









# Proceeding of The First International Annual Conference on Economics, Management, Business and Accounting

# Digital payment usage by MSME players in Bone regency: a theory of planned behavior and risk perception approach

Muh. Hasbi Ash. Shiddiq<sup>1\*</sup>, Titiek Muthmainnah<sup>2</sup>

1,2 Islamic Banking Department, IAIN Bone, Sulawesi Selatan, Indonesia

Article Info: Abstract

#### Keywords:

Digital Payment; MSMEs; Perceived Risk; Theory of Planned Behavior; This study aims to identify the factors influencing the intention to adopt digital payment methods among Micro, Small, and Medium Enterprises (MSMEs) in Bone Regency, South Sulawesi, using the Theory of Planned Behavior and perceived risk approach. Data were collected through online questionnaires and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The findings of this study reveal that only two variables in the Theory of Planned Behavior significantly influence the intention to adopt digital payment methods among MSMEs, while perceived risk does not have a significant direct or mediating effect. The results indicate that MSMEs in Bone Regency are accustomed to using digital payments because they perceive it as a convenient method. Additionally, the ability to operate digital payments positively influences their intention to adopt. MSMEs in this study do not perceive any significant risks associated with digital payments.

Article DOI: http://dx.doi.org/

(\*) Corresponden Author: Muh. Hasbi Ash. Shiddiq

☑ IAIN Bone, Sulawesi Selatan, Indonesia.

Email: hasbi.m.as@gmail.com

# INTRODUCTION

One of the challenges in using physical currency (paper money and coins) is counterfeit money, although the number of counterfeit cases has decreased, it still occurs (Ramli, 2022). Another challenge is small-denomination change, which is often replaced with candies or other items sold by store owners/retailers. Socialization regarding the right to proper change has been conducted (Oktivana et al., 2014), although in practice, many businesses do not adhere to it. Legally, consumers indeed have the right and protection for small change in the form of candies; however, due to a lack of information regarding consumer protection laws, people often accept candies as change (Ahmad et al., 2022). Additionally, efficiency challenges are common when conducting large transactions because consumers must carry a significant amount of cash.

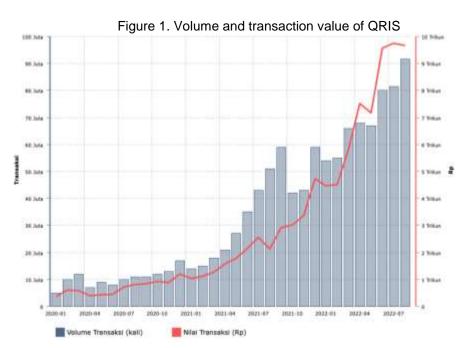
The development of technology, which also drives the digitization of financial systems, has accustomed people to engage in non-cash payments using Card Payment Instruments (APMK) such as credit and debit cards, as well as digital payments like mobile/internet banking transfers, e-Money, e-Wallet, and the latest payment method known as the Quick Response Code Indonesian Standard (QRIS). This digitization is expected to address the challenges associated with physical currency as a means of payment.

Digital Payment is a payment mechanism that utilizes an internet connection for the purchase of goods or services by users (Turban et al., 2002). The goal of developing a payment system is to establish an efficient, secure, and reliable payment system to facilitate transactions (Juhro, 2021). Perry Warjiyo emphasized the urgency of implementing digital payments to aid in the economic recovery post the COVID-19 pandemic. This was communicated during the G20 Presidency event, outlining three initiatives: the acceleration of the consolidation of the payment system industry, consisting of both banking and fintech sectors, the development of integrated payment system infrastructure, and synergy and coordination involving electrification, integration transformation, and digitalization of SMEs (Departemen Komunikasi BI, 2022).

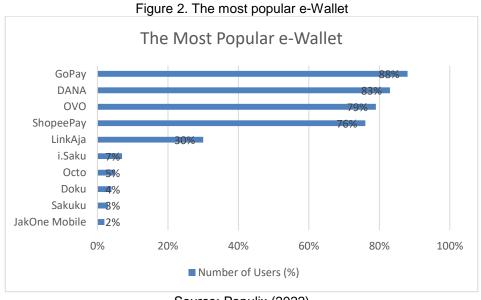
The growth of digital payments also has an impact on the increase in the money supply (Istanto S & Fauzie, 2014). The basic assumption behind the expansion of the money supply is that increased consumer spending stimulates economic growth. This is supported by research by (Febriaty, 2019), which found that e-Money transactions have a positive impact on economic growth.

The rate of adaptation to the use of digital payments in Indonesia has accelerated during the COVID-19 pandemic. The policies restricting activities during the pandemic have changed various aspects of people's lives, including how they conduct transactions. Post-pandemic, digital payments through e-Wallets and m-Banking have witnessed significant growth (Szumski, 2022). From a business perspective, the presence of fintech in the payment system has provided a positive contribution during the pandemic (Nizar & Sholeh, 2021). The surge in fintech usage integrated with the banking system during the pandemic includes payments with QRIS, e-Wallet applications, and Payment Gateways (Riyadi et al., 2022).

As the latest payment method, QRIS has the fastest growth rate in usage. Based on the data in the above Figure 1, there is a noticeable surge in the volume and value of QRIS transactions. Up to the period of October 2022, QRIS transactions have reached 91.7 million times with a transaction value of Rp. 9.6 billion. This value is expected to continue to increase with the promotion of the digitalization of SMEs, the provision of advice, and digital payment infrastructure. Likewise, the use of electronic wallets (e-Wallets) as a payment method is gaining more traction in society, especially among the Millennial and Gen-Z generations. In Figure 2, several e-Wallets that are widely used in 2022 are depicted.



Source: Katadata (2022)



Source: Populix (2022)

Several studies on the use of digital payments, including by (Ayudya & Wibowo, 2018), indicate that the intention to use electronic money is influenced by attitudes and behavioural control but is not proven to be influenced by subjective norms. This suggests that internal factors in individuals have a greater impact on the intention to use electronic money than external factors such as recommendations from close acquaintances. However, the results of a study by (A. Nugroho et al., 2018) actually show that subjective norms are the most dominant factor in encouraging interest in using electronic money.

Generally, users of digital payments are dominated by the Z and millennial generations. Research by (Persada et al., 2021) found that the interest of Generation Z in using electronic wallets is not only due to the ease of transactions but also because Generation Z feels that the discount services offered by companies are the main reason for using electronic wallets. In addition to efficiency factors, digitization also has an impact on SME players. (Nurjannah, Ibrahim Daud et al., 2022) show that digital payments affect the financial performance of SMEs along with digital financial variables and digital marketing. This is because the convenience, ease, and effectiveness of consumers in transacting using digital payments such as GoPay, OVO, T-Cash, and ShopeePay contribute to increased income for SMEs.

From several previous studies, there is inconsistency in the variables influencing the interest in adapting to the use of digital payments. Therefore, this study aims to re-examine the adaptation of digital payment usage using the Theory of Planned Behaviour approach by adding the variable of risk perception. Additionally, most previous studies focused on digital payment users as buyers rather than as business actors. In this study, an attempt is made to look from the perspective of business actors, specifically focusing on micro, small, and medium-sized enterprises (MSMEs).

Micro, Small, and Medium Enterprises (MSMEs) have become pillars of the national economy, including in the Bone Regency. The realization trend of credit for MSMEs in Bone continues to grow from year to year (KPPN Watampone, 2022), allowing for an increase in the need for digital payments to facilitate transactions in the MSME sector in Bone Regency.

#### THEORITICAL FOUNDATION

Digital payments refer to the process of automated monetary asset exchange in business transactions and the transmission of value through information and communication technology networks. In simple terms, digital payments are a payment system that utilizes internet technology as a means of intermediary (A. S. Nugroho, 2016). With the growing number of internet users and the widespread use of e-commerce sites, the presence of digital payments is a solution to replace conventional payment transaction tools. Types of electronic payments include ATM machines, e-money, internet/mobile banking, credit cards, debit cards, and mobile payments/e-wallets (Ming-Yen Teoh et al., 2013). The focus of this research will only discuss chip and server-based digital payment methods as follows:

# E-Money

Bank Indonesia defines electronic money as a payment instrument that meets the following criteria: 1) issued in accordance with the nominal value of the money initially deposited with the issuer; 2) the value of the money is stored in electronic media such as chips or servers; and 3) the value of electronic money managed by the issuer is not the same as deposits or savings as referred to in banking laws (Departemen Komunikasi BI, 2020).

Electronic money is a form of stored value or prepaid product, where the mechanism of its value is stored in an electronic medium controlled by the consumer. This electronic value is exchanged by consumers using physical money and is converted, stored, and will decrease each time the consumer uses it for payment (Usman, 2017). It can be understood that electronic money is a type of money stored on a special card with a chip and managed by the issuer. The value of the money corresponds to what is deposited with the issuer.

#### E-Wallet

There are several differences between electronic money (e-Money) and electronic wallet (e-Wallet). Some common definitions state that an electronic wallet

is a type of electronic service that can be used for online transactions through a computer or smartphone (Sikri et al., 2019). An electronic wallet can replace the role of a physical wallet and allows users to make online payments using mobile devices with the seller. Bank Indonesia defines an electronic wallet as an electronic service for storing data on payment instruments, including payment tools using cards and/or electronic money, which can hold funds for making payments (Bank Indonesia, n.d.). From the definitions above, it can be concluded that an electronic wallet is a medium for storing user monetary data that can be used to transact with sellers who have also provided electronic payment methods. The similarity between an electronic wallet and electronic money is that users first load the balance through cash deposits, transfers, automatic debit from savings accounts, or electronic money. Funding/loading can be done using ATMs, retail outlets such as Alfamart/Indomart, EDC machines, and mobile banking.

### **Quick Response Code Indonesia Standard (QRIS)**

Quick Response Code Indonesian Standard (QRIS) is a standard for QR Code payments in the Indonesian payment system developed by Bank Indonesia and the Indonesian Payment System Association (ASPI). The introduction of QRIS in 2020 is expected to make payment transactions more efficient and cost-effective, accelerate financial inclusion, and facilitate and advance micro, small, and medium enterprises (MSMEs) to promote economic growth. The advantages that contribute to the adoption of QRIS by the Indonesian public lie in its usefulness and ease of use. Additionally, payments using QRIS can provide security, convenience, and time efficiency (Saputri, 2020). The precision level and waiting time for QRIS verification average 4225.67 ms and 657.46 ms, respectively (Suprapto & Kusuma, 2022).

#### **Mobile Banking**

M-Banking is a channel that enables customers to interact with the bank through mobile devices or personal digital assistants but does not include banking services in the form of voice calls (Barnes & Corbitt, 2003). The Financial Services Authority (OJK) defines mobile banking as a form of banking transactions through smartphones in the form of mobile banking applications or operator-native applications (Otoritas Jasa Keuangan, n.d.). From the various definitions above, it can be understood that m-Banking is a banking service that allows customers to perform banking services through mobile devices, such as smartphones or tablets. m-Banking facilitates customers in accessing bank accounts, conducting fund transfers, paying bills, checking balances and performing various other banking transactions through the m-banking application.

#### Theory of Planned Behaviour

The Theory of Planned Behaviour is an extension of the Theory of Reasoned Action (TRA) proposed by (Ajzen, 1991), stating that most intentionally performed human actions can be predicted based on intention, as long as the person feels in control of their actions. There are three components in the Theory of Planned Behaviour that contribute to shaping an individual's behaviour: attitude towards behaviour, subjective norm, and perceived behavioural control (Ajzen, 2020).

Attitude represents how an individual responds positively or negatively to something or an interest. The attitudes observed in a person's actions are based on beliefs acquired after responding to an action in a positive or negative way (Ajzen, 2005). Attitudes are built on behavioural beliefs and evaluations of action outcomes. Thus, behavioural attitudes serve as a foundation to encourage someone to perform an action or at least be interested in performing an action.

Subjective norm is based on normative beliefs, which are beliefs about whether an individual or group agrees or disagrees with a particular action.

Additionally, subjective norm also depends on an individual's desire to follow actions taken by others (Ajzen, 2005). Social pressure based on the beliefs of others or external parties can influence an individual's interest and make them reconsider whether to perform an action or not (Jogiyanto, 2007).

Perceived behavioural control is a factor that provides an individual with an idea of how easy or difficult it is for them to perform an assumed action or behaviour based on past experiences and estimates of potential hindrances to their actions (Ajzen, 1991). The experience of having control over something previously done will determine the decision to continue the action or not, so perceived control also influences behavioural interest. Studies using the Theory of Planned Behaviour approach have been conducted by scholars. All three TPB variables have a positive impact or encourage individuals to use digital payments (Ariffin et al., 2021; Jena, 2022; Putra & Heruwasto, 2022; Song & Jo, 2023).

In addition to the three variables in the Theory of Planned Behaviour, the researcher adds the variable of risk perception as a mediator variable. Bauer argues that in every transaction, individuals are forced to face the risk of uncertainty or the probability of loss and the consequences or the importance of the loss (Bauer, 2001). Before using digital payments, individuals first calculate the risks they will face. Consumers often worry about risks because many things are unpredictable, so consumers tend to avoid online transactions if the perceived risks are greater than conventional transactions (Kim et al., 2009). Therefore, consumers will decide to use it when the level of trust is higher than the perception of risk.

The experienced or perceived risk is the result of subjective evaluation and the potential cause and effect of dangers or unpredictable events. This is a reflection of an individual's assessment when involved in a certain condition. Risks can vary from person to person, even if facing the same risk, the evaluation will differ for each individual. In this study, the observed risks are financial risk and privacy risk according to (Claudia, 2012). Several studies have tested the relationship between risk perception and attitudes, subjective norms, and perceived behavioural control (Fortes & Rita, 2016; Q. Xie et al., 2017). The higher the perceived risk, the more likely consumers are to choose other places/methods considered more reliable (J. Xie et al., 2021).

# **Hypotheses and Conceptual Framework**

Based on the above theoretical foundation, the researcher proposes several research hypotheses, divided into direct and indirect effects as follows:

Direct Effects

H<sub>1</sub>: Attitude has a negative influence on risk perception.

H<sub>2</sub>: Subjective norm has a negative influence on risk perception.

H<sub>3</sub>: Perceived behavioural control has a negative influence on risk perception.

H<sub>4</sub> : Attitude has a positive influence on the interest of MSME actors to use digital payments.

H<sub>5</sub> : Subjective norm has a positive influence on the interest of MSME actors to use digital payments.

H<sub>6</sub> : Perceived behavioural control has a positive influence on the interest of MSME actors to use digital payments.

H<sub>7</sub>: Risk perception has a negative influence on the interest of MSME actors to use digital payments.

Indirect Effects

: Risk perception mediates the relationship between attitude and the interest of MSME actors to use digital payments.

: Risk perception mediates the relationship between subjective norm and the interest of MSME actors to use digital payments.

H<sub>10</sub>: Risk perception mediates the relationship between perceived behavioural control and the interest of MSME actors to use digital payments.

The conceptual framework of the study is as follows:

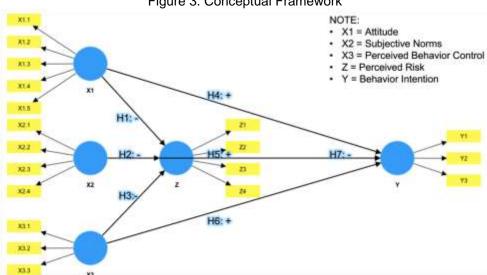


Figure 3. Conceptual Framework

# **RESEARCH METHODS**

This study uses SmartPLS version 3 with the Partial Least Square-Structural Equation Modeling (PLS-SEM) method for data processing. The choice of PLS-SEM is due to the small sample size in this study (Hair et al., 2019), given the limited participation of UMKM actors in filling out the questionnaires. The questionnaire was created in Google Form and distributed through WhatsApp, Instagram, and Facebook from May 14, 2023, to June 14, 2023. The sample size is determined based on the assumptions of path coefficients in this study, expected to be below 0.31-0.4, which is a minimum of 39 samples (Hair Jr. et al., 2021). The questionnaire uses a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), except for the risk variable, which uses a scale from 1 (never) to 5 (very often).

#### **RESULT**

Data in this study were collected from respondents who filled out the online questionnaire. There are 64 valid sample data out of the total 67 received. Table 1 contains information about the respondents.

Table 1. Respondent Demographics					
Item	Option	Amount	%		
Gender	Male	33	52		
	Female	31	48		
Business Address	Kec. Ajangale	1	1		
	Kec. Awangpone	2	3		
	Kec. Barebbo	1	1		
	Kec. Bengo	1	1		
	Kec. Cenrana	2	3		
	Kec. Cina	3	5		
	Kec. Dua Boccoe	1	2		
	Kec. Palakka	1	2		
	Kec. Sibulue	3	5		
	Kec. Tanete Riattang	18	28		
	Kec. Tanete Riattang Barat	24	37		
	Kec. Tellu Siatting'e	3	5		
	Kec. Tonra	1	2		
	Kec. Ulaweng	3	5		
Age	<20 Years	4	6		
Ago	20-30 Years	38	59		
	31-40 Years	15	24		
	41-50 Years	4	6		
	>50 Years	3	5		
Highest Education Levels	Junior High School	1	1		
Highest Education Levels		20			
	Senior High School	20 1	31		
	Diploma	•	2 52		
	Bachelor's degree	33			
Type of Dyninges	Master's degree	9 2	14		
Type of Business	Agribusiness		3		
	Fashion	12	18		
	Creative Industry	8	12		
	Cleaning Services	1	2		
	Daily Needs	3	5		
	Beauty & Event Organizer	6	9		
	Food and Beverage	17	26		
	Automotive	2	3		
	Tours and Travel	1	2		
	Others	13	20		
Revenue Range	<50 million/Year	49	76		
	51-150 million/year	7	11		
	151-300 million/year	2	3		
	301-1 billion/year	5	8		
	1B-2,5B / year	1	2		
Type of Digital Payments Used*	e-Money	9	8		
	e-Wallet	27	25		
	QRIS	17	16		
	m-Banking	55	51		

<sup>\*</sup>Respondents may choose more than one option

Source: Primary Data (2023)

The respondents consist of 52% males and 48% females, with an age range of 20-30 years comprising 59%, followed by the age range of 31-40 years at 24%.

These age ranges belong to the Millennial and Generation Z, who are accustomed to digital payment methods. Most business locations are in the Tanete Riattang Barat district at 37% and Tanete Riattang at 28%. Both districts are classified as urban areas with better internet access for digital payments. The majority of respondents have completed a bachelor's degree at 52%, followed by high school at 31%, master's degree at 14%, and others including diploma and junior high school at 1%. The top three types of businesses are culinary at 26%, other businesses at 20% (such as internet package and credit top-up sales, livestock, optical glasses, etc.), followed by fashion at 18%, and creative industries at 12%. Referring to the annual turnover, the majority of respondents fall under microbusinesses according to Law No. 20/2008 concerning MSMEs. As for the most-used digital payment methods, 51% use mobile banking transfers, 25% use e-Wallets, 16% use QRIS, and 8% use e-Money.

#### **Outer Model Testing**

Exogenous and endogenous variables in this study use a reflective model with outer model measurements consisting of loading factors  $\geq$  0.70, Cronbach's alpha  $\geq$  0.70, composite reliability  $\geq$  0.70, and average variance extracted (AVE)  $\geq$  0.50 (Hair Jr. et al., 2021; Richter et al., 2016). Indicator X2.2 (following friends' recommendations) was deleted because the outer loading value was only 0.547. After that, a re-estimation was carried out, resulting in the presented results in Table 2 below.

Table 2. Measurement Model Result's

Variable	Symbol	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
	X1.1	Wise choice	0.860	•	-	
Attitude	X1.2	Practicality	0.927			
(X1)	X1.3	Usefulness	0.944	0.921	0.948	0.760
(/\1)	X1.4	Trend/Lifestyle	0.777			
X1.5	Speed	0.840				
	X2.1	Following Family recommendation	0.766			
Subjective Norms	X2.3	Following social community recommendation	0.867	0.791	0.811	0.706
(X2)	X2.4	Following Figure/Influencer recommendation	0.883			
	X3.1	Having knowledge about digital payments	0.924			
Perceived Behavior Control (X3)	X3.2	Having ability to use digital payments Having	0.953	0.923	0.924	0.866
	X3.3	resources/internet network to use digital payments	0.915			
Risk Perception (Z)	Z1	Double payment occurs	0.849			
	Z2	Loss of balance/payment not received	0.905	0.902	0.915	0.771

	Z3 Z4	Price errors occur Risk of fraud/scam	0.872 0.886			
	Y1	Intention to use digital payments	0.890			
Behavior Intention (Y)	Y2	Plan to use digital payments in the future	0.785	0.765	0.791	0.680
	Y3	Usage frequency (monthly)	0.795			

The outer loading values for variable X1 range from 0.777 to 0.944, for variable X2 from 0.766 to 0.883, for variable X3 from 0.915 to 0.953, for variable Z from 0.849 to 0.905, and for variable Y from 0.785 to 0.890, indicating that each indicator is able to reflect its respective variable. The values of Cronbach's Alpha and CR for all variables are > 0.70, meaning that all indicators are capable of measuring their latent constructs. Similarly, the AVE values for each variable are > 0.50, indicating that all indicators are valid.

Discriminant validity testing refers to the Fornell-Larcker criterion, cross-loadings, and Heterotrait-Monotrait Ratio (HTMT). However, (Henseler et al., 2015) recommend using HTMT for discriminant validity testing. A good HTMT ratio is < 0.90. The results of the Fornell-Larcker measurement and HTMT ratio are presented in Table 3.

Table 3. Discriminant Validity Result's

	X1	X2	Х3	Υ	Z
X1	0.872	0.093	0.587	0.587	0.155
X2	0.029	0.840	0.119	0.122	0.251
Х3	0.551	-0.066	0.931	0.813	0.097
Υ	0.517	0.083	0.693	0.824	0.165
Z	-0.120	0.212	-0.091	-0.121	0.878

Note: The bold numbers in the diagonal are the square root of AVE for each construct. Below the diagonal are correlation between constructs. Above the diagonal are the HTMT values.

The square root of AVE for each variable is greater than that of the other variables below it. All HTMT values are < 0.90, indicating that reflective indicators are good measures for their respective variables. Thus, all variables are reliable.

#### **Inner Model Testing**

The first step in testing the structural model in this study is to examine the construct's ability of endogenous variables in explaining exogenous variables based on R-Square values. The grouping of R-Square values for endogenous variables refers to (Chin, 1998), namely 0.67 (substantial), 0.33 (moderate), and 0.19 (weak). Exogenous variables (X1, X2, X3, and Z) collectively explain the variable Y by 0.525 or 52.5%, which is considered moderate as it is < 0.67. Meanwhile, the variables X1, X2, and X3 in explaining the variable Z are only 0.061 and are considered weak.

The magnitude of influence between variables at the structural level refers to (Cohen, 1988) recommendations:  $\geq 0.02$  (small),  $\geq 0.15$  (moderate), and  $\geq 0.35$  (large). In this modelling, only one large F-Square value is the relationship X3 $\rightarrow$ Y (H6) at 0.520. There are three moderate F-Square values: the relationship X2 $\rightarrow$ Z (H2) 0.049, X1 $\rightarrow$ Y (H4) 0.044, and X2 $\rightarrow$ Y (H5) 0.035. The rest, X1 $\rightarrow$ Z (H1), Z $\rightarrow$ Y (H7), and X3 $\rightarrow$ Z (H3), have no effect as they are below 0.02.

Hypothesis testing uses bootstrapping with 5,000 sub-samples (Lowry & Gaskin, 2014) to estimate the structural model. The results of bootstrapping show the Path Coefficient values and p-values to observe the relationships between variable paths based on the proposed hypotheses. The testing results indicate that only two hypotheses are accepted: the relationship  $X1 \rightarrow Y$  (H4) and the relationship  $X3 \rightarrow Y$  (H6).

H4 means there is a positive and significant influence between behavioural attitudes and interest ( $\beta=0.175$ , p 0.046). H6 means there is a positive and significant influence between control perceptions and interest ( $\beta=0.598$ , p 0.000). The direct influence of attitude, subjective norm, and control perception on risk perception (H1, H2, H3) is rejected because the p-value for each variable is > 0.05. The same goes for the subjective norm on interest (H5) and risk perception on interest (H7).

Risk perception has a negative but non-significant influence on interest ( $\beta =$  -0.075, p > 0.05). Meanwhile, the indirect influence on interest through the risk perception variable is rejected because p > 0.05. This also refers to the statistical mediation effect  $\nu$  values (Lachowicz et al., 2018), all of which are 0.000, meaning there is no mediation effect. Additionally, the model fit assessment (SRMR) follows (Henseler, 2017) recommendations, with an SRMR value of 0.078, where a value < 0.10 indicates a good model fit.

Table 4. Summary of Hypothesis Testing

	Path		1		••	
Hypothesis	Coefficient	Coefficient P-Value	F <sup>2</sup>	R <sup>2</sup>	$Q^2$	Result
Direct Effect						
H1. X1→Z	-0.121	0.281	0.011			Rejected
H2. X2→Z	0.215	0.094	0.049	0.061	0.026	Rejected
H3. X3→Z	-0.010	0.480	0.000			Rejected
H4. X1→Y	0.175	0.046	0.044			Supported
H5. X2→Y	0.133	0.145	0.035	0.525	0.323	Rejected
H6. X3→Y	0.598	0.000	0.520	0.525	0.323	Supported
H7. Z→Y	-0.075	0.232	0.011			Rejected
Hypothesis	Path	P-Value	ν	R <sup>2</sup>	Q <sup>2</sup>	Result
	Coefficient					rtoodit
Indirect Effect						
H8. $X1\rightarrow Z\rightarrow Y$	0.009	0.386	0.000			Rejected
H9. $X2\rightarrow Z\rightarrow Y$	-0.016	0.293	0.000	-	-	Rejected
H10. X3→Z→Y	0.001	0.490	0.000			Rejected

	Table 5. SRMR result's	
	Estimated	
SRMR	0.078	

# **DISCUSSION**

Three elements in the Theory of Planned Behaviour, consisting of attitude, subjective norm, and perceived behavioural control in this study, have a positive influence on the interest in using digital payments. However, only two are significant: attitude and perceived behavioural control. This study aligns with the findings of (Chaveesuk et al., 2021; Sudibyo et al., 2018; Wijayanthi, 2019), which found that the attitude variable influences intention. MSME actors perceive digital payments as something common in the current technological era.

The results of this study indicate that MSME actors in Bone regency choose to use digital payments because of efficiency, ease of use, and their perceived ability to operate them. MSME actors feel they don't need to follow the advice or observe people around them in transactions, so without recommendations from close individuals or public figures, they will use digital payments. This study is in line with research (Ariffin & Lim, 2020; Makaba, 2023) where Attitude and Perceived Control become drivers of digital payment usage adaptation. However, the results of this study differ from previous research (Filona & Misdiyono, 2019), where the factors influencing the use of digital payments are attitude and subjective norms. This is because, in the early stages of adapting to digital payment use, there is still a need for encouragement from those around them to believe that digital payments are the same and can replace physical payments with paper money.

In essence, subjective norms indeed have a positive influence on the interest in using digital payments, as seen in studies by (Aji et al., 2021). However, in this study, it does not emerge as a primary factor for MSME actors to adopt digital payments. The increasing variety and development of digital payment methods make people accustomed to different forms of digital transactions (Putri, 2020). As a result, even without external influences from friends or family, they remain interested in using digital payments.

The consistent role of risk perception has a negative impact on attitude and adoption interest in digital services, implying that the higher the risk, the more reluctant individuals are to use digital services. This aligns with the findings of studies (Bhatti & Akram, 2020; Koenig-Lewis et al., 2015; Lee, 2009; Pal et al., 2021). However, in this study, it does not show significant results. This situation is similar to the results of a study by (Purwantini & Anisa, 2021), where MSME actors do not pay much attention to perceived risks because the majority come from the millennial and Generation Z, who are already accustomed to and feel secure in financial transactions with technology.

Risk perception also does not act as a mediating factor in the interest in using digital payments among MSME actors. This indicates the high level of trust MSME actors have in digital payment methods for now. However, this should be a concern for service providers and stakeholders, given that cybercrimes continue to occur.

#### CONCLUSION

This study provides results that the adaptation of digital payment usage among MSME actors is driven by attitude and perceived control. Perceived control has a strong influence on the interest in using digital payments with an F2 value of 0.520 and a confidence interval ( $\beta$  =0.598, p 0.000), while attitude has a moderate influence with an F2 value of 0.044 and a confidence interval ( $\beta$  = 0.175, p 0.046). Subjective norms and risk perception do not significantly influence interest. The role of risk perception as a mediator also has no effect.

Limitations: The model in this study can still be further developed conceptually. Additionally, this development is expected to provide a more in-depth explanation of the role of risk in transactions using digital payments to anticipate the risks of cybercrime. Furthermore, the sample limitations may lead to inaccuracies in estimation calculations, making it highly recommended for future research to use a larger sample.

#### **REFERENCE**

- Ahmad, A., Ariyano, D., & Suriati, M. (2022). Tinjauan Yuridis terhadap Pelaku Usaha yang Mengganti Uang Kembalian dengan Permen di Kota Balikpapan. *LEX SUPREMA Jurnal Ilmu Hukum*, *4*(1), 819–839.
- Aji, H. M., Berakon, I., & Riza, A. F. (2021). The effects of subjective norm and knowledge about riba on intention to use e-money in Indonesia. *Journal of Islamic Marketing*, 12(6), 1180–1196. https://doi.org/10.1108/JIMA-10-2019-0203
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211.
- Ajzen, I. (2005). Attitudes, Personality and Behaviour (Second Edi). McGraw-hill education (UK).
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314–324. https://doi.org/10.1002/hbe2.195
- Ariffin, S. K., Abd Rahman, M. F. R., Muhammad, A. M., & Zhang, Q. (2021). Understanding the consumer's intention to use the e-wallet services. *Spanish Journal of Marketing ESIC*, 25(3), 446–461. https://doi.org/10.1108/SJME-07-2021-0138
- Ariffin, S. K., & Lim, K. T. (2020). *Investigating Factors Affecting Intention to Use Mobile Payment Among Young Professionals in Malaysia*. 6–11. https://doi.org/10.2991/AEBMR.K.200514.002
- Ayudya, A. C., & Wibowo, A. (2018). The Intention to Use E-Money using Theory of Planned Behavior and Locus of Control. *Jurnal Keuangan Dan Perbankan*, 22(2), 335–349. https://doi.org/10.26905/jkdp.v22i2.1691
- Bank Indonesia. (n.d.). Dompet Elektronik. Bank Indonesia.
- Barnes, S. J., & Corbitt, B. (2003). Mobile banking: concept and potential. International Journal of Mobile Communications, 1(3), 273. https://doi.org/10.1504/IJMC.2003.003494
- Bauer, R. A. (2001). Consumer behavior as risk. *Marketing: Critical Perspectives on Business and Management*, 3, 13.
- Bhatti, A., & Akram, H. (2020). The Moderating Role Of Subjective Norms Between Online Shopping Behaviour And Its Determinants. *International Journal of Social Sciences and Economic Review*, 2(2), 1–09. https://doi.org/10.36923/ijsser.v2i2.52
- Chaveesuk, S., Khalid, B., & Chaiyasoonthorn, W. (2021). Digital payment system innovations: A marketing perspective on intention and actual use in the retail sector. *Innovative Marketing*, 17(3), 109–123. https://doi.org/10.21511/im.17(3).2021.09
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295–336.

- Claudia, I. (2012). The mediating role of perceived risk when buying online. *Acta Universitatis Danubius. Œconomica*, 8(5).
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd Editio). Routledge. https://doi.org/10.4324/9780203771587
- Departemen Komunikasi BI. (2020). Apa itu Uang Elektronik. Bank Indonesia.
- Departemen Komunikasi Bl. (2022). *Tiga Insiatif Pembayaran Digital untuk Pemulihan Ekonomi.*
- Febriaty, H. (2019). Pengaruh sistem pembayaran non tunai dalam era digital terhadap tingkat pertumbuhan ekonomi Indonesia. *Prosiding FRIMA (Festival Riset Ilmiah Manajemen Dan Akuntansi)*, 2, 307–313.
- Filona, & Misdiyono. (2019). Factors Affecting The Adoption of Electronic Money Using Technology Acceptance Model and Theory of Planned Behavior. *Journal of Business Economics*, 24(1), 100–113. https://doi.org/10.35760/eb.2019.v24i1.1858
- Fortes, N., & Rita, P. (2016). Privacy concerns and online purchasing behaviour: Towards an integrated model. *European Research on Management and Business Economics*, 22(3), 167–176. https://doi.org/10.1016/j.iedeen.2016.04.002
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203
- Hair Jr., J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R. 197. https://doi.org/10.1007/978-3-030-80519-7
- Henseler, J. (2017). *Advanced Methods for Modeling Markets* (P. S. H. Leeflang, J. E. Wieringa, T. H. . Bijmolt, & K. H. Pauwels (eds.)). Springer International Publishing. https://doi.org/10.1007/978-3-319-53469-5
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/S11747-014-0403-8/FIGURES/8
- Istanto S, L., & Fauzie, S. (2014). Analisis dampak pembayaran non tunai terhadap jumlah uang beredar di Indonesia. *Jurnal Ekonomi Dan Keuangan*, *2*(10), 14817.
- Jena, R. K. (2022). Investigating and Predicting Intentions to Continue Using Mobile Payment Platforms after the COVID-19 Pandemic: An Empirical Study among Retailers in India. *Journal of Risk and Financial Management 2022, Vol. 15,* Page 314, 15(7), 314. https://doi.org/10.3390/JRFM15070314
- Jogiyanto, H. M. (2007). Sistem Informasi Keperilakuan. Andi Offset.
- Juhro, S. M. (2021). Pengantar Kebanksentralan: Teori dan Kebijakan. PT. RajaGrafindo Persada.

- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2009). Trust and Satisfaction, Two Stepping Stones for Successful E-Commerce Relationships: A Longitudinal Exploration. *Information Systems Research*, 20(2), 237–257.
- Koenig-Lewis, N., Marquet, M., Palmer, A., & Zhao, A. L. (2015). Enjoyment and social influence: predicting mobile payment adoption. *The Service Industries Journal*, 35(10), 537–554. https://doi.org/10.1080/02642069.2015.1043278
- KPPN Watampone. (2022). *Realisasi KUR Bone capai Rp.553,34 M sampai dengan 30 April 2022*. Ditjen Perbendaharaan Kemenkeu RI.
- Lachowicz, M. J., Preacher, K. J., & Kelley, K. (2018). A novel measure of effect size for mediation analysis. *Psychological Methods*, 23(2), 244–261. https://doi.org/10.1037/met0000165
- Lee, M.-C. (2009). Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit. *Electronic Commerce Research and Applications*, 8(3), 130–141. https://doi.org/10.1016/j.elerap.2008.11.006
- Lowry, P. B., & Gaskin, J. (2014). Partial Least Squares (PLS) Structural Equation Modeling (SEM) for Building and Testing Behavioral Causal Theory: When to Choose It and How to Use It. *IEEE Transactions on Professional Communication*, 57(2), 123–146. https://doi.org/10.1109/TPC.2014.2312452
- Makaba, K. A. (2023). Faktor-Faktor yang Mempengaruhi Behavior Intention Masyarakat Gen Y dalam Menggunakan QRIS pada Berbagai Toko Ritel di Kota Batam. *MAMEN: Jurnal Manajemen*, 2(1), 60–70. https://doi.org/https://doi.org/10.55123/mamen.v2i1.1386
- Ming-Yen Teoh, W., Choy Chong, S., Lin, B., & Wei Chua, J. (2013). Factors affecting consumers' perception of electronic payment: an empirical analysis. *Internet Research*, 23(4), 465–485. https://doi.org/10.1108/IntR-09-2012-0199
- Nizar, N. I., & Sholeh, A. N. (2021). Peran Ekonomi Digital Terhadap Ketahanan dan Pertumbuhan Ekonomi Selama Pandemi COVID-19. *Jurnal Madani: Ilmu Pengetahuan, Teknologi, Dan Humaniora, 4*(1), 87–99. https://doi.org/10.33753/MADANI.V4I1.163
- Nugroho, A., Najib, M., & Simanjuntak, M. (2018). Factors Affecting Consumer Interest In Electronic Money Usage With Theory Of Planned Behavior (TPB). *Journal of Consumer Sciences*, 3(1), 15. https://doi.org/10.29244/jcs.3.1.15-27
- Nugroho, A. S. (2016). e-Commerce Teori dan Implementasi. Ekuilibra.
- Nurjannah, Ibrahim Daud, D., Mohyi, A., Ambarwati, T., Cahyono, Y., Haryoko, A. E., Handoko, A. L., Putra, R. S., Wijoyo, H., Ari-yanto, A., & Jihadi, M. (2022). The effect of digital marketing, digital finance and digital payment on finance performance of Indonesian SMEs. *International Journal of Data and Network Science*, 6(1), 37–44. https://doi.org/10.5267/j.ijdns.2021.10.006
- Oktivana, D., Yuanitasari, D., & Singadimedja, H. N. (2014). Penyuluhan Hukum Mengenai Hak Konsumen Dalam Mendapatkan Pengembalian Pembayaran Dalam Bentuk Uang Pada Transaksi Jual Beli. *Dharmakarya*, *3*(1), 40–42.

- Otoritas Jasa Keuangan. (n.d.). Apakah yang dimaksud dengan Internet Banking dan Mobile Banking?
- Pal, A., Herath, T., De', R., & Rao, H. R. (2021). Is the Convenience Worth the Risk? An Investigation of Mobile Payment Usage. *Information Systems Frontiers*, 23(4), 941–961. https://doi.org/10.1007/s10796-020-10070-z
- Persada, S. F., Dalimunte, I., Nadlifatin, R., Miraja, B. A., Redi, A. A. N. P., Prasetyo, Y. T., Chin, J., & Lin, S.-C. (2021). Revealing the Behavior Intention of Tech-Savvy Generation Z to Use Electronic Wallet Usage: A Theory of Planned Behavior Based Measurement. *International Journal of Business and Society*, 22(1), 213–226. https://doi.org/10.33736/ijbs.3171.2021
- Purwantini, A. H., & Anisa, F. (2021). Fintech Payment Adoption Among Micro-Enterprises: The Role of Perceived Risk and Trust. *Jurnal ASET (Akuntansi Riset)*, 13(2), 375–386. https://doi.org/10.17509/jaset.v13i2.37212
- Putra, I. T. P., & Heruwasto, I. (2022). Factors affecting consumer intention to use QRIS during the Covid-19 pandemic by using C-TAM-TPB. *Proceeding of the International Conference on Family Business and Entrepreneurship*, *3*(1). https://doi.org/http://dx.doi.org/10.33021/icfbe.v3i1.3783
- Putri, M. A. T. (2020). Makin Banyak Masyarakat Manfaatkan Pembayaran Digital untuk Belanja. Kompas.
- Ramli, R. R. (2022, May). Peredaran Uang Palsu Kian Susut, Kuartal I-2022 BI Hanya Temukan 33.668 Lembar. *Kompas*.
- Richter, N. F., Sinkovics, R. R., Ringle, C. M., & Schlägel, C. (2016). A critical look at the use of SEM in international business research. *International Marketing Review*, 33(3), 376–404. https://doi.org/10.1108/IMR-04-2014-0148
- Riyadi, D. K., Soemitra, A., & Nawawi, Z. M. (2022). Pertumbuhan Transaksi Financial Technology (Fintech) Di Dalam Perbankan Pada Masa Pandemi Covid-19. *Management Studies and Entrepreneurship Journal (MSEJ)*, *3*(2), 634–643. https://doi.org/10.37385/MSEJ.V3I2.426
- Saputri, O. B. (2020). Preferensi konsumen dalam menggunakan quick response code indonesia standard (qris) sebagai alat pembayaran digital. *KINERJA*, 17(2), 237–247. https://doi.org/10.29264/JKIN.V17I2.7355
- Sikri, A., Dalal, S., Singh, N. P., & Le, D. (2019). Mapping of e-Wallets With Features. Cyber Security in Parallel and Distributed Computing: Concepts, Techniques, Applications and Case Studies, 245–261.
- Song, H. G., & Jo, H. (2023). Understanding the Continuance Intention of Omnichannel: Combining TAM and TPB. *Sustainability*, *15*(4), 3039. https://doi.org/10.3390/su15043039
- Sudibyo, S. D., Maarif, M. S., Sukmawati, A., & Affandi, M. J. (2018). Analysis of Factors Affecting People's Behavior In Using Electronic Payment Instruments. *Jurnal Organisasi Dan Manajemen*, 14(2), 108–119. https://doi.org/10.33830/JOM.V14I2.156.2018
- Suprapto, S. S., & Kusuma, V. A. (2022). Pengukuran Waktu Tunggu Verifikasi

- Transaksi Digital Otomatis Berbasis Quick Response Code Indonesian Standard (QRIS) Dynamic pada Rancang Bangun Vending Machine. *SPECTA Journal of Technology*, 6(1), 10–17. https://doi.org/10.35718/specta.v6i1
- Szumski, O. (2022). Comparative analyses of digital payment methods from the pre and post COVID-19 perspective. *Procedia Computer Science*, 207, 4660–4669. https://doi.org/10.1016/j.procs.2022.09.530
- Turban, E., King, D., Lee, J., Warkentin, M., & Chung, H. M. (2002). Electronic commerce: A managerial perspective (International Edition). *Prentice Hall USA*, *4*(9), 523–527.
- Usman, R. (2017). Karakteristik Uang Elektronik Dalam Sistem Pembayaran. *Yuridika*, 32(1), 134–166. https://doi.org/10.20473/YDK.V32I1.4431
- Wijayanthi, I. M. (2019). Behavioral Intention of Young Consumers Towards E-Wallet Adoption: An Empirical Study Among Indonesian Users. *Russian Journal of Agricultural and Socio-Economic Sciences*, *85*(1), 79–93. https://doi.org/10.18551/rjoas.2019-01.09
- Xie, J., Ye, L., Huang, W., & Ye, M. (2021). Understanding FinTech Platform Adoption: Impacts of Perceived Value and Perceived Risk. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(5), 1893–1911. https://doi.org/10.3390/jtaer16050106
- Xie, Q., Song, W., Peng, X., & Shabbir, M. (2017). Predictors for e-government adoption: integrating TAM, TPB, trust and perceived risk. *The Electronic Library*, 35(1), 2–20. https://doi.org/10.1108/EL-08-2015-0141