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Factors Influencing the Adoption of QRIS Digital Payments in MSMEs

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ABSTRACT

This study examines factors influencing the adoption of QRIS digital payments in MSMEs in West Jakarta. QRIS (Quick Response Code Indonesian Standard) standardises QR codes for easier transactions. Utilising the Unified Theory of Acceptance and Use of Technology (UTAUT) framework, this research investigates the impact of Performance Expectancy, Effort Expectancy, and Financial Literacy on Behavioural Intention to use QRIS. Data were collected via a survey of MSME owners using QRIS and analysed with SmartPLS software using the Partial Least Squares (PLS) method. Findings indicate that Performance Expectancy, Effort Expectancy, and Financial Literacy significantly influence Behavioural Intention. This research contributes to understanding digital payment technology adoption among MSMEs and provides insights for policy development to boost QRIS use. Future research should expand geographic coverage, sample size, and explore additional financial technologies to understand adoption challenges and opportunities more comprehensively.

Keywords: *Financial Literacy, MSMEs, Technology Adoption, UTAUT.*

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INTRODUCTION

Technological development is something that must occur along with the times (Ariyanto, 2021). Technological developments are utilised by various sectors to improve their operational efficiency. The banking sector, which plays an important role in the economy, continues to innovate by utilising technological and information developments to develop its banking products and services, such as savings, credit, debit and credit cards, and others (Supartoyo et al., 2018). In accordance with regulations set by Bank Indonesia. One way to implement information technology and digital economic growth is to Implement non-cash payments. The efficiency of electr onic money can be seen from its ease and speed in making transactions. It can be seen from the table of the number of electronic money transactions in 2022 and 2023 below:

Table 1. Number of Electronic Money Transactions in 2022 and 2023

Period	Transaction Value (IDR Trillion)	Total Balance (IDR Trillion)
2022	296,4	287,5
2023 (until November)	326,8	311,2

Source: Bank Indonesia, 2023

Table 1 shows that the number of electronic money transactions continues to increase as electronic money has become one of the most popular non-cash payment instruments in Indonesia. Along with the development of technology and the needs of society, QRIS (Quick Response Code Indonesian Standard) is present as an easier and more practical payment solution. The use of Quick Response (QR) based digital payment systems itself has been massively adopted in various countries. The Middle East and North Africa (MENA) which consists of African countries has encouraged the use of various digital-based payment platforms (Mouna & Jarboui, 2022). Vietnam is also experiencing rapid development with an increase to 20,000 vendors accepting QR payments by 2019 (Le, 2022).

The majority of banks and vendors in Pakistan have implemented QR-based financial services. This has been further fuelled by the pandemic. China as a country with extensive prevalence of smartphone users has been recognised as the country with the largest number of QR payment user base in the world (Jiang et al., 2021). Turkey as a developing country has been trying to encourage the use of QR through its central bank's support of QR payment types (Türker et al., 2022). With these various advantages, QRIS is an ideal payment solution for people in today's digital era. QRIS is expected to drive economic growth and increase financial inclusion in Indonesia. International organisation OpenGov Asia considers QRIS to have contributed to digital transformation that benefits society. QRIS is considered a powerful tool that can support digitalisation and regional integration (Bank Indonesia, 2020).

The use of QRIS in Indonesia is one of the rapid technological developments. It can be seen from the table of the number of QRIS application users and their growth from 2019 to 2023 below:

Table 2. Number of QRIS Users from 2019 to 2023

YEAR	NUMBER OF QRIS USERS (MILLION)	GROWTH
2019	2,1	-
2020	5,8	176%
2021	10,1	74%
2022	28,75	185%
2023 (October)	43,44	51%

Source: Bank Indonesia, 2023

Based on table 2. QRIS users continue to experience significant growth every year. This shows that Indonesian people are increasingly accustomed to using QRIS as a digital payment tool. Along with technological developments and community needs, MSMEs (Micro, Small and Medium Enterprises) began to utilise QRIS to increase the efficiency and competitiveness of their businesses in the digital era. Cooperation between micro-entrepreneurs and QRIS can increase MSME accessibility to non-cash payments. The large number of micro businesses in Indonesia shows

considerable potential for the banking sector. This is because MSMEs are one of the main pillars of the Indonesian economy, absorb a lot of labour, and create jobs. There are some drawbacks to QRIS, firstly there are transaction fees. Since 1 July 2023, Bank Indonesia (BI) has imposed an MDR for QRIS transactions of 0.3% of the transaction value (OJK, 2022). Previously, the 0.3% QRIS MDR caused various responses from the public and MSMEs.

Second, security. Cybercrime and fraud are always a risk in digital transactions. Therefore, MSMEs need to ensure that they use QRIS from trusted, secure providers and need to be careful of fraud modes on behalf of QRIS. Third, dependency on technology. Internet disruptions or device malfunctions can hinder the use of QRIS. MSMEs need to have QRIS compatible devices and ensure a stable internet connection. Since not all MSMEs have access to adequate technical support to assist them in using QRIS. This can make it difficult for MSMEs to overcome technical issues that may occur.

Fourth, based on the 2022 National Survey on Financial Literacy and Inclusion (SNLIK): Indonesians are increasingly aware of the importance of finance and increasingly understand financial products and services. This shows that there is a significant increase in the Financial Literacy Index in 2023 compared to 2022, from 49.68% to 59.28% (OJK, 2022). In addition, more and more people are using financial products and services, such as savings, money transfers, and payments. This shows that the Financial Inclusion Index also increased in 2023, from 83.10% to 85.10% (OJK, 2022).

In research Kayali & Alaaraj (2020), found that Performance Expectancy has a significant effect on BI. This means that the higher the expectations and ease that a person feels in using a technology, the higher their intention to use the technology. However, in research Zidan & Auliya (2023) shows that the Performance Expectancy variable, namely the use of the QRIS System, does not help in improving their work.

Effort Expectancy is the user's expectation of the ease of using technology (Venkatesh et al., 2012). When users feel comfortable when using Digital Payment, it will increase their expectations to use technology to improve their performance (Martins et al., 2014). However, in research Butarbutar et al. (2022). Effort Expectancy does not have a significant effect on Behavior Intention When certain MSME players and consumers encounter difficulties while making online payments using QRIS, it can create a negative impression that subsequently influences their inclination to utilize the payment system again.

Financial Literacy is the knowledge of the underlying facts, concepts, principles and technological tools to be smart in using money (Garman & Forgue, 2010). Based on the National Survey of Financial Literacy and Inclusion in 2022, it shows that there will be a significant increase in the Financial Literacy Index in 2023 by 9.6% (OJK, 2022). and the development of financial technology that is related to the results of research Marhamah (2023) which shows that a high level of financial literacy will have a positive impact on the decision to use QRIS. Users who have a good understanding of basic financial concepts and principles tend to trust and actively use QRIS in their financial transactions.

Based on the phenomena, problems, inconsistencies of previous research, this research is expected to provide a new perspective and develop ways of thinking and implementing the theory that has been learned. This research is expected to add information and provide input to improve customer satisfaction and operational efficiency through the use of appropriate technology. This research is expected to help analyse the use of QRIS by MSMEs so as to identify risks, evaluate effectiveness, and design regulations that support and protect consumers. For the public, this research can increase understanding of the benefits of QRIS, such as convenience, security, and efficiency in transactions, and provide advice for MSMEs who want to implement a digital payment system.

THEORETICAL REVIEW

Theory of Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a theoretical framework that elucidates the determinants that impact the acceptance and utilization of technology by individuals or organizations. The central idea of UTAUT is the acceptance of technology, which refers to the extent to which an individual is willing to adopt and utilize specific technological advancements. Venkatesh et al. (2012) developed the UTAUT theory of information technology acceptance (IT acceptance) theory in 2012 with the aim of providing criteria or variables that affect IT acceptance by users. Initially, there were eight criteria that determine IT acceptance. Then, these criteria were reviewed and grouped based on similarities, and validated into four main criteria. These four main criteria became known as UTAUT Theory.

UTAUT theory explains that a person's belief in the benefits and ease of using an information technology system is a major factor in the technology adoption model in an organisation. This theory also states that there are determining factors that become a reference for a person's attitude towards using a particular system. These factors will ultimately determine a person's intention to use the system and produce real usage behaviour (Mahendra et al., 2017). UTAUT theory can help understand the factors that influence the adoption and use of QRIS. By understanding these factors, efforts can be made to increase the adoption rate of QRIS and provide benefits to the community and MSMEs in Indonesia.

Quick Response Code Indonesian Standard (QRIS)

Quick Response Code Indonesian Standard (QRIS) is the standardisation of payments using the QR Code method from Bank Indonesia (Bank Indonesia, 2020). Along with the times, payment tools continue to transform. In the past, humans used cash as the main medium of exchange. Now, various non-cash alternatives have developed rapidly, such as electronic money. These changes reflect the advancement of technology and modernisation in human life and bring a lot of convenience and efficiency in transactions.

Based on research results Aini et al. (2018) additional rules are necessary to govern digital economic innovation matters that can extend to even the most minute areas, such as PBI, in order to manage QRIS users. Therefore, MSMEs can contribute to fostering the growth of the digital economy in Indonesia. The utility and ease of QRIS have a substantial impact on the efficiency of digital payments (Rangkuti & Vionita, 2021).

Micro, Small and Medium Enterprises (MSMEs)

Micro, Small, and Medium Enterprises (MSMEs) are businesses that have an important role in the national economy. MSMEs in Indonesia are defined based on Law No. 20/2008 on Micro, Small, and Medium Enterprises. Based on the Law, MSMEs are classified based on assets and annual turnover as follows: Firstly, micro enterprises are defined as businesses with assets valued at less than IDR 50 million, excluding the value of land and buildings used for business purposes. The maximum annual turnover is IDR 300 million. Second Small Enterprises refers to businesses with assets valued between IDR 50 million and IDR 500 million, excluding the value of land and buildings used for business purposes. Annual revenue exceeding IDR 300 million but not exceeding IDR 2.5 billion. Thirdly, Medium Enterprises are defined as businesses with assets ranging from IDR 500 million to IDR 10 billion, excluding the value of land and buildings used for business purposes. Annual revenue above Rp 2.5 billion up to Rp 50 billion.

Performance Expectancy

Performance expectancy is a component of the UTAUT framework designed to assess an individual's belief in the effectiveness of a system in enhancing their job performance. According to Venkatesh et al. (2012) performance expectancy refers to the extent to which an individual believes that utilizing a system will contribute to improved performance outcomes in the workplace.

Effort Expectancy

Effort expectancy is the user's belief that a system can help them complete tasks more easily (Venkatesh et al., 2012). The easier a system is to use, the less effort it takes to complete tasks with it. Conversely, systems that are difficult to use will require higher effort. In other words, effort expectancy reflects the level of ease of using a system and the effort required to complete tasks with the system. Users' belief that the system can help them save time and effort.

Financial Literacy

Financial Literacy is defined as the ability to manage personal finances (Chen & Volpe, 2002). Financial literacy refers to the understanding of facts, concepts, principles, and technical tools that are essential for making intelligent financial decisions (Garman & Forgue, 2010). Not only that, Financial Literacy is knowledge and understanding of finance that is useful for making the right decisions in choosing financial products and services (Hasan et al., 2021).

Behavioural Intention

Behaviour Intention is a person's desire, willingness, or motivation to take certain actions in the future. Behaviour Intention is the level of user desire to use QRIS as a digital payment medium. Behaviour Intention is used to measure how much users want to use QRIS. A person's intention arises because of internal and external influences (Rahman & Dewantara, 2017).

Hypothesis Development

Effect of Performance Expectancy on Behaviour Intention

Performance expectancy is an individual's belief that the use of technology will provide benefits and improve the performance of its users, or the ability to obtain significant benefits after using a system. A person's intention arises because of internal and external influences (Rahman & Dewantara, 2017). Based on research conducted by conducted on 100 small and medium enterprises (MSMEs), performance expectancy affects behaviour intention. Research conducted by Hidayatullah et al. (2020) on Mobile Banking users in Malang with a sample size of 135 people also shows that performance expectancy affects behaviour intention. Research conducted Hung et al. (2019) on mobile payment users in Cambodia shows that performance expectancy has a significant effect on behaviour intention. The same results were also found in research (Gupta & Arora, 2020; Amarullah et al., 2021; Al-saedi et al., 2020; Arianita et al., n.d.) states that performance expectancy has a significant effect on behaviour intention. Based on the grand theory and previous research, the hypothesis formed is as follows:

H1: Performance expectancy affects behaviour intention.

Effect of Effort Expectancy on Behaviour Intention

Based on the Unified Theory of acceptance and use of technology, effort expectancy is the ease with which individuals learn and use technology. Meanwhile, a person's intention arises because of internal and external influences (Rahman & Dewantara, 2017).

Based on research conducted by (Suyanto et al., 2024; Hidayatullah et al., 2020; Hidayat et al., 2023; Hung et al., 2019; Tamilselvi & Balaji, 2019; Wardani & Masdiantini, 2022) It was found that effort expectancy has a significant effect on behaviour intention. Based on the grand theory and previous research, the hypothesis formed is as follows:

H2: Effort expectancy affects behaviour intention.

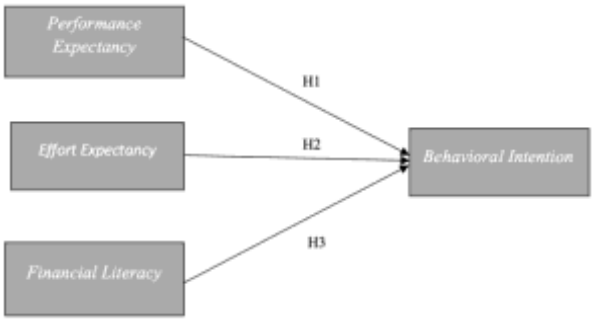
Effect of Financial Literacy on Behaviour Intention

Based on the Unified Theory of acceptance and use of technology, behaviour intention is s person's intention arises because of internal and external influences (Rahman & Dewantara, 2017). Financial literacy encompasses the knowledge and comprehension of factual information, conceptual understanding, fundamental principles, and technological skills that are necessary for making informed and astute financial choices (Garman & Forgue, 2010).

Previous studies that have examined the effect of financial literacy on Behavioural Intention to Use include those conducted by (Foster et al., 2022; Anggriani et al., 2023; Muhome Matita & Chauma, 2021; Satoto & Putra, 2021) which states that financial literacy has a positive and significant effect on Intention to Use. This means that when financial literacy is high, MSME actors are more skilled in managing finances and have more intention to use financial products/services. Based on the grand theory and previous research, the hypothesis formed is as follows:

H3: Financial Literacy affects Behavioural Intention.

From the explanations in hypothesis development, the following research theoretical framework is obtained:



Source: Data processed by researchers, 2024

Figure 1. Conceptual Framework

METHODOLOGY

The research adopted a quantitative approach, specifically utilizing a survey research design. The primary research instrument employed was a questionnaire, which was delivered to actors involved in Micro, Small, and Medium Enterprises (MSMEs). The study population comprises data obtained from the Office of Industry Trade Cooperatives Small and Medium Trade Industries (PPKUKM) in West Jakarta. The population derived from the April data consists of 2,104 Micro, Small, and Medium Enterprises (MSMEs) that utilize Quick Response Code Indonesian Standard (QRIS). The researchers employed a non-probability sampling strategy, specifically convenience sampling, based on practicality and ease of data collecting. The data underwent processing and analysis using the SmartPLS program, employing the Partial Least Squares (PLS) method. The study utilizes the SEM-PLS approach, following the procedural procedures outlined by Musyaffi et al. (2022) and Hair & Alamer (2022). In order to ascertain the quantity of samples, researchers employed the Slovin Formula in the following manner:

$$n = \frac{N}{1 + n(e)^2} = \frac{2.104}{1 + 2.104(0,1)^2} = 95,46 \text{ rounded to } 96$$

From this calculation, which is said to be technically representative, the sample in this study with an error rate of 10% is 96 respondents.

Variable Operationalisation

Performance expectancy is a crucial idea for comprehending the adoption and utilization of technology. It pertains to the personal convictions that utilizing specific technologies will yield advantages and enhance one's ability to accomplish objectives. Effort Expectancy refers to the level of ease with which a system can be used, which in turn can decrease the amount of effort required to use the system. Financial literacy refers to the acquisition of information and comprehension of financial ideas, which enables individuals to make informed and effective financial decisions. Moreover, possessing financial literacy can enhance one's financial well-being and is correlated with an individual's capacity to handle money. Behaviour intention refers to an individual's inclination, readiness, or drive to engage in specific acts in the future as a result of their past experiences and level of contentment. Below is a table that presents the operationalization of each variable:

Table 3. Variable Operationalisation

Variables	Indicators	Scale
Performance Expectancy Venkatesh et al. (2012)	Perceived Usefullness	Likert
	Extrinsic Motivation	
	Job Fit	
	Relative Advantage	
	Outcome Expectation	
Effort Expectancy Venkatesh et al. (2012)	Perceived ease of use	
	Ease of Use	
	Complexity	
Financial Literacy Kozup & Hogarth (2008)	Knowledge	
	Skill	
	Behaviour	
	Affecting Factors	
Behavioural Intention Venkatesh et al. (2012)	Future use	
	Usage compared to other methods	
	Use for business purposes	

Source: Data Processed by Researchers, 2024

RESULTS AND DISCUSSION

Descriptive Statistics

This study uses descriptive statistics to describe the characteristics of all variables analysed. The variables are divided into two categories: independent variables (Performance Expectancy (X1), Effort Expectancy (X2), and Financial Literacy (X3)) and dependent variables (Behavioural Intention (Y)). Each variable is measured by a Likert scale, which ranges from 1 (Strongly Disagree) to 5 (Strongly Agree) for the answers of each respondent in this study. The results of descriptive analysis of each variable in this study are as follows:

Table 4. Descriptive Statistics

Indicators	Mean	Criteria
Performance Expectancy (X1)	3.70	Agree
Effort Expectancy (X2)	3.64	Agree
Financial Literacy (X3)	3.68	Agree
Behavioural Intention (Y)	3.73	Strongly Agree

Source: Data Processed by Researchers, 2024

Based on table 3. shows that the Behavioural Intention variable has the highest mean value of 3.73 with strongly agree criteria. This shows that respondents have a strong intention to continue using QRIS. This reflects their satisfaction with the benefits obtained from using QRIS.

Convergent Validity Test

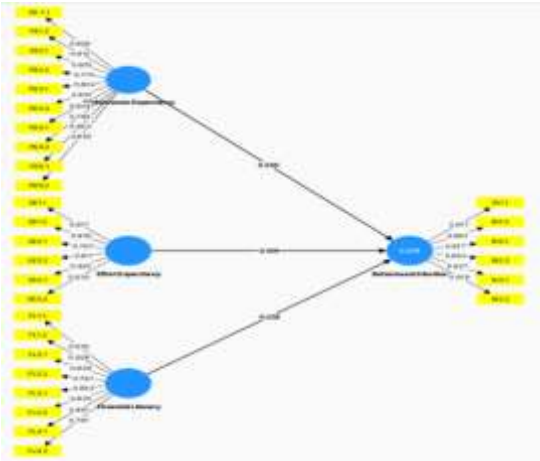
According to Hair & Alamer (2022) explains that the convergence value of Average Variance Extracted (AVE). The minimum acceptable AVE value is 0.50. The following are the results of the calculation of the AVE value:

Table 5. Results Average variance extracted (AVE)

Variables	Average variance extracted (AVE)
Behavioural Intention	0,696
Performance Expectancy	0,666
Effort Expectancy	0,660
Financial Literacy	0,686

Source: Data Processed by Researchers, 2024

Table 5. is the result of Average Variance Extracted (AVE) which shows a value of more than 0.5, it can be concluded that the convergent validity in this study as a whole has been fulfilled and is considered valid. The convergent validity analysis in this study was carried out using the PLS SEM model. The following is Figure 4.1 of the outer loading results after the calculation for each indicator of the five variables studied:



Source: Processed by Researchers (2024)

Outer Loading Results After Calculation

Discriminant Validity Test

Henseler et al. (2015) proposed the use of heterotrait-monotrait ratio (HTMT) as a preferred measure. Elevated HTMT readings suggest the presence of discriminant validity concerns. The threshold value for conceptually comparable constructs is set at 0.90, whereas for more different constructs it is set at 0.85. Researchers computed the Heterotrait Monotrait Ratio (HTMT) value, which is presented in the subsequent table:

Table 6. Heterotrait Monotrait Ratio (HTMT) results

	Behavioural Intention (Y)	Effort Expectancy (X2)	Financial Literacy (X3)	Performance Expectancy (X1)
Behavioural Intention				
Effort Expectancy	0,533			
Financial Literacy	0,508	0,605		
Performance Expectancy	0,535	0,562	0,465	

Source: Data Processed by Researchers, 2024

Based on table 6, the HTMT value for all variables is below 0.9. Thus, all variables in this study fulfil the validity criteria and are considered valid.

Reliability Test

There are two standards that can be used to measure reliability, namely Cronbach's Alpha and Composite Reliability. The minimum standard applied for the Cronbach's Alpha value is 0.6 while for the Composite Reliability value is 0.7. The following are the results of construct reliability and validity:

Table 7. Construct Reliability and Validity Results

Variables	Cronbach's alpha	Composite reliability
Behavioural Intention (Y)	0,913	0,932
Performance Expectancy (X1)	0,945	0,952
Effort Expectancy (X2)	0,898	0,921
Financial Literacy (X3)	0,935	0,946

Source: Data Processed by Researchers, 2024

Based on table 7. the test results show that the Performance Expectancy (X1), Effort Expectancy (X2), Financial Literacy (X3), and Behavioural Intention (Y) variables have Cronbach's alpha and composite reliability values ≥ 0.7, and AVE values ≥ 0.5. Therefore, it can be concluded that all variables meet the reliability requirements.

Variance Inflation Factor (VIF) Test

To detect the presence of multicollinearity in the model, multicollinearity occurs when the independent variables (predictors) in the model are highly correlated. A high VIF value (≥ 10) indicates multicollinearity that needs to be addressed. Conversely, a VIF value of < 5 indicates no significant multicollinearity. The following are the results of the Variance Inflation Factor (VIF) test:

Table 8. Variance Inflation Factor Test Results

X1	VIF	X2	VIF	X3	VIF	Y	VIF
PE1.1	3,057	EE1.1	2,247	FL1.1	2,737	BI1.1	2,319
PE1.2	2,917	EE1.2	2,896	FL1.2	2,995	BI1.2	2,956
PE2.1	4,277	EE2.1	2,346	FL2.1	2,705	BI2.1	2,323
PE2.2	3,202	EE2.2	2,385	FL2.2	3,112	BI2.2	2,469
PE3.1	3,303	EE3.1	2,491	FL3.1	3,376	BI3.1	2,530
PE3.2	3,059	EE3.2	2,665	FL3.2	2,875	BI3.2	2,677
PE4.1	2,703			FL4.1	3,351		
PE4.2	3,060			FL4.2	2,958		
PE5.1	2,686						
PE5.2	3,805						

Source: Data Processed by Researchers, 2024

Based on the data in table 8. shows that each indicator, namely Performance Expectancy (X1), Effort Expectancy (X2), Financial Literacy (X3), and Behavioural Intention (Y), has a VIF value that is less than 10.00. Therefore, it can be concluded that there is no multicollinearity problem in this study.

R Square Test

The criteria that can be used are a value of 0.67 or more indicates a strong influence, 0.33 or more indicates a moderate influence, and 0.19 indicates a weak influence. The following are the results of the R-square calculation:

Table 9. R-Square Calculation Results

Variables	R-square	Adjusted R-square
Behavioural Intention (Y)	0,376	0,357

Source: Data Processed by Researchers, 2024

Based on table 9. shows that the coefficient of determination (R Square) is 0.376, which is included in the medium criteria. This indicates that there is an influence of Performance Expectancy (X1), Effort Expectancy (X2), Financial Literacy (X3), and Behavioural Intention (Y) of 37.6%. Meanwhile, 62.4% of the variation has been influenced by other variables not examined in this study.

F Square Test

A value of 0.35 or more indicates a strong influence, 0.15 or more indicates a moderate influence, and 0.02 or more indicates a weak influence. The following are the results of the Effect Size calculation:

Table 10. Effect Size Results

Variables	f^2	Description
Behavioural Intention		
Performance Expectancy	0,102	Small Effect
Effort Expectancy	0,037	Small Effect
Financial Literacy	0,057	Small Effect

Source: Data Processed by Researchers, 2024

Based on table 10. shows that the Effect Size value is below 0.15 which means it has a weak influence. This indicates that all variables have a small effect in this study.

Hypothesis Test

The t-test statistic is used to see the significance in the p-value output, which is below 0.10, indicating a significant effect. In addition, this method can be applied by checking the crucial value of t-statistics. If the t-statistics value exceeds 1.66, then the hypothesis can be accepted. The following are the results of the path coefficients:

Table 11. Results of Path Coefficients

	Hypothesis	Original sample (O)	P values	Description
H1	**X1 -> Y**	0.305	0.006	Accepted
H2	**X2 -> Y**	0.199	0.040	Accepted
H3	**X3 -> Y**	0.238	0.019	Accepted

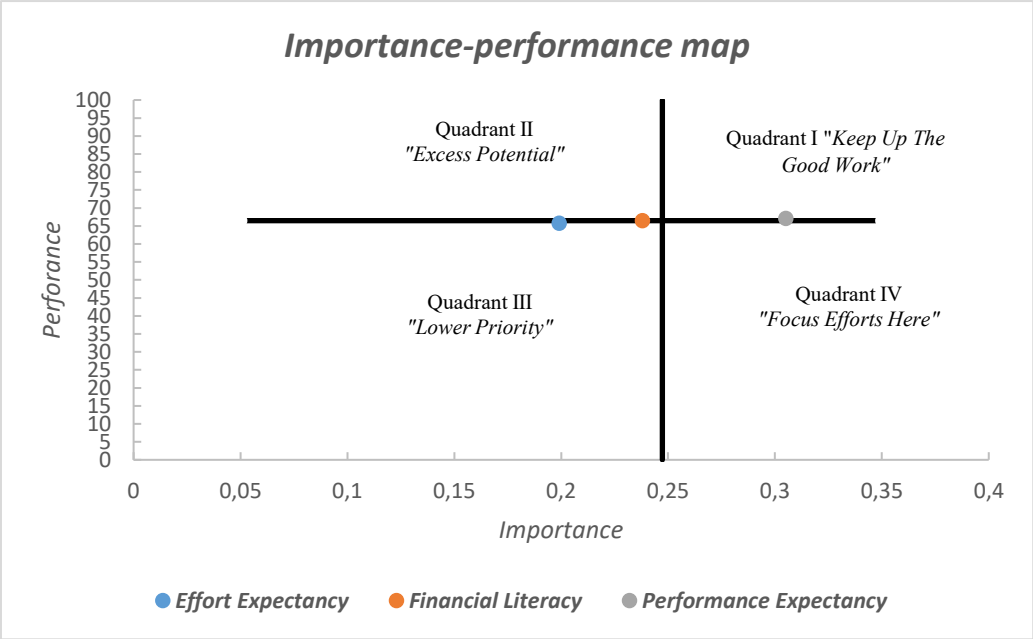
Source: Data Processed by Researchers, (2024)

Based on the calculations in table 11. shows the results of the research hypothesis test held by looking at the t-statistics value (≥1.66) and the significance value (≤ 0.10) as follows:

a) The Performance Expectancy (X1) variable with Behavioural Intention (Y) has a p-value of 0.006, meaning that H1 is accepted.
b) The Effort Expectancy (X2) variable with Behavioural Intention (Y) has a p-value of 0.040, meaning that H2 is accepted.
c) The Financial Literacy variable (X3) with Behavioural Intention (Y) the p-value is 0.019, meaning that H3 is accepted.

Importance-performance map analysis (IPMA)

The plotted variables are then categorised into four quadrants based on their importance and performance. In quadrant I "Keep Up The Good Work" here there are variables that are important and perform well. This variable is a top priority and must be maintained or improved. In quadrant II "Excess Potential" the variables in this quadrant are important but underperforming. Efforts should be focused on improving the performance of this variable. In quadrant III "Lower Priority" variables here are not important but perform well. Consider reducing focus or resources on this variable, but still monitor its performance. In quadrant IV "Focus Efforts Here" this variable is not important and performs poorly. Consider eliminating or reducing the focus on this variable. The following is an Importance-Performance Analysis (IPMA) analysis:



Source: Processed by Researchers (2024)

Figure 3. Results of Importance-performance map analysis

Based on Figure 3, the Importance-Performance Analysis (IPMA) analysis shows the influence of three exogenous latent variables on the Behavioural Intention of QRIS users in West Jakarta MSMEs. With the following explanation:

1. Performance Expectancy occupies the position of quadrant 1 "Keep Up The Good Work".
2. Financial Literacy is in quadrant 2 "Excess Potential".
3. Effort Expectancy is located between quadrant 2 "Excess Potential" & quadrant 3 "Lower Priority".

Effect of Performance Expectancy on Behavioural Intention

The results showed that the first hypothesis (H1) which states that Performance Expectancy has an influence on the Behavioural Intention of QRIS users in West Jakarta MSMEs can be accepted, the higher the UMKM belief that QRIS will improve their business performance, the higher their intention to use QRIS. The data shows that the majority of respondents believe QRIS greatly improves the efficiency of business transactions although there are some doubts regarding other benefits. Some perceived obstacles include lack of understanding of QRIS benefits, performance uncertainty, and lack of adequate infrastructure such as stable internet access.

The results of this study align with other research investigating the correlation between Performance Expectancy and Behavioural Intention. Such as research conducted by (Amarullah et al., 2021; Lonardi & Legowo, 2021; Butarbutar et al., 2022) said the same result that Performance Expectancy affects Behaviour Intention. The results demonstrate that performance expectations play a crucial role in motivating the behavioral intention of payment systems utilizing QRIS.

Effect of Effort Expectancy on Behavioural Intention

The results showed that the second hypothesis (H2) which states that Effort Expectancy has an influence on the Behavioural Intention of QRIS users in West Jakarta MSMEs can be accepted, the easier MSMEs feel in using QRIS, the greater their intention to use it. Descriptive statistics show that the majority of respondents find QRIS relatively easy to use despite some initial obstacles such as inconvenience and lack of technical training.

The results of this study align with other research investigating the correlation between Effort Expectancy and Behavioural Intention. Such as research conducted by (Ridwan, 2022; Wardani & Masdiantini, 2022; Butarbutar et al., 2022) The same study also said that the Effort Expectancy variable affects Behaviour Intention. This proves that in addition to the Performance Expectancy

aspect, Effort Expectancy In addition, it is crucial to consider the role of incentives in promoting the use of the QRIS payment system.

Effect of Financial Literacy on Behavioural Intention

The results show that the third hypothesis (H3), which states that FL affects the BI of QRIS users in West Jakarta MSMEs, is accepted. Descriptive statistics show the majority of respondents have a good understanding of financial literacy, which supports the intention to use QRIS, although there are obstacles such as low financial literacy in some respondents.

The findings of this study are consistent with previous studies examining the relationship between Financial Literacy and Behavioural Intention. Like the latest research conducted by (Octavianingrum et al., 2023; Marhamah, 2023; Wicaksono, 2022) The same study also said that the Financial Literacy variable affects Behaviour Intention to use QRIS. The results showed that a high level of financial literacy will have a positive impact on the decision to use QRIS.

CONCLUSION AND RECOMMENDATIONS

Conclusion

After going through the stages of analysis and testing the relationship between variables, this study resulted in several conclusions, namely:

1. The first hypothesis (H1) is accepted, indicating that Performance Expectancy has an influence on Behavioural Intention to use QRIS in West Jakarta MSMEs. MSMEs that perceive QRIS as a tool that can improve their operational efficiency and effectiveness are more likely to adopt this technology. This reflects the importance of understanding the direct benefits of technology towards improving business performance. Education and demonstration of the tangible benefits of QRIS need to be strengthened, so that MSMEs can see firsthand how this technology can optimise their business processes.

2. The second hypothesis (H2) is accepted, stating that Effort Expectancy also has an influence on Behavioural Intention to use QRIS in West Jakarta MSMEs. MSMEs that find QRIS easy to learn and use are more willing to implement it in their daily activities. This emphasises that technology adoption is highly dependent on how intuitive and user-friendly the technology is. Technology developers and QRIS service providers should focus on easy-to-use interfaces and provide adequate technical support to help MSMEs in the adoption process of this technology.

3. The third hypothesis (H3) is accepted, stating that Financial Literacy also has an influence on Behavioural Intention to use QRIS in West Jakarta MSMEs. MSMEs with good financial literacy are better able to understand the financial benefits of using QRIS, such as better financial management and easier access to various financial services. Programmes to improve financial literacy should be a priority, as a good understanding of finance will encourage the adoption of technologies that support financial efficiency and transparency.

Recommendations for Future Research

Based on the results of the analysis and the limitations identified, the following are recommendations for future research:

1. Expanding geographical coverage. Future research should cover different regions with different characteristics to increase the generalisability of the findings and provide a more comprehensive understanding of financial technology adoption in different contexts.

2. Increase in sample size and integration of additional variables. Increasing the sample size will improve the representativeness of the results and external validity. With a larger and more diverse sample, the research findings will be more generalisable to a wider population of MSMEs and future research needs to integrate additional variables such as government support, regulation, market conditions and organisational culture. This will provide a deeper insight into the factors that influence technology adoption.

3. Focus on various types of financial technology. Future research should explore different types of financial technologies other than QRIS. This will help understand the different challenges and opportunities in adopting various financial technologies by MSMEs.

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