.

Table 1. Validity And Reliability

<b>Latent Variable</b>	<b>Indicator</b>	<b>Factor Loading</b>	<b>Composite Reliability</b>	<b>AVE</b>
<b>Perceived Health Risk</b>	PHR1	0.801	0.910	0.670
	PHR2	0.804		
	PHR3	0.870		
	PHR4	0.800		
	PHR5	0.814		
<b>Government Support</b>	GS4	0.704	0.789	0.658
	GS5	0.903		
<b>Facilitating Conditions</b>	FC1	0.795	0.897	0.636
	FC2	0.838		
	FC3	0.702		
	FC4	0.818		
	FC5	0.826		
<b>Promotional Benefit</b>	PB2	0.797	0.856	0.664
	PB3	0.836		
	PB4	0.812		
<b>Payment Habit</b>	PH1	0.768	0.872	0.632
	PH2	0.803		
	PH3	0.870		
	PH4	0.732		
<b>Behavioral Intention</b>	BI1	0.851	0.936	0.745
	BI2	0.890		
	BI3	0.848		
	BI4	0.884		
	BI5	0.843		
<b>Actual Usage</b>	AU1	0.781	0.891	0.620
	AU2	0.784		
	AU3	0.813		
	AU4	0.800		
	AU5	0.758		

Table 2. Discriminant Validity

	<b>AU</b>	<b>BI</b>	<b>FC</b>	<b>GS</b>	<b>PB</b>	<b>PH</b>	<b>PHR</b>
<b>AU</b>	0.787						
<b>BI</b>	0.762	0.863					
<b>FC</b>	0.693	0.565	0.797				
<b>GS</b>	0.460	0.453	0.436	0.810			

<b>PB</b>	0.631	0.585	0.560	0.500	0.815		
<b>PH</b>	0.599	0.646	0.319	0.234	0.533	0.795	
<b>PHR</b>	0.556	0.606	0.453	0.410	0.452	0.405	0.818

## 5.2 Hypothesis Test

Based on the findings of the hypotheses, the structural model reveals that the R-square of behavioral intention is 0.641 and the R-square of actual usage is 0.581. The results above indicate that the five parameters provide significant results. Behavioral intention has significant results on actual usage, thus supporting H1. Facilitating conditions have significant results on behavioral intention, thus supporting H2. Government support provides significant results on behavioral intention, thus supporting H3. Promotional benefits give insignificant results on behavioral intention, so it does not support H4. Payment habit offers significant results on behavioral intention, thus supporting H5. Perceived health risk has significant results on behavioral intention thus supporting H6. (Table 3)

Table 3. Analysis Of the Structural Model Hypothesis Testing Results

<b>Path</b>	<b>Path Coefficient</b>	<b>t-value</b>	<b>p-value</b>	<b>Results</b>
PHR → BI	0.260	4.506	0.000	Supported
GS → BI	0.120	2.453	0.014	Supported
FC → BI	0.230	4.158	0.000	Supported
PB → BI	0.062	0.941	0.347	Not Supported
PH → BI	0.406	6.923	0.000	Supported
BI → AU	0.762	18.334	0.000	Supported

## 5.3 Discussion

The results found in this study focused on the phenomenon of people using mobile payments in Indonesia during the COVID-19 pandemic, notably in the Greater Jakarta area, where the virus was most prevalent (Fajrian, 2022). The study examined the variables that influence the adoption of mobile payments during the pandemic. This study was conducted to determine if the key factors are relevant and have a significant influence on the use of mobile payments during the pandemic.

According to the findings, perceived health risk significantly affects behavioral intention, indicating that people are concerned about the risks of the virus. As a result, if there is a technology that can lower the potential for getting the COVID-19 virus, it will affect the behavioral intentions, such as becoming cashless using a mobile payment method. This aligns with previous digital payments research on how behavioral intention is positively influenced by perceived health risk (Aji et al., 2020; Daragmeh et al., 2021).

The authors also argue that the government plays significant role in helping in the development of products or services by providing support in the form of good regulations. Those regulations should be carefully designed and made to the public with a sense of trust and security, such as online transaction regulations to prevent crime, as well as the availability of adequate infrastructure for people to access the Internet. As a result, people's behavioral intentions are very likely to be influenced by government support. Thus, the results found in this study show that government support provides significant results on behavioral intention. Past studies also showed similar results that the two factors have significant impact on mobile payments user (Sanchez et al., 2018; Mandari and Chong, 2018).

Moreover, to build behavioral intentions and beliefs in the community, it is necessary to have a system that enables the use of technology. Furthermore, with such a framework in place, people can easily and comfortably adapt to new technology. Consequently, the findings of the study showed that facilitating condition had a significant impact on the



intention. Past studies reported a similar finding Musyaffi et al. (2021) on mobile payments. Thus, these factors are relevant to use. The study also revealed that the facilitating conditions has a significant impact on behavioral intention in the use of mobile shopping (Chopdar et al., 2018).

The factors investigated in this study are not all supported by the preceding hypotheses. These are promotional benefits that have insignificant effects on behavioral intention. These findings contrast prior studies, indicating a substantial positive relationship between promotional benefits and behavioral intention (Sunny and George, 2018; Prabhakaran et al., 2020). Other studies on mobile promotions found similar results to the present study (Ji and Ha, 2021; Santini et al., 2015). The authors posit that the differences in outcomes are due to society's advancement and adaptation to mobile payment apps. Thus, because of the adaptation, the community is no longer concerned with the benefits, particularly in the context of transactions resulting in promotions. This finding indicates that using mobile payments has become a necessity for the community in the recent years, particularly during the pandemic. Furthermore, this notion is consistent with data obtained from the central bank of Indonesia, which stated that annual digital money circulation had experienced a significant growth (Bank Indonesia, 2021).

The use of technology, especially in mobile payments, has now become a pattern of behavior in society that has made it a habit for people to conveniently use mobile payments. In the previous research on mobile applications, payment habits are a key factor that significantly influences behavioral intention, either directly or indirectly, in using technology. This suggests that people's experiences will increase when technology is utilized and becomes a habit (Kwateng et al., 2019; Gupta and Arora, 2019). Similarly, this study revealed that payment habits have a positive and significant impact on behavioral intention.

The desire or intention of the community to adopt new technology will be formed when people feel that there are perceived benefits, such as being able to improve efficiency and performance in daily activities. Moreover, in the pandemic condition, the use of technology is beneficial for the community in their activities to limit direct contact with other people, thereby influencing people's behavioral intentions in the actual use of technology. Accordingly, the notion can be an indication that behavioral intention influences the actual usage of technology. Finally, the utilization of mobile payments during the COVID-19 pandemic is affected by actual usage. Consistent with past research Gupta and Arora (2019) and Wei et al. (2021), the findings of the study s indicated that behavioral intention has a positive influence on technology usage in mobile payments.

## **6. Conclusion & Future Research**

This research extends the use of the UTAUT model by including perceived health risks, government support, and promotional benefits in the analysis of people's behavioral intentions to use mobile payments during the COVID-19 pandemic. This research found that the public's use of mobile payments during the COVID-19 pandemic is influenced by perceived health risks, government support, facilitating conditions, and payment habits. This research also found that behavioral intention has a substantial mediating function, in strengthening the link between the independent and dependent variables. In short, this research demonstrates that the current state of the COVID-19 pandemic encourages individuals' behavioral intentions to adopt mobile payments.

The authors, therefore, suggest that mobile payment providers and the government to promote cashless applications to minimize the spread of the COVID-19 virus by using physical money, debit cards, or credit cards. Mobile payment providers must be able to continuously adapt and innovate their service. Mobile payment providers may adapt to the systems, lifestyles, and advantages required by society during the COVID-19 pandemic by providing efficiency, compatibility, and progressively sufficient infrastructure. In addition, mobile payment providers will be better off if they can improve the quality of security to protect against the risk of theft in the money storage system or during transactions.

On the other hand, the government could increase its support in various ways that can promote public use of a cashless method, such as expanding the infrastructure and enacting regulations that will aid in the development of mobile payment businesses while also protecting the security of the various parties involved. By creating a good ecosystem, the government can indirectly promote this payment method to the wider community. The importance of creating a good ecosystem to increase the use of mobile payments has been proven in India, where both the government and parties such as the internet service providers and mobile payment providers play an active role in creating a strong ecosystem for mobile payments (Pal et al., 2019).

As a conclusion, future studies are encouraged to gather more respondents from wider regions in Indonesia and other countries to further explore the topic. Further research can be carried out by applying longitudinal research to compare the conditions before, during, and after the COVID-19 pandemic. Future studies could also consider variables in the UTAUT2 theory (e.g., hedonic motivation) and variables such as security risk and compatibility. Furthermore, future study could also employ the demographic elements as a moderating role to test the factors which influence people's behavior in using mobile payments.

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