

# DETERMINANTS OF QRIS USAGE AS A DIGITAL PAYMENT TOOL FOR MSMEs

KHALISA MARSAHANDA RAFIANI<sup>1</sup>, ROCHANIA AYU YUNANDA<sup>1</sup>, TOTO RUSMANTO<sup>1</sup>

<sup>1</sup>Accounting Program , School of Accounting, Bina Nusantara University, Jakarta

\*rochania.yunanda@binus.edu

## ABSTRACT

The development of technology and information in the globalization era contributes significantly to the growth of the digital economy in Indonesia. It has significant impacts on all types of industries including MSMEs (Micro, Small, and Medium Enterprises). The development of MSMEs is currently increasing in various regions throughout Indonesia. The utilization of technology by MSMEs is on the rise. Various digital technologies are being employed by MSMEs, such as electronic money and non-cash payments are gaining momentum with the introduction of QR-code payment systems. Using the Technology Acceptance Model, this study aims to examine the determinants of QRIS as a digital payment tool used by MSMEs. This study analyzes 162 from MSMEs players. Out of the six hypotheses tested, four were found to be significant or accepted. Perceived Usefulness, Perceived Ease of Use, Revenue, and Perceived Risk have significant influences on the Interest in using QRIS.

**Keywords:** *Technology Acceptance Model, Financial Literacy, QR Payment*

## 1. RESEARCH BACKGROUND

Modern technology presents a new challenge to the field of accounting. Financial transactions are no longer primarily conducted with physical cash but with digital currencies [1]. The extraordinary acceleration of technological developments has led to the emergence of a new business tradition [2] and payment system. The development of information technology has brought about innovations in the use of money as a means of payment. One of these innovations is the creation of electronic payment tools. Technological advancements in payment systems have transformed the role of physical cash into non-cash forms, which are more efficient and cost-effective as payment methods.

The development of technology and information in the globalization era contributes significantly to the growth of the digital economy in Indonesia. The 4.0 industrial revolution in Indonesia is marked by the digital revolution, particularly in digital payments. The Bank of Indonesia has been promoting digital payments since 2014 through the establishment of the

National Non-Cash Movement (GNNT). The Bank of Indonesia and the government launched the National Non-Cash Movement (GNNT) to encourage the use of non-cash payment systems and create a cashless society.

There are approximately 65.4 million MSMEs in Indonesia, accounting for 99.99% of all business entities in the country. MSMEs have a high level of employment absorption, employing around 119 million workers, which makes up 96.92% of the workforce in the business sector. Additionally, MSMEs in Indonesia contribute approximately 9.5 million or 60.51% to the country's Gross Domestic Product (GDP).

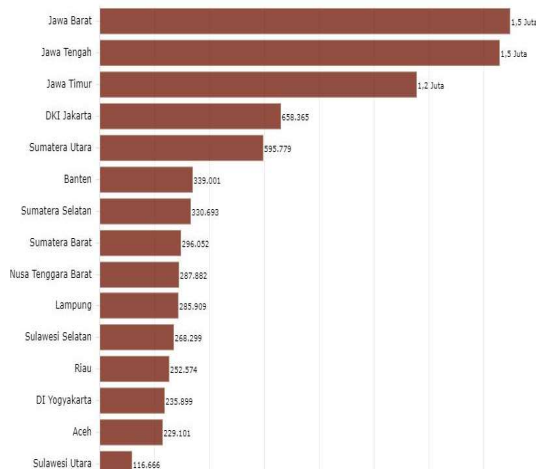


Figure 1: The number of SMEs (2022)

The development of MSMEs (Micro, Small, and Medium Enterprises) is currently increasing in various regions throughout Indonesia. One of them is the city of DKI Jakarta, which plays a crucial role in the economic growth of DKI Jakarta.

Based on the data above, West Java has the highest number of MSMEs with a total of 1.49 million business units. In second place, is Central Java with 1.45 million business units. In the third place, followed by East Java with 1.15 million business units. DKI Jakarta is among the top five provinces with the highest number of MSMEs, with 658,365 business units. This indicates that MSMEs in DKI Jakarta are experiencing rapid growth.

Among the various MSME sectors in Indonesia, the food and beverage sector have a significant number of enthusiasts. The food and beverage sector within MSMEs offers promising opportunities for aspiring entrepreneurs to benefit from innovations in the constantly evolving food and beverage industry. In 2020, DKI Jakarta had 5,159 medium to large-scale food and beverage businesses, the highest number among all provinces in Indonesia. It was followed by West Java with 1,414 businesses, and then by East Java and Banten with 821 and 539 businesses, respectively. This demonstrates that DKI Jakarta is the province with the largest food and beverage sector businesses in Indonesia.

The development of digital business in Indonesia has increased during the COVID-19

pandemic, with business operators effectively leveraging digitalization. Concerning the utilization of digitalization in the era of the 4.0 industrial revolution, the Ministry of Communication and Information Technology launched the "MSMES Go Online" program, which existed before the pandemic. According to the Ministry of Cooperatives and Small and Medium Enterprises, out of over 65 million MSMEs, only approximately 17.25 million, or about 26.5% of MSMEs, have embraced the digital ecosystem. The government aims to have around 30 million digitally-enabled MSMEs by 2024. According to the Minister of Cooperatives and SMEs, approximately 6 million MSMEs need to transition to digital each year to achieve this target (Ministry of Cooperatives and SMEs, 2021).

The utilization of technology by MSMEs is on the rise. Various digital technologies are being employed by MSMEs, such as electronic money (E-wallets), which provide convenience for both MSME operators and customers in conducting transactions. Non-cash payments are gaining momentum with the introduction of QR-code payment systems, which are expected to facilitate faster and more efficient transaction activities. The implementation of the QR Code payment system is anticipated to make payment transactions faster, more effective, and non-contactable as they do not involve physical cash. The Quick Response Code Indonesian Standard (QRIS) is a server-based system proposed by Bank Indonesia and the Association of Indonesian Payment Systems (ASPI) to facilitate payment systems in Indonesia. The Quick Response Code Indonesian Standard (QRIS) is a QR Code used for payments through electronic money applications, E-wallets, and mobile banking.

Although the government has encouraged every MSME operator to have QRIS, there are still some MSMEs that do not use the system because they are unaware of it and prefer cash payments. QRIS still faces challenges in its implementation, one of which is the lack of widespread digital finance adoption and financial literacy in general. The difficulty of digitalization for MSMEs in Indonesia is also greatly influenced by the low level of financial knowledge in the country. The Financial Services Authority (OJK) explains that the highest financial literacy index is

in DKI Jakarta, reaching 40%, and nationally, Indonesia's financial literacy index in 2016 was 29.66%. This is one of the reasons why many people, especially MSME operators, do not know and understand QRIS. Many MSME operators are not ready to enter the digitalization era, and many consumers feel unsafe when conducting digital transactions, which does not align with consumer expectations regarding product quality.

Based on these concrete conditions, it can be said that the Interest of MSME operators in using QRIS is still relatively low. Therefore, a study on the factors influencing the Interest in using QRIS is important. To determine what influences MSME operators' Interest in using the Quick Response Indonesian Standard (QRIS), a theory that can measure the acceptance and utilization of technology is needed. The model commonly used to measure this is the Technology Acceptance Model (TAM).

TAM is an information system theory developed to explain how to apply and understand information technology. The Technology Acceptance Model (TAM) aims to explain and predict the relationship between an individual's information-based acceptance of technology and the behavior of end users with a wide range of variations and user populations. The TAM model is an adaptation of the Theory of Reasoned Action [3].

The number of MSMEs dominates the real sector in Indonesia. This study contributes toward the development of MSMEs and how they catch up with technological advances and opportunities. It is valuable to consider the MSMEs perception of the adoption of QRIS to offer easiness for customers and to escalate their businesses. Numerous prior studies focused on the adoption of particular tools from customers' perspectives. This study focuses on examining the factors influencing the adoption of a particular digital payment from players' (MSMEs) perception.

This research is conducted to identify the fundamental factors that drive someone to use a technology system, enabling a focus on variables that significantly influence the Interest in using the technology system. There are two components related to TAM: Perceived Usefulness and Perceived Ease of Use. This research also introduces other perceptions that can influence the

Interest in using QRIS, namely Perceived Risk and Perceived Trust.

## 2. LITERATURE REVIEW

### 2.1. Theory of Reasoned Action (TRA)

The TAM model is adapted from the Theory of Reasoned Action (TRA), which assumes that human attitudes and behavior regarding technology acceptance are determined by their beliefs and observations. The Theory of Reasoned Action (TRA), developed by Ajzen & Fishbein, assesses individual behavior based on the Interest of an individual to perform that behavior. This theory clearly describes the factors influencing individual behavior and their relationship with beliefs, subjective norms, Interests, attitudes, and individual behavior. Behavioral Interest is the key factor directly influencing actions [4]. To what extent behavior is voluntarily controlled, i.e., to what extent individuals exert significant influence on it, determines the theory's ability to explain behavior.

### 2.2. Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) was developed by Ajzen [10] as an extension of the Theory of Reasoned Action. In his research, Ajzen added one factor, the belief that factors are preventing a behavior from being carried out if they hinder the Interest to perform that behavior. This Interest is a function of two fundamental factors: an individual's attitude toward the behavior, which is an individual aspect, and the individual's perception of social pressure to perform or not perform the behavior, known as subjective norm. The Interest to perform this behavior is influenced by three variables: attitude toward the behavior, subjective norm, and perceived behavioral control.

### 2.3. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a model used to explain how technology is accepted from the user's perspective [5]. The Technology Acceptance Model (TAM) was first introduced by Davis (1989) as an application of the development of the Theory of Reasoned Action (TRA) designed to model user acceptance of information systems. One of the factors influencing attitudes in the acceptance of information technology is the user's perception of the usefulness and ease of use of information technology. These perceptions serve as the basis

for individuals to assess the benefits and ease of using technology as a benchmark for accepting a technology.

#### 2.3.1. Perceived Ease of Use

Perceived Ease of Use refers to the extent to which an individual believes that using a particular system will be free from effort. In other words, Perceived Ease of Use is used to measure someone's belief in the ease of using technology and its understandability, making users free from effort [3].

#### 2.3.2. Perceived Usefulness

Perceived Usefulness is defined as the extent to which an individual believes that using a particular system will enhance job performance. Perceived usefulness can also be interpreted as the extent to which an individual believes that using a system will improve their performance [6].

#### 2.3.3. Perceived Risk

According to Cox & Rich [26], perceived risk is the nature and amount of risk perceived by consumers in making purchasing decisions and is a major determinant of an individual's behavior in adopting technology. Perceived risk is used as a factor that examines the attitude of technology acceptance that directly affects the Interest in using technology.

#### 2.3.4. Perceived Trust

Perceived Trust is an indicator that refers to an individual's trust in technology, affecting the Interest in adopting that technology [7]. Perceived Trust concerns consumers' trust in the product's ability to provide benefits or not. Perceived Trust plays an important role in understanding how trust affects potential user attitudes and their willingness to adopt, as well as factors that can influence trust [8].

### 2.4. Interest in using QR Code Payment

Interest is the tendency of behavior to continue using technology [3]. Interest is the desire to use, always strive to use, and continue to use in the future [9]. Interest is closely related to feelings of pleasure, influencing individual attitudes to do what is most suitable for them. So when someone does something according to their Interest, there is compulsion in it. Perceptions show a positive relationship with Interest in using someone's behavior, and this behavior can be predicted accurately [10] [11]. Therefore, in the context of using digital payment systems, Interest

in use means Interest in using digital payment systems as innovative services, which collectively refers to the transition from traditional industries to financial and information technology services [12].

Quick Response is a type of matrix or two-dimensional barcode that can store data information and is designed to be read by smartphones, indicating that the code's content must be translated very quickly at a high speed [13]. The function of the QR Code in the payment system is to connect users to payment transaction services by scanning the QR Code using a smartphone camera that is already linked to the user's account. QR Code payment is a payment system that uses QR codes that are scanned during each payment transaction. The purpose of using QR codes by business actors is to facilitate customers in making non-cash payments based on servers. This is done by transferring the code provided by the Payment Service Provider (PJSP). Various QR codes are currently available in Indonesia within applications such as LinkAja, OVO, Go-Pay, BCA Mobile, Shopee, and others.

QRIS (Quick Code Response Indonesian Standard) is a QR Code payment for the Indonesian payment system developed by Bank Indonesia and the Association of Indonesian Payment Systems (ASPI) [13]. The Quick Response Code Indonesian Standard (QRIS) is the standard QR Code for digital payments through digital wallets or mobile banking. The purpose of QRIS is to make digital payments easier for the public to conduct non-cash transactions for all buying and selling transactions [14].

There are three types of payments using the Quick Code Response Indonesian Standard, as follows [13]:

- a) Merchant Presented Mode (MPM) Static: Merchants only need to display a QRIS printout, which is free. Users only need to scan it, enter the payment amount, then enter the PIN and click to pay. QRIS MPM is very suitable for micro and small businesses.
- b) Merchant Presented Mode (MPM) Dynamic: The QR Code is issued through an EDC machine. Merchants need to enter the payment amount first, and then customers can scan the displayed or

printed QRIS. QRIS is suitable for medium and large business merchants.

- c) Customer Presented Mode (CPM): Customers only need to show the QRIS displayed from the payment application they use for scanning at the merchant. QRIS CPM is suitable for merchants requiring high-speed transactions, such as transportation providers, parking, and modern retail.

## 2.5. Financial Literacy

Financial literacy is understood as the description and ability to utilize different financial capabilities, such as investment, budgeting, and individual financial management. According to the Regulation of the Financial Services Authority No. 76/POJK.07/2016 regarding the Improvement of Financial Literacy and Inclusion in the Financial Services Sector for Consumers and/or the Public, financial literacy is knowledge, skills, and beliefs that affect behavior and attitudes to improve the quality of decision-making and financial management in order to achieve financial well-being.

In the National Financial Literacy Strategy of Indonesia (Revisit 2017), financial literacy is described as knowledge, skills, and beliefs that influence behavior and attitudes to improve the quality of decision-making and financial management for the financial well-being of individuals and communities and participation in the economic field.

According to the Regulation of the Financial Services Authority No. 76/POJK.07/2016 regarding the Improvement of Financial Literacy and Inclusion in the Financial Services Sector for Consumers and/or the Public, the goals of financial literacy include:

- a) Improving the quality of individual financial decision-making.
- b) Changing people's behavior and attitudes towards financial management to be better, so they can determine and use financial institution products and services that are in accordance with their needs and capabilities, as well as for the benefit of consumers and/or the public, in order to achieve financial well-being.

The application of guidance in improving financial literacy for citizens is very much needed. According to a survey by the OJK in 2013, the level of financial literacy among the Indonesian population is divided into four parts:

- a) Well literate: Has knowledge and confidence about financial institutions and financial products, including features, uses, risks, rights, and obligations related to financial products and services, and has the skills to use financial products and services.
- b) Sufficient literate: Has knowledge and confidence about financial institutions and financial products and services, including features, uses, and risks, as well as rights and obligations related to financial products and services.
- c) Less literate: Only has knowledge about financial institutions, financial products, and financial services.
- d) Not Literate: Has no knowledge or confidence in financial institutions and financial products and services, and has no skills to use financial products and services.

## 2.6. Hypotheses Development

Hypotheses are statements made by researchers about the relationship between variables in research, and they are specific statements. Hypotheses also serve as temporary answers to research that has been conducted under certain conditions that have occurred. The Technology Acceptance Model identifies several variables to achieve the factors influencing user behavior in technology acceptance using the Theory of Reasoned Action (TRA) as the theoretical basis for determining the model of variable relationships.

Perceived Usefulness is the belief in using technology that can improve an individual's performance [3]. Perceived Usefulness is a belief at the decision stage. If someone perceives a system as useful, they will use it. Conversely, if the perceived usefulness of a system is low, it will not be used. Research by Wu et al [27] showed that Perceived Usefulness has a significant positive impact on the Interest in using mobile payment as a digital payment method. This is also supported by other studies [15] [16] [17] [18], which confirm that the perceived benefits have a strong positive impact on the Interest in using. In

other words, the greater the perceived benefits of using QRIS, the greater the likelihood that businesses will use it to support their transactions.

*Hypothesis 1 (H1)*

*Perceived Usefulness (X1) has a positive influence on the Interest in using QRIS as a payment tool for MSMEs in DKI Jakarta.*

Perceived Ease of Use is the belief that using a system is easy [3]. It means that using a new system does not require complex effort. Perceived Ease of Use measures an individual's belief in the ease of using technology and its understandability, making users free from effort or making it effortless. This theory is in line with the TPB variable of Perceived Behavioral Control, where someone believes that using technology will be easy or difficult. Fitriana et al. [28] found that Perceived Ease of Use has a significant positive impact on the Interest in using e-money as a digital payment method. This is also confirmed by research [19] [20] [21], which states that perceived ease of use has a significant positive impact, meaning that the easier the perceived ease of use, the greater the Interest in using. This indicates that the QRIS payment system is easy to learn and very easy to use for all of its transaction services.

*Hypothesis 2 (H2)*

*Perceived Ease of Use (X2) has a positive influence on the Interest in using QRIS as a payment tool for MSMEs in DKI Jakarta.*

Perceived Trust is an individual's belief in technology that can influence the Interest in using technology [7]. Research by Ooi and Tan [29] shows that Perceived Trust has an impact on the Interest in using QRIS as a digital payment method. This is in line with research [22] [8] [23] [24], which states that trust has a significant positive impact on the use of financial technology. This indicates that users' trust in technology increasingly influences their continued Interest in using QRIS. The results indicate that if someone believes that the technology system they use can meet their needs, this belief can encourage an increase in the Interest in using the technology.

*Hypothesis 3 (H3)*

*Perceived Trust (X3) has a positive influence on the Interest in using QRIS as a payment tool for MSMEs in DKI Jakarta.*

Research by Palupi et al. [30] shows that financial literacy influences the decision to use QRIS among MSMEs. This is in line with research by Morgan & Long [31] and Purba [32], which means that the level of financial literacy has a significant impact on the Interest in using financial technology products, including QRIS as a digital payment technology. This affects people's attitudes and behavior in increasing the quality and understanding of financial literacy.

*Hypothesis 4 (H4)*

*Financial Literacy (X4) has a positive influence on the Interest in using QRIS as a payment tool for MSMEs in DKI Jakarta.*

Income is the total amount of income received, including income received by an individual without having to work or do anything. In other words, MSMEs will strive to increase their sales by following the trend of using QRIS payment systems so that sales can increase. Research by Maulia [33] shows a relationship between income and the Interest of individuals to use digital payments. When the Interest of MSMEs in using digital payment systems such as QRIS is higher, income will increase.

*Hypothesis 5 (H5)*

*Income (X5) has a positive influence on the Interest in using QRIS as a payment tool for MSMEs in DKI Jakarta.*

The Technology Acceptance Model with Perceived Usefulness and Perceived Ease of Use variables refers to Perceived Risk, which is perceived as a risk that an increase in the quality of information technology systems considered useful and simple will continue to lead to failures in its application. This theory is in line with the TPB variable of Perceived Behavioral Control because Perceived Risk can negatively affect the decision to use electronic money due to its crucial role in reducing Interest in transaction activities. Research by Ningsih et al. [34] and Phonthanukitithaworn et al. [35] shows that Perceived Risk has an impact on the Interest in using Mobile payment as a digital payment method. The higher the perceived risk of MSMEs in using QRIS as a payment tool, the lower the likelihood of their Interest in using QRIS.

However, Priambodo & Prabawani [36] found negative results, indicating that the higher the uncertainty and consequences faced by individuals, the less likely they are to use electronic money, or even to avoid it altogether. However, the Interest in electronic services increases with lower uncertainty and perceived risk.

*Hypothesis 6 (H6)*

*Perceived Risk (X6) has a negative influence on the Interest in using QRIS as a payment tool for MSMEs in DKI Jakarta.*

### 3. RESEARCH METHODOLOGY

The research methodology used by the author in this study is a quantitative research method. Quantitative research is a method used to study a specific population or sample, and data collection is done using research instruments [25]. The research object is the SME (Small and Medium Enterprises) players in DKI Jakarta who have already adopted QRIS as a digital payment tool. The population to be studied consists of SME actors in the food and beverage sector who implement the QRIS digital payment system in DKI Jakarta. The author will conduct research on the factors influencing the Interest in using QRIS as a digital payment tool for SMEs by distributing questionnaires to SME actors in the food and beverage sector in DKI Jakarta. Data collected will be obtained using a Likert Scale questionnaire. The data collection process will be carried out by distributing questionnaires consisting of 28 indirect questions via Google Forms with the assistance of acquaintances, connections, and through social media platforms such as WhatsApp, Telegram, and Instagram.

The data analysis method used is Partial Least Square (PLS). Partial Least Square (PLS) is a type of Structural Equation Modeling (SEM) based on variance designed to address issues raised by covariance-based Structural Equation Modeling (SEM). Structural Equation Modeling (SEM) is a robust approach that does not rely on various assumptions, and SMART PLS is capable of testing both formative and reflective SEM models with different measurement scales in a single model, regardless of their scale.

### 4. ANALYSIS AND DISCUSSION

The distribution of questionnaires resulted in 162 respondents. The author classified respondents based on the location of their business, the duration of using QRIS, digital business seller partners, and QRIS income in one month.

#### 4.1. Data Description

Based on the classification of the duration of using the QRIS payment system in Table 4.2, it can be seen that some have been using the QRIS payment system for more than 12 months. This indicates that a majority of SMEs in DKI Jakarta have been using QRIS for more than 12 months.

*Table 1: Duration of Using QRIS*

Duration of Use	Number	Percentage (%)
More than 12 months	70	42,9%
6-12 months	50	30,9%
1-6 months	42	25,8%
Total	162	100,0%

*Table 2: Digital Business Partner*

Digital Business Partners	Number	Percentage (%)
Gojek (GoPay)	59	36,0%
Grab (OVO)	56	35,0%
Shopee (ShopeePay)	19	12,0%
Dana	16	10,0%
LinkAja	12	7,0%
Total	162	100,0%

Based on Table above, it can be seen that the respondents are predominantly partnered with Gojek (GoPay) at 36.0%. This indicates that MSMEs (Micro, Small, and Medium Enterprises) in DKI Jakarta are most commonly partnered with Gojek (GoPay).

*Table 3: Monthly transaction using QRIS*

Transaction	Percentage (%)
<Rp.5.000.000	44,8%
Rp.20.000.000 - Rp.49.999.999	40,5%
Rp.50.000.000 – Rp.99.999.999	9,2%
Rp.100.000.000 – Rp.499.999.999	3,7%
>Rp.500.000.000	1,2%
Total	100,0%

Based on table above, it can be seen that a significant portion of transaction from using QRIS

in 1 month is less than Rp. 5,000,000, which is 44.8%. This indicates that the QRIS payment system may not be very helpful to MSMEs (Micro, Small, and Medium Enterprises) in DKI Jakarta as a payment tool. This is because many consumers still use cash.

*Outer Model Loading Factor*

The measurement model testing (Outer Model) was conducted by examining the correspondence between latent variables and indicators, which function to test the reliability and validity characteristics and use them as measures of research hypotheses. The measurement model conducted in this research includes testing the loading factor, average variance extracted (AVE), composite reliability, Cronbach's alpha, and discriminant validity.

**4.2. Loading Factor**

In the loading factor stage, this is done to review the loading factor values to measure the correlation between indicators and their constructs.

Table 4: Outer Loading

Variable	Indicator	Outer Loading	Status
Financial Literacy	LK1	0,783	VALID
	LK2	0,949	VALID
	LK3	0,775	VALID
Interest in Using QRIS	MPQ1	0,849	VALID
	MPQ2	0,857	VALID
	MPQ4	0,576	VALID
Revenue	PDTN1	0,829	VALID
	PDTN2	0,823	VALID
	PDTN3	0,884	VALID
	PDTN4	0,885	VALID
Perceived Ease of Use	PEOU1	0,792	VALID
	PEOU2	0,705	VALID
	PEOU3	0,879	VALID
	PEOU4	0,807	VALID
	PEOU5	0,805	VALID
Perceived Risk	PR1	0,894	VALID
	PR2	0,727	VALID
	PR3	0,728	VALID
	PR4	0,850	VALID
Perceived Trust	PT1	0,939	VALID
	PT2	0,861	VALID
	PT3	0,858	VALID

	PT4	0,810	VALID
Perceived Usefulness	PU1	0,905	VALID
	PU2	0,942	VALID
	PU3	0,944	VALID
	PU4	0,938	VALID

Based on table above, the results of the loading factor values are greater than 0.7. It can be concluded that the variable has met the criteria for convergent validity.

Table 5: Average Variance Extracted (AVE)

Variables	AVE	Status
Financial Literacy	0,705	VALID
Interest in Using QRIS	0,597	VALID
Income	0,733	VALID
Perceived Ease of Use	0,639	VALID
Perceived Risk	0,645	VALID
Perceived Trust	0,754	VALID
Perceived Usefulness	0,869	VALID

The Average Variance Extracted (AVE) values are greater than 0.5 or positively correlated with their constructs are considered valid. It can be concluded that this variable meets the criteria for convergent validity.

**4.3. Inner Model**

Testing the structural model (Inner Model) is an advanced test conducted after using the measurement model (Outer Model) to ensure validity and reliability.

Table 6. R-Square

Dependent Variable	R Square	Adjusted R Square	Adjusted R Square
Interest in Using QRIS	0,431	0,409	Moderate

Source: Researcher's Data Analysis, 2023

Based on table above, the adjusted R-Squared shows that influence of perceived usefulness, perceived ease of use, perceived trust, financial literacy, income, and perceived risk on the Interest in using QRIS among SMEs in DKI Jakarta is 0.409, which means this variable can be considered as a moderate model.

Effect Size Testing ( $f^2$ ) is used to determine the strength of the influence of each independent variable on the dependent variable.



Table 7. *f*-Square Values

Relationship	<i>f</i> Squared	Description
Perceived usefulness-> Interest in Using QRIS	0,054	Strong
Perceived ease of use -> Interest in Using QRIS	0,042	Strong
Perceived Trust -> Interest in Using QRIS	0,007	Weak
Financial Literacy -> Interest in Using QRIS	0,022	Moderate
Pendapatan -> Interest in Using QRIS	0,123	Moderate
Perceived Risk -> Interest in Using QRIS	0,090	Strong

The results of the *f*<sup>2</sup> values can be summarized as follows:

1. The *f*<sup>2</sup> value of Perceived Usefulness on the Interest in using QRIS is 0.054, indicating that Perceived Usefulness has a strong influence on the Interest in using QRIS among SMEs in DKI Jakarta.
2. The *f*<sup>2</sup> value of Perceived Ease of Use on the Interest in using QRIS is 0.042, indicating that Perceived Ease of Use has a strong influence on the Interest in using QRIS among SMEs in DKI Jakarta.
3. The *f*<sup>2</sup> value of Perceived Trust on the Interest in using QRIS is 0.007, indicating that Perceived Trust has a small influence on the Interest in using QRIS among SMEs in DKI Jakarta.
4. The *f*<sup>2</sup> value of Financial Literacy on the Interest in using QRIS is 0.022, indicating that Financial Literacy has a moderate influence on the Interest in using QRIS among SMEs in DKI Jakarta.
5. The *f*<sup>2</sup> value of Income on the Interest in using QRIS is 0.123, indicating that Income has a moderate influence on the Interest in using QRIS among SMEs in DKI Jakarta.
6. The *f*<sup>2</sup> value of Perceived Risk on the Interest in using QRIS is 0.090, indicating that Perceived Risk has a strong influence on the Interest in using QRIS among SMEs in DKI Jakarta.

Path Coefficient is used to indicate how strong the influence of independent variables is on the dependent variable.

Table 8: Path Coefficient

Relationship	Coefficient	Description
Perceived Usefulness -> Interest in Using QRIS	0,203	Positive
Perceived Ease of Use -> Interest in Using QRIS	0,173	Positive
Perceived Trust -> Interest in Using QRIS	-0,063	Negative
Financial Literacy -> Interest in Using QRIS	0,114	Positive
Income -> Interest in Using QRIS	0,296	Positive
Perceived Risk -> Interest in Using QRIS	0,245	Positive

Based on Table 4.14, the results of the Path Coefficient can be summarized as follows:

1. Perceived Usefulness towards Interest in using QRIS is positively related, as the large value of the path coefficient is 0.203, indicating a positive relationship, and the path coefficient is closer to +1.
2. Perceived Ease of Use towards Interest in using QRIS is positively related because the path coefficient is 0.173, indicating a positive relationship, and the path coefficient is closer to +1.
3. Perceived Trust towards Interest in using QRIS is negatively related because the path coefficient is -0.063, indicating a negative relationship, and the path coefficient is closer to +1.
4. Financial Literacy towards Interest in using QRIS is positively related because the path coefficient is 0.114, indicating a positive relationship, and the path coefficient is closer to +1.

5. Income towards Interest in using QRIS is positively related because the path coefficient is 0.296, indicating a positive relationship, and the path coefficient is closer to +1.
6. Perceived Risk towards Interest in using QRIS is positively related because the path coefficient is 0.245, indicating a positive relationship, and the path coefficient is closer to +1.

2. Perceived ease of use towards Interest in using QRIS has a T-Statistic value of 2.598, which is  $\geq 1.96$ . Therefore, it can be concluded that it has a significant relationship.
3. Perceived Trust towards Interest in using QRIS has a T-Statistic value of 0.790, which is  $\leq 1.96$ . Therefore, it can be concluded that it does not have a significant relationship.
4. Financial literacy towards Interest in using QRIS has a T-Statistic value of 1.234, which is  $\leq 1.96$ . Therefore, it can be concluded that it does not have a significant relationship.
5. Income towards Interest in using QRIS has a T-Statistic value of 3.998, which is  $\geq 1.96$ . Therefore, it can be concluded that it has a significant relationship.
6. Perceived Risk towards Interest in using QRIS has a T-Statistic value of 3.412, which is  $\geq 1.96$ . Therefore, it can be concluded that it has a significant relationship.

Table 9: P Value

Relationship	T Statistics	P Value	Description
Perceived Usefulness -> Interest in Using QRIS	3,285	0,001	Significant
Perceived Ease of Use -> Interest in Using QRIS			
Perceived Trust -> Interest in Using QRIS	2,598	0,010	Significant
Financial Literacy -> Interest in Using QRIS			
Income -> Interest in Using QRIS	0,790	0,430	Insignificant
Perceived Risk -> Interest in Using QRIS			
Perceived Usefulness -> Interest in Using QRIS	1,234	0,218	Insignificant
Perceived Ease of Use -> Interest in Using QRIS			
Perceived Trust -> Interest in Using QRIS	3,998	0,000	Significant
Financial Literacy -> Interest in Using QRIS	3,412	0,001	Significant

Based on Table above, the results of the T-Statistic can be summarized as follows:

1. Perceived usefulness towards Interest in using QRIS has a T-Statistic value of 3.285, which is  $\geq 1.96$ . Therefore, it can be concluded that it has a significant relationship.

Hypothesis testing was conducted in this study to determine whether the previously proposed hypotheses could be accepted or rejected. In analyzing the main hypotheses, the researcher utilized the values of T-Statistic and Path Coefficient.

Table 10: Summary of Hypotheses

Hypotheses	Relationship	T Statistics	Decision
H1	PU -> MPQ	3,285	Accepted
H2	PEOU -> MPQ	2,598	Accepted
H3	PT -> MPQ	0,790	Rejected
H4	LK-> MPQ	1,234	Rejected
H5	PDTN -> MPQ	3,998	Accepted
H6	PR -> MPQ	3,412	Accepted

This research found that Perceived Usefulness has a significant and positive influence on the Interest in using QRIS. This suggests that the Interest of MSME participants in DKI Jakarta to use QRIS will increase as well. This aligns with the studies by Najib et al. [37] and Widowati et al. [38], where perceived usefulness affects the Interest in using QRIS. The research shows that MSMEs believe that the implementation of digital payment technology will be beneficial for them in

terms of better quality and accuracy, and they will be satisfied with the digital payment system. The benefits include faster transaction processing and more efficient management of MSMEs businesses. Therefore, it can be concluded that perceived usefulness significantly affects MSMEs.

This research also found that Perceived Ease of Use has a significant and positive influence on the Interest in using QRIS. This suggests that the Interest of MSMEs participants in DKI Jakarta to use QRIS will increase as well. This finding is in line with the research by Najib et al. [37]. It is essential for digital payment providers to develop user-friendly products so that MSMEs owners or managers perceive digital payments as technology that is easy to adopt.

The table above also indicates that Perceived Trust does not have a significant influence on the Interest in using QRIS. This means that consumers do not see trust as a factor in their Interest in using QRIS, as they assume that QRIS is a product of Bank Indonesia protected by the Indonesian government. This is contrary to the research by Agustino et al. [39], Meyliana et al. [23], Wong & Mo [40] (2019), and Yang et al. [41].

The table above shows that financial literacy does not have a significant influence on the Interest in using QRIS. This aligns with the research by Nabila [42]. Understanding money management is a way for individuals to manage their finances for the future and anticipate future losses. Greater financial literacy will impact well-being.

Furthermore, this research also shows that income has a significant influence on the Interest in using QRIS. This suggests that the use of QRIS positively impacts the income of MSMEs participants in DKI Jakarta. It can be concluded that the use of QRIS significantly contributes to the increase in income for MSMEs in Medan. In this research, the presence of QRIS demonstrates that the QRIS payment system has a positive impact on the development of MSMEs in terms of increased income.

Another finding from this research is that Perceived Risk has a significant influence on the Interest in using QRIS. This means that the higher the perception of risk, the greater the Interest of MSMEs participants in DKI Jakarta to use QRIS.

MSMEs participants feel that using a digital payment system is not risky, and they perceive it as a trustworthy system with guaranteed security.

## 5. CONCLUSION

This research plays a crucial role in advancing the understanding of MSMEs' adaptation to technological development. It is important to take into account the perspectives of MSMEs regarding the adoption of QRIS, aiming to provide convenience for customers and enhance their businesses. While previous studies have mainly concentrated on customers' views on adopting specific tools, this research uniquely focuses on exploring the factors that influence the adoption of a specific digital payment method from the standpoint of MSMEs.

This research aimed to determine the factors influencing the Interest in using the Quick Response Indonesian Standard (QRIS) among SMEs in the food and beverage sector in DKI Jakarta using the Technology Acceptance Model (TAM). This study derives the variables from TAM and includes financial literacy. Out of the six hypotheses tested, four were found to be significant or accepted. The accepted hypotheses are the perceived usefulness (Perceived Usefulness) on the Interest in using QRIS, perceived ease of use (Perceived Ease of Use) on the Interest in using QRIS, income on the Interest in using QRIS, and perceived risk (Perceived Risk) on the Interest in using QRIS. There were two hypotheses that were not significant or rejected. The rejected hypotheses are perceived trust (Perceived Trust) on the Interest in using QRIS and financial literacy in the Interest in using QRIS. This is in line with the relatively low level of financial literacy in Indonesia. This research only explores SMEs in one particular area and examines limited variables. Future research may explore more variables derived from TAM and include more observed areas.

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