

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMEs ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati^{1*}, M. Rizky Wijaya²

^{1,2} Management Study Program / Universitas Potensi Utama, Medan, Indonesia

E-mail: mahfuzahmelati.ak2@gmail.com ¹, wijayarizky98@gmail.com ^{2*}

Received: 01/08/2026 | **Revised:** 10/08/2026 | **Accepted:** 26/08/2026 | **Published:** 06/10/2026

Abstract

The use of the Quick Response Code Indonesian Standard (QRIS) as a digital payment method has continued to grow among Micro, Small, and Medium Enterprises (MSMEs). However, MSMEs' decisions to use QRIS may be influenced by various factors, such as financial literacy, trust in digital payment systems, and perceived security in conducting transactions. This study aims to analyze the effects of financial literacy, trust, and perceived security on the decision to use QRIS among MSMEs in Medan City. This study employs a quantitative approach with a sample of 100 MSMEs assisted by the Medan City Cooperative Office. Data were collected through questionnaires using a Likert scale. The results show that financial literacy has a positive and significant effect on the decision to use QRIS, trust has a positive and significant effect on the decision to use QRIS, and perceived security has a positive and significant effect on the decision to use QRIS. Simultaneously, financial literacy, trust, and perceived security have a significant effect on the decision to use QRIS among MSMEs assisted by the Medan City Cooperative Office.

Keywords: Financial Literacy, Trust, Perceived Security, Usage Decision, QRIS, MSMEs

INTRODUCTION

The advancement of digital technology has brought about significant changes in various economic activities, including how people conduct payment transactions. One digital payment innovation gaining traction in Indonesia is the Quick Response Indonesian Standard (QRIS), a QR code-based payment system that enables businesses and consumers to carry out transactions quickly and conveniently. For Micro, Small, and Medium Enterprises (MSMEs), adopting QRIS offers opportunities to enhance transaction efficiency, expand payment access, and keep pace with the evolving digital economy. However, despite the conveniences QRIS offers, some MSMEs have yet to fully utilize the service. Several factors influence the decision to adopt QRIS, including financial literacy levels, trust in digital payment systems, and perceptions regarding transaction security. Adequate financial literacy helps MSME owners understand the benefits and usage of digital services. Furthermore, trust in the system and the assurance that transactions are secure are crucial considerations before adopting QRIS.

Tabel 1. MSME criteria based on Government Regulation (PP) No. 7 of 2021

Criteria	Micro Enterprise	Small Enterprise	Medium Enterprise
Omzet	1 Miliar - 2 Miliar	2 Miliar- 15 Miliar	15 Miliar-50 Miliar
Asset	-	-	-
Owner's equity	s.d 1 Miliar	Rp 1-5 Miliar	Rp 5-10 Miliar

Sumber: UKMINDONESIA.ID

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

Under Government Regulation No. 7 of 2021, MSMEs are classified based on annual turnover and business capital. Micro-enterprises have an annual turnover of IDR 1–2 billion, small enterprises IDR 2–15 billion, and medium enterprises IDR 15–50 billion. This classification serves as the basis for formulating policies and MSME empowerment initiatives (Government of the Republic of Indonesia, 2021). As a trade hub in North Sumatra, Medan City exhibits dynamic MSME development. The wholesale and retail trade and motor vehicle repair sector is the largest employer, accounting for 26.02% of the workforce—followed by the construction sector at 19.28%—with both sectors largely driven by MSME activities (Ginting & Nur, 2024).

Table 2. MSME Growth Data in Medan City

Years	2019	2020	2021	2022	2023	2024
Number of MSMEs	1.206	10.235	12.457	15.953	40.624	46.807
Growth (%)	-	748,01%	21,73%	28,01%	154,67%	15,22%

Source: Statistics Indonesia (BPS) (2025)

Based on Table 2, the number of MSMEs in Medan City experienced a significant increase between 2019 and 2024. The number of MSMEs rose from 1,206 units in 2019 to 46,807 units in 2024. This growth was driven by post-pandemic economic recovery, government support, and increased digital adoption among MSME players. Data from the Medan City Cooperative Agency for 2025 indicates that the number of MSMEs reached 194,861 business units, with 1,284 units operating in the food and beverage sector. Advancements in digital technology have also spurred changes in payment systems through financial technology (fintech). Digital payments are increasingly utilized due to the convenience, speed, and security they offer for transactions. A key innovation is the Quick Response Code Indonesian Standard (QRIS), launched by Bank Indonesia in 2019 as the national QR payment standard to support financial inclusion and the digitalization of MSMEs (Bank Indonesia, 2019).

Table 3. Data on QRIS Usage Growth in Indonesia

Years	2019	2020	2021	2022	2023	2024	2025
Number of Merchant	500 ribu	5,1 juta	14,8 juta	23,97 juta	29,6 juta	32,71 juta	38,1 juta

Source: ASPI (aspi-indonesia.or.id) and Bank Indonesia (2026)

Based on Table 3, the use of QRIS in Indonesia has experienced significant year-on-year growth. The number of merchants rose from approximately 500,000 in 2019 to 38.1 million in 2025. This growth reflects the widening adoption of digital payments among the public and MSMEs, while also accelerating the transformation of the digital payment system in Indonesia. Preliminary survey results and interviews indicate that the decision to use QRIS among culinary MSMEs in Medan City is not yet optimal. This is evident from persistent challenges regarding the understanding of QRIS mechanisms, consistency in usage, and commitment to sustained adoption. Financial literacy is suspected to be a key factor influencing this decision, as a solid understanding of finance enables MSME owners to grasp the benefits and effective application of QRIS. Financial literacy is defined as an individual's ability to understand and apply financial knowledge to make informed decisions (Septiani & Wuryani, 2020). According to the 2024 SNLIK data, Indonesia's financial literacy index stands at 65.43%, while the financial inclusion index is 75.02%; this indicates that access to financial services exceeds the level of understanding regarding their use (OJK & BPS, 2024). This situation suggests that while some MSME owners utilize digital services like QRIS, they do not yet fully comprehend the associated benefits and risks. Consequently, financial literacy emerges as a crucial factor in driving the decision to adopt QRIS among MSMEs.

Trust reflects the user's belief that the service provider is capable of delivering a reliable system, ensuring transaction security, protecting personal data, and providing services that meet user expectations. Higher levels of trust among MSME owners in digital payment systems foster greater confidence in utilizing digital payment technologies, as owners feel assured that transaction security and risks are being effectively managed. Therefore, the higher the level of trust MSME operators have in the security, reliability, and credibility of QRIS service providers, the greater the likelihood that they will decide to use QRIS as a payment method for their business operations (Sebayang & Rahmayati, 2023).

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMEs ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

Table 4. Pre-survey Results Regarding MSME Perceptions of Security in Medan City

No	Item Statement	Yes		No		Total	
		f	%	f	%	f	%
1	I feel that transactions via QRIS are safe from the risk of fraud.	19	63,33%	11	36,66%	30	100
2	I feel that my personal data and business information are protected when using QRIS.	23	76,66%	7	23,33%	30	100
3	I feel that the risk of fraud when using QRIS is relatively low.	17	56,66%	13	43,33%	30	100
4	I feel secure accepting business payments using QRIS.	21	70%	9	30%	30	100

Source: Preliminary questionnaire data analysis results (2026)

Based on Table 4, the results of a pre-survey involving 30 respondents indicate that the perceived security of using QRIS among culinary MSMEs in Medan City is relatively good. Specifically, 63.33% of respondents considered QRIS transactions safe from fraud, 76.66% felt their personal data and business information were protected, and 70% felt secure accepting payments via QRIS. However, concerns regarding fraud risks and data security persist. Interview results also reveal that most MSME owners view QRIS as secure due to the availability of clear transaction records and the system's oversight by Bank Indonesia. Nevertheless, some business owners still perform additional checks and harbor concerns regarding data protection. These findings align with research by Rayhan, Nursaidah, and Dian (2025), which states that perceived security influences the decision to use QRIS among MSMEs. Consequently, perceived security emerges as a crucial factor influencing MSME owners' decisions to adopt QRIS; the greater the sense of security regarding the digital payment system, the higher the likelihood of its use.

This study is significant for analyzing how financial literacy, trust, and perceived security influence the decision to use QRIS among MSMEs in Medan City. It is expected to provide valuable insights for MSME owners, the government, and financial institutions in formulating more effective policies. The study will contribute to both academic and practical fields. Academically, it enriches the literature on the factors influencing QRIS adoption decisions among MSMEs. Practically, the findings are expected to serve as a foundation for MSMEs to improve their financial literacy, build confidence in the security of QRIS payment transactions, and better understand the role of perceived security in the decision to use QRIS.

Based on the background outlined above, the problem identification for this study is as follows:

1. While the financial literacy of culinary MSME operators in Medan City is reasonably good, challenges remain regarding the understanding and management of QRIS transactions.
2. Trust in QRIS among MSME operators needs to be enhanced, particularly concerning data security, system reliability, and transaction transparency.
3. Perceptions of security remain a hurdle, as some MSME operators are still concerned about the risks of fraud and data protection issues.
4. Decisions regarding QRIS adoption are not yet optimal, as some MSMEs do not fully understand the mechanism, lack consistency in usage, and have not committed to the long-term use of QRIS.

METHOD

This study employs quantitative data and examines the relationships between two or more variables. Specifically, it investigates causal relationships—connections characterized by cause and effect involving independent and dependent variables (Sugiono, 2023). The study aims to determine the influence of financial literacy, trust, and perceived security on the decision to use QRIS among MSMEs in Medan City.

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

Table 5. Validity Test Results

Variable	Item	r count	r table	Description
Financial Literacy (X1)	X1.1	0.839	0,3610	Valid
	X1.2	0.938	0,3610	Valid
	X1.3	0.890	0,3610	Valid
	X1.4	0.802	0,3610	Valid
	X1.5	0.808	0,3610	Valid
	X1.6	0.853	0,3610	Valid
	X1.7	0.765	0,3610	Valid
	X1.8	0.752	0,3610	Valid
	X2.1	0.805	0,3610	Valid
	X2.2	0.871	0,3610	Valid
	X2.3	0.756	0,3610	Valid
	X2.4	0.857	0,3610	Valid
	X2.5	0.697	0,3610	Valid
	X2.6	0.797	0,3610	Valid
	X2.7	0.871	0,3610	Valid
Trust (X2)	X2.8	0.492	0,3610	Valid
	X3.1	0.775	0,3610	Valid
	X3.2	0.820	0,3610	Valid
	X3.3	0.868	0,3610	Valid
	X3.4	0.742	0,3610	Valid
	X3.5	0.762	0,3610	Valid
	X3.6	0.785	0,3610	Valid
	X3.7	0.660	0,3610	Valid
	X3.8	0.801	0,3610	Valid
	Y1	0.856	0,3610	Valid
	Y2	0.824	0,3610	Valid
	Y3	0.681	0,3610	Valid
	Y4	0.731	0,3610	Valid
	Y5	0.712	0,3610	Valid
	Y6	0.750	0,3610	Valid
Perception of Security (X3)				
Decision Use of QRIS (Y)				

Source: Data processed in 2026

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

Validity testing was conducted by comparing the calculated r-value (r-count) with the r-table value. For 30 respondents (df = 28), the r-table value was 0.361 at the 5% significance level. An item was considered valid if the calculated r-value exceeded 0.361. Based on the test results, all items in Table 3.4 were determined to be valid.

Table 6. Reliability Test Results

Variable	Cronbach's Alpha	Reliable	Description
Financial Literacy (X1)	0.936	0,60	Reliable
Trust (X2)	0.901	0,60	Reliable
Perception of Security (X3)	0.906	0,60	Reliable
QRIS Usage Decision (Y)	0.853	0,60	Reliable

Source: Data processed in 2026

Based on the table above, all variables in this study have Cronbach's Alpha values exceeding 0.60. The highest Cronbach's Alpha value was obtained by the Financial Literacy variable (X1) at 0.936, while the lowest was obtained by the QRIS Usage Decision variable (Y) at 0.853. Thus, all research instruments are deemed reliable and suitable for further testing.

RESULTS AND DISCUSSION

Results

Statistic Descriptive Test Results

Table 7. Statistic Descriptive Test Results

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Financial Literacy	100	16	40	29,30	6,190
Trust	100	16	40	30,06	5,617
Perception of Security	100	12	40	28,98	6,090
QRIS Usage Decision	100	13	30	22,32	4,124
Valid N (listwise)	100				

Source: SPSS version 25 (2026)

Based on the table above, all variables in this study have Cronbach's Alpha values exceeding 0.60. The highest Cronbach's Alpha value was obtained by the Financial Literacy variable (X1) at 0.936, while the lowest was obtained by the QRIS Usage Decision variable (Y) at 0.853. Thus, all research instruments are deemed reliable and suitable for further testing.

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

Normality Test Results

Table 8. Kolmogorov-Smirnov Test Results

		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.12338647
Most Extreme Differences	Absolute	.071
	Positive	.061
	Negative	-.071
Test Statistic		.071
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Source: SPSS version 25 (2026)

Based on the Kolmogorov-Smirnov normality test, the results show an Asymp. Sig. (2-tailed) value of 0.200. This indicates that the Asymp. Sig. (2-tailed) value is greater than the significance level of 0.05. Therefore, it can be concluded that all variables are normally distributed.

Multicollinearity Test Results (Tolerance and VIF)

Table 9. Multicollinearity Test Results

		Coefficients ^a				Collinearity Statistics	
		Unstandardized Coefficients		Standardized Coefficients		Tolerance	VIF
Model		B	Std. Error	Beta	t		
1	(Constant)	5,116	2,070		2,471		
	Financial Literacy	,219	,057	,329	3,877	,829	1,206
	Trust	,207	,067	,282	3,115	,728	1,374
	Perception of Security	,157	,063	,232	2,511	,701	1,427

a. Dependent Variable: QRIS Usage Decision

Source: SPSS version 25 (2026)

Table 9 above demonstrates that the data is free from multicollinearity among the independent variables in the regression model. The VIF values for the independent variables are 1.206 for Financial Literacy, 1.374 for Trust, and 1.427 for Perceived Security. None of the VIF values exceed 10. Furthermore, the tolerance values are greater than 0.10, leading to the conclusion that multicollinearity is not present.

Heteroscedasticity Test Results (Glejser)

Table 10. Glejser Heteroscedasticity Test Results

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	4,718	1,246		3,787
	Financial Literacy	-,013	,034	-,043	-,395
	Trust	-,048	,040	-,141	-1,204
	Perception of Security	-,014	,038	-,046	-,385

a. Dependent Variable: Abs_res

Source: SPSS version 25 (2026)

Based on Table 4.13 and the results of the Glejser test for heteroscedasticity, it can be concluded that the Financial Literacy variable (X1) shows a significance value of 0.694 (> 0.05), the Trust variable (X2) shows a

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

significance value of 0.231 (> 0.05), and the Perceived Security variable (X3) shows a significance value of 0.701 (> 0.05). Given these results for the three independent variables, there is no indication of heteroscedasticity.

Multiple Linear Regression Test Results

Table 11. Multiple Linear Regression Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1					
	(Constant)	5,116	2,070	2,471	,015
	Financial Literacy	,219	,057	,329	,000
	Trust	,207	,067	,282	,002
	Perception of Security	,157	,063	,232	,014

a. Dependent Variable: QRIS Usage Decision

Source: SPSS version 25 (2026)

Referring to Table 11. the regression equation for the above values is:

$$Y = 5,116 + 0,219X_1 + 0,207X_2 + 0,157X_3 + e$$

The interpretation of the analysis results is as follows:

1. The constant value (a) is 5.116 (positive); this indicates that if the variables of Financial Literacy, Trust, and Perceived Security are held constant or set to zero, the value associated with the decision to use QRIS among MSMEs would increase by 5.116.
2. The regression coefficient for the Financial Literacy variable (X1) is 0.219 (positive); this means that for every one-unit increase in Financial Literacy, the value associated with the decision to use QRIS increases by 0.219.
3. The regression coefficient for the Trust variable (X2) is 0.207 (positive); this means that for every one-unit increase in Trust, the value associated with the decision to use QRIS increases by 0.207.
4. The regression coefficient for the Perceived Security variable (X3) is 0.157 (positive); this means that for every one-unit increase in Perceived Security, the value associated with the decision to use QRIS increases by 0.157.

Hypothesis Testing

Partial Test Results (t-Test)

Table 12. Partial Test Results (t-Test)

Coefficients ^a								
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero-order	Partial	Part
1								
	(Constant)	5,116	2,070	2,471	,015			
	Financial Literacy	,219	,057	,329	,000	,511	,368	,300
	Trust	,207	,067	,282	,002	,507	,303	,241
	Perception of Security	,157	,063	,232	,014	,497	,248	,194

a. Dependent Variable: QRIS Usage Decision

Source: SPSS version 25 (2026)

Based on the conducted tests, the t-test results are as follows:

1. The Financial Literacy variable (X1) yielded a calculated t-value of 3.877 (greater than the t-table value of 1.98498) with a significance value of 0.000 (less than 0.05); therefore, the first hypothesis (H₁) is accepted. This indicates that Financial Literacy has a positive and significant effect on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency.
2. The Trust variable (X2) yielded a calculated t-value of 3.115 (greater than the t-table value of 1.98498) with a significance value of 0.002 (less than 0.05); therefore, the second hypothesis (H₂) is accepted. This indicates

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

that Trust has a positive and significant effect on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency.

3. The Perceived Security variable (X3) yielded a calculated t-value of 2.511 (greater than the t-table value of 1.98498) with a significance value of 0.014 (less than 0.05); therefore, the third hypothesis (H_3) is accepted. This indicates that Perceived Security has a positive and significant effect on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency.

Simultaneous Test Results (F-Test)

Table 13. Simultaneous Test Results (F-Test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	717,961	3	239,320	23,788	,000 ^b
	Residual	965,799	96	10,060		
	Total	1683,760	99			
a. Dependent Variable: QRIS Usage Decision						
b. Predictors: (Constant), Financial Literacy, Trust, Perception of Security						

Source: SPSS version 25 (2026)

Based on the calculations in Table 4.16, the significance value is 0.000 and the calculated F-value is 23.788. The decision-making criterion is a significance level of 5% (0.05). Since the significance value (0.000) is less than α (0.05) and the calculated F-value exceeds the F-table value ($23.788 > 2.70$), it can be concluded that the variables of Financial Literacy, Trust, and Perceived Security simultaneously have a positive and significant effect on the decision to use QRIS among MSMEs under the guidance of the Medan City Cooperative Agency.

Determination Test Results

Table 14. Determination Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,653 ^a	,426	,408	3,172

a. Predictors: (Constant), Financial Literacy, Trust, Perception of Security

Source: SPSS version 25 (2026)

Based on Table 14, the Adjusted R-Square value is 0.408. This indicates that the variables of Financial Literacy, Trust, and Perceived Security collectively explain 40.8% of the variation in the decision to use QRIS among MSMEs, while the remaining 59.2% is influenced by other variables not included in this research model.

Discussion

The Influence of Financial Literacy on the Decision to Use QRIS

Based on the multiple linear regression results, Financial Literacy (X1) has a positive regression coefficient of 0.219. The partial test results show a calculated t-value of 3.877 with a significance level of 0.000 ($p < 0.05$). Thus, H_1 is accepted, indicating that Financial Literacy has a positive and significant influence on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency. Based on standardized beta $\times$ zero-order calculations, Financial Literacy contributes 16.8%, representing the largest contribution compared to Trust and Perceived Security. Descriptive analysis results show an average Financial Literacy score of 3.66, which can be categorized as reasonably good. The highest value is found in the indicator for monitoring income via QRIS, with a mean of 3.85; this indicates that MSME operators are reasonably capable of utilizing QRIS to monitor business receipts. Meanwhile, the lowest value is found in the understanding of QRIS transaction deduction fees, with a mean of 3.48. These findings suggest that respondents' understanding of transaction cost aspects still needs improvement. The research results indicate that financial literacy helps MSME operators understand digital transactions, manage receipts, record transactions, understand costs, and consider the benefits of using QRIS. The better the financial

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

literacy, the greater the likelihood that MSME operators will use QRIS as a payment method. These findings align with Palupi (2022), Putri, Lakoni, and Safrianti (2023), as well as Syamsul, Rayyani, and Amin (2023), who found a link between financial literacy and the decision to use QRIS. However, Syahrin, Marlizar, and Sulfitra (2025) found that financial literacy did not have a significant partial effect. These differences indicate that the impact of financial literacy can vary based on respondent characteristics, business type, region, and the level of technology adoption. Therefore, education and guidance regarding transaction recording, QRIS fees, financial management, and the use of financial technology need to be continuously enhanced. Thus, financial literacy emerges as a key factor influencing MSMEs supported by the Medan City Cooperative Agency in their decision to adopt QRIS.

The Influence of Trust on the Decision to Use QRIS

Based on the multiple linear regression results, Trust (X₂) has a positive regression coefficient of 0.207. The partial test results show a calculated t-value of 3.115 (exceeding the t-table value of 1.98498) and a significance level of 0.002 (below 0.05). Thus, H₂ is accepted, indicating that Trust has a positive and significant influence on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency. Based on the standardized beta $\times$ zero-order calculation, the contribution of Trust is 14.3%. Descriptive analysis shows an average Trust score of 3.76, placing it in the "fairly good" category. The highest scores were found in the indicators regarding the belief that QRIS processes transactions correctly and provides consistent service quality (each with a mean of 3.84), while the lowest score was found in the aspect of service provider honesty and transparency (mean of 3.64). These findings indicate that respondents place more trust in the technical reliability of QRIS than in the transparency of the service provider.

The research results demonstrate that trust in reliability, security, service consistency, and transaction processes can encourage MSME operators to use QRIS. Higher levels of trust correlate with a greater likelihood of business operators choosing QRIS as a digital payment method. These findings align with studies by Putri, Lakoni, and Safrianti (2023) and Asmara and Kusumadewi (2022), which highlight the importance of trust in the adoption of digital financial services. However, Agustin, Usman, and Kusno (2025) found that trust did not have a significant partial effect. Such discrepancies suggest that the influence of trust may depend on respondent characteristics, usage experience, and business environment conditions. Therefore, QRIS service providers need to enhance information transparency, system reliability, the speed of fund disbursement, and complaint handling. Thus, trust is a key factor driving the decision of MSMEs supported by the Medan City Cooperative Agency to use QRIS.

The Influence of Perceived Security on the Decision to Use QRIS

Based on the multiple linear regression results, Perceived Security (X₃) has a positive regression coefficient of 0.157. The partial test results show a calculated t-value of 2.511 (exceeding the t-table value of 1.98498) and a significance level of 0.014 (below 0.05). Thus, H₃ is accepted, indicating that Perceived Security has a positive and significant influence on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency. Based on the standardized beta $\times$ zero-order calculation, the contribution of Perceived Security is 11.5%, which is the smallest contribution compared to Financial Literacy and Trust. Descriptive analysis results show an average Perceived Security score of 3.62, placing it in the "quite good" category. The highest score was found in the indicator regarding the belief that business information would not be misused by the QRIS service provider (mean: 3.69), while the lowest score was found in the belief that QRIS payments are processed without interruption (mean: 3.52). This indicates that respondents are relatively more confident in information protection than in the stability of the transaction process.

The research results indicate that the more positive the MSME operators' perceptions regarding the security, data protection, and reliability of the QRIS system, the greater their tendency to use QRIS as a digital payment method. These findings align with Anggraini et al. (2024) and Maharani et al. (2026), who found that perceived security has a positive and significant influence on the decision to use QRIS. However, network disruptions, technical errors, and the risk of QR code-based fraud remain concerns for some MSME operators. Therefore, efforts to enhance system security, provide education on fraud prevention, and strengthen data protection must be continuously pursued. Thus, the perception of security is one of the factors driving the decision of MSMEs supported by the Medan City Cooperative Agency to use QRIS.

The Influence of Financial Literacy, Trust, and Perception of Security on the Decision to Use QRIS

Based on the F-test results, the calculated F-value was 23.788, exceeding the F-table value of 2.70, with a significance level of 0.000 (< 0.05). Thus, H₄ is accepted. This indicates that Financial Literacy, Trust, and Perception

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMEs ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

of Security simultaneously exert a positive and significant influence on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency. These results also demonstrate the suitability of the regression model. The Adjusted R-Square value of 0.408 indicates that these three variables explain 40.8% of the variation in the decision to use QRIS, while the remaining 59.2% is influenced by factors outside the scope of this study. Based on standardized beta coefficients, Financial Literacy exerted the greatest relative influence (0.329), followed by Trust (0.282) and Perception of Security (0.232). Descriptive analysis results show that the decision to use QRIS had a mean score of 3.72, falling into the "good" category. The highest score was observed for the indicator regarding the ease of understanding QRIS (mean: 3.84), while the lowest score was found for the commitment to continue using QRIS despite the availability of other payment methods (mean: 3.49). This suggests that the ease of understanding QRIS has not yet fully translated into a decision to use it consistently.

These findings indicate that the decision to use QRIS is influenced by MSME operators' ability to understand financial aspects, their trust in the system, and their sense of security during transactions. These results align with the findings of Putri, Lakoni, and Safrianti (2023) as well as Anggraini et al. (2024). Therefore, efforts to enhance financial literacy, service transparency, system reliability, and transaction security must be sustained to ensure the consistent and sustainable use of QRIS among MSMEs supported by the Medan City Cooperative Agency.

CONCLUSION

Based on the research results, it can be concluded that:

1. Individually, the Financial Literacy variable has a positive and significant effect on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency. This result is indicated by a calculated t-value of 3.877 (exceeding the t-table value of 1.98498) and a significance level of 0.000 (below 0.05). This implies that the better the financial literacy of MSME owners, the greater their tendency to decide to use QRIS.
2. Individually, the Trust variable has a positive and significant effect on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency. This result is indicated by a calculated t-value of 3.115 (exceeding the t-table value of 1.98498) and a significance level of 0.002 (below 0.05). This implies that the higher the trust in the system's capability, reliability, transparency, and service, the stronger the decision to use QRIS.
3. Individually, the Perceived Security variable has a positive and significant effect on the decision to use QRIS among MSMEs supported by the Medan City Cooperative Agency. This result is indicated by a calculated t-value of 2.511 (exceeding the t-table value of 1.98498) and a significance level of 0.014 (below 0.05). This implies that the more secure the system is perceived to be by MSME owners, the stronger their tendency to use QRIS.
4. Simultaneously, the variables of Financial Literacy, Trust, and Perceived Security have a positive and significant effect on the decision to use QRIS. The F-test results show a calculated F-value of 23.788 (exceeding the F-table value of 2.70) with a significance level of 0.000 (below 0.05); thus, there is a collective influence of the three independent variables on the decision to use QRIS.

Based on the conclusions outlined above, the author offers the following recommendations:

1. MSME operators are advised to improve their financial literacy, particularly regarding transaction fees, record-keeping, and revenue management associated with QRIS. Business owners should also utilize QRIS services from authorized providers, regularly review transaction histories, and safeguard the security of their accounts and business data. These measures can enhance trust, security, and consistent QRIS usage in business operations.
2. The Cooperatives and MSME Agency, Bank Indonesia, the Financial Services Authority (OJK), and relevant stakeholders need to strengthen education and support regarding digital financial literacy, QRIS usage mechanisms, transaction fees, data security, and fraud prevention. Such programs should be practical and sustainable to ensure ease of implementation for MSME operators.
3. Future researchers are advised to incorporate additional variables, as Financial Literacy, Trust, and Perceived Security explain only 40.8% of the variance in the decision to use QRIS. Potential variables for study include perceived ease of use, internet network quality, and service quality. Future research could also expand the sample size, the range of MSME sectors, and the geographical scope, as well as incorporate mediating or moderating variables.

REFERENCES

- Aditya, M. S., & Fitriasari, P. (2025). Pengaruh Literasi Keuangan, Persepsi Kemanfaatan, Persepsi Kemudahan Penggunaan, Sikap Penggunaan Teknologi Dan Risiko Terhadap Keputusan Penggunaan Quick Respons Indonesia Standard (QRIS). *Jurnal Akuntansi Manajemen Madani*, 11 (2). <https://jurnalmadani.stiemadani.ac.id/index.php/jamm/article/view/225/98>
- Aditya, & Mahyuni. (2022). Pengaruh literasi keuangan , persepsi kemudahan , manfaat , keamanan dan pengaruh sosial terhadap minat pelanggan. *FORUM EKONOMI : Jurnal Ekonomi , Manajemen Dan Akuntansi* ISSN : 1411-1713 (Print) 2528-150X (Online), 22. <https://doi.org/10.29264/jfor.v24i2.10330>
- Agustin, K. L., Usman, W. W., & Kusno, H. S. (2025). The Effect of Financial Literacy, Ease and Trust on the Decision to Use QRIS. *Management and Economic Journal*, 9. <https://doi.org/10.18860/mec-j.v9i2.28831>
- Anggraini, M. S., Anggraeni, E., & Nurhayat. (2024). Pengaruh Persepsi Kepercayaan dan Persepsi Keamanan Terhadap Pelaku Usaha Pada Keputusan Penggunaan QRIS. : *Jurnal Publikasi Ilmu Manajemen Dan E-Commerce*. <https://doi.org/10.30640/digital.v3i3.3196>
- Aprilia, E. C., Natalina, A., & Kakiay, A. N. (2026). Analisis Determinan Keputusan Bertransaksi Menggunakan QRIS. *Jurnal Ekonomi Dan Manajemen*. <https://doi.org/10.56127/jekma.v5i1.2557>
- Asnahwati, & Maswir, M. (2021). Analisis Tingkat Literasi Pasar Modal dan Minat Mahasiswa dalam Berinvestasi Saham Pada Perusahaan Yang Terdaftar Di Bursa Efek Indonesia (BEI). *Jurnal Daya Saing*, 7(2).
- Ayu Munthoharoh, & Hayon, P. P. (2025). Pengaruh literasi keuangan dan inklusi keuangan terhadap keputusan penggunaan QRIS pada UMKM yang terdaftar di BNI KCU Merauke. *PAPSEL ECONOMIC JOURNAL*, 2 (3), 9–21. <https://doi.org/10.63185/pej.v2i3.19>
- Bank Indonesia. (2019). *QRIS, satu QR code untuk semua pembayaran*. <https://www.bi.go.id>
- Bank Indonesia. (2022). *Quick Response Code Indonesian Standard (QRIS)*. <https://www.bi.go.id>
- BIS, B. for I. S. (2023). *Annual Economic Report 2023: Digital Payments and Financial Inclusion*. Bank for International Settlements. (Issue June 2022). <https://www.bis.org/publ/arpdf/ar2023e.pdf>
- Company, M. &. (2023). *The 2023 McKinsey Global Payments Report: On the cusp of the next payments era*. McKinsey & Company. <https://www.mckinsey.com/industries/financial-services/our-insights/the-2023-mckinsey-global-payments-report>
- Davis, F. D. (1989). *Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*. *MIS Quarterly*, 13(3), 319-340.
- Featherman, M. S., & Pavlou, P. A. (2003). *Predicting E-Services Adoption: A Perceived Risk Facets Perspective*. *International Journal of Human-Computer Studies*, 59(4), 451-474.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003). *Trust and TAM in online shopping: An integrated model*. *MIS Quarterly*, 27(1), 51-90. <https://doi.org/10.2307/30036519>
- Gobel, F., Pongoliu, Y. I., Rahman, R., & Utina, S. D. A. (2024). Analisis Pengaruh Risk Dan Trust Dalam Penerimaan Alat Pembayaran Digital QRIS (Study Kasus Pada 30 UMKM). *Jurnal Ilmiah Manajemen Dan Bisnis*, 7(2). <https://doi.org/10.37479/jimb.v7i2.27422>
- Hakim, & Septianingsih, F. (2026). Pengaruh Literasi Keuangan Dan Kemudahan Penggunaan Terhadap Keputusan Menggunakan QRIS Dengan Kepercayaan Sebagai Variabel Mediasi Pada UMKM Kuliner Binaan Rumah BUMN Cilacap. *JURNAL ILMIAH M-PROGRESS*, 16(2), 285–298. <https://doi.org/10.35968/mpu.v16i2.2067>
- Hermawan, S., Prapanca, D., Biduri, S., Herlambang, M. B., Esomar, M. J. F., Oktaviyanti, I., Suarni, A., Gustina, G., Marina, A., & Agustina, Y. (2026). *Literasi Keuangan di Era Digital*. Star Digital Publishing.
- Izzah, B., Karimah, S., & Khasanah, U. (2026). Digital Financial Literacy and QRIS Adoption: A Literature Review on Perceptions of Convenience, Security, Benefits, and Trust. *International Conference on Islamic Economics (ICIE)*, 3, 45–54.
- Jonardi, K. R., Djuranovik, E., Yapari, E. A., Lakshmi Jaya Ningsih, & Maichal. (2025). Pengaruh Kemudahan Penggunaan Seluler, Keunggulan Relatif, Dan Persepsi Keamanan Terhadap Niat Untuk Menggunakan QRIS. *Jurnal Ekonomi Trisakti*, 5(1), 553–562. <https://doi.org/10.25105/v5i1.22529>

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati et al

- Mändmaa, S. (2020). FINANCIAL LITERACY. *Eurasian Journal of Social Sciences*. <https://doi.org/10.15604/ejss.2019.07.02.002>
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *Academy of Management Review*, 20(3), 709–734.
- Mcknight, D. H., Choudhury, V., & Kacmar, C. (2012). *Developing and Validating Trust Measures for E-Commerce : An Integrative Typology*.
- McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). *Developing and Validating Trust Measures for E-Commerce: An Integrative Typology*. *Information Systems Research*, 13(3), 334-359.
- Meri Hartati. (2024). Pengaruh Literasi Keuangan, Inklusi Keuangan, Dan Fintech Terhadap Penggunaan QRIS Pada Merchant Di Guardian Bengkulu Yang Dimediasi Oleh Technology Acceptance Model (TAM). *Jurnal Economic Edu*, 5(01), 8–14. <https://doi.org/10.36085/jee.v5i01.6590>
- Nations, U. (2017). *Micro Small Medium Businesses Day*. <https://www.un.org/en/observances/micro-small-medium-businesses-day>
- Nawang Sari, S., & Pryhasti, A. L. (2025). Analisis Faktor-Faktor yang Mempengaruhi Keputusan Penggunaan QRIS sebagai Alat Pembayaran Digital. 6(2), 603–610. <https://doi.org/10.47065/arbitrase.v6i2.2541>
- Otoritas Jasa Keuangan & Badan Pusat Statistik. (2024). *Siaran Pers Bersama: OJK dan BPS Umumkan Hasil Survei Nasional Literasi dan Inklusi Keuangan Tahun 2024*. <https://ojk.go.id>
- Otoritas Jasa Keuangan (OJK). (2024). *Buku Saku Literasi Keuangan*. <https://ojk.go.id>
- Pebyarni, A. (2024). Analisis Faktor-Faktor Yang Mempengaruhi Penggunaan Qris Sebagai Alat Transaksi UMKM Di Yogyakarta. *Skripsi*. <https://dspace.uui.ac.id/bitstream/handle/123456789/50208/20312498>.
- Putri, M. N., Lakoni, I., & Safrianti, S. (2023). Pengaruh Literasi Keuangan, Kemudahan Dan Kepercayaan Terhadap Keputusan Bertransaksi Menggunakan QRIS Pada UMKM Di Kota Bengkulu. *Jurnal Ilmiah Ekonomi Dan Bisnis*. <https://doi.org/10.51903/e-bisnis.v16i2>
- Putri, P. A., Rahman, T., & Noviasari, H. (2024). Pengaruh Persepsi Manfaat Dan Persepsi Keamanan Melalui Kepercayaan Terhadap Keputusan Penggunaan QRIS. *Jurnal Ilmiah Mahasiswa Ekonomi Dan Manajemen*.
- Rayhan, M., Nursaidah, & Dia, T. (2025). Pengaruh Persepsi Manfaat, Kemudahan, Kepercayaan dan Risiko terhadap Keputusan Penggunaan Qrispada UMKM Se-Kota Jember. *Jurnal Ekonomi, Manajemen, Akuntansi Dan Keuangan*, 6(3), 1–13. <https://doi.org/https://doi.org/10.53697/emak.v6i3.2759>
- Prabowo, A., & Risal, T. (2023). Peran Enterpreneurial Orientation Dan Social Media Marketing Terhadap Peningkatan Strategi Bersaing (Ukm) Coffe Shop Pada Era Modern Customer Di Kota Medan. *Jurnal Menara Ekonomi: Penelitian dan Kajian Ilmiah Bidang Ekonomi*, 9(1).
- Prabowo, A., Adam, A. A., Subhan, Z. N., Tanjung, Y., Parhusip, A. A., & Deviana, A. Irwansyah.(2025). Sustainable Business Practices in Coffee Shops: The Role of Marketing Innovation, Digital Marketing, and Branding Innovation Through Market Development. *International Journal of Accounting and Economics Studies*, 12 (6), 43, 50. <https://doi.org/10.14419/p0k0pc78>
- Prabowo, A., Wahyuni, E. S., Tanjung, Y., Wijaya, M. R., & Adam, A. A. (2025). *Manajemen Pemasaran (Strategi Pemasaran Era Digital: Menguasai Tren dan Teknologi Sebagai Konsep Baru Meningkatkan Penjualan)*. Serasi Media Teknologi.
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Robbins, S. P., Bergman, R., Stagg, I., & Coulter, M. (2014). *Management Pearson Australia*. <https://books.google.co.id/books?id=hLGaBQAAQBAJ>
- Roger C. Mayer, James H. Davis, & F. David Schoorman (1995). *An Integrative Model of Organizational Trust*. *Academy of Management Review*.
- Safitri, A. (2024). Pengaruh Persepsi Kemudahan Penggunaan Dan Keamanan Terhadap Keputusan Penggunaan QRIS.
- Septiani, R. N., & Wuryani, E. (2020). Pengaruh Literasi Keuangan dan Inklusi Keuangan terhadap Kinerja UMKM di Sidoarjo. *E-Jurnal Manajemen*, 9(8), 3214–3236. <https://doi.org/10.24843/EJMUNUD.2020.v09.i08.p16>

THE INFLUENCE OF FINANCIAL LITERACY, TRUST AND PERCEIVED SECURITY ON THE DECISION TO USE THE QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AMONG MSMES ASSISTED BY THE MEDAN CITY COOPERATIVE AGENCY

Mahfuzah Melati **et al**

- Solahudin, M. S., & Abdurachman, A. (2026). Dampak Persepsi Keamanan dan Persepsi Risiko terhadap Kepuasan Pengguna. *Jurnal Administrasi Bisnis*. <https://e-journals.unmul.ac.id/index.php/jadbis/article/view/26658/pdf>
- Sugiono. (2023). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D* Alfabeta.
- Suryani, D., Ermansyah, & Suk, S. Al. (2021). *Pengaruh Perceived Ease of Use, Perceived Usefulness dan Trust Terhadap Kepuasan Pelanggan Gojek*. <https://journal.irpi.or.id/index.php/ijbem/article/view/171>
- UKM, K. (2025). *pemerintah-dorong-umkm-naik-kelas-tingkatkan-kontribusi-terhadap-ekspor-indonesia*. <https://www.ekon.go.id>
- Widiyati, S., Wijayanto, E., & Prihatiningsih. (2018). Financial Literacy Model at Micro Small Medium Enterprise (MSMEs). *MIMBAR Jurnal Sosial Dan Pembangunan*, 34 (2), 255–264.
- World Economic Forum. (2022). *Why we shouldn't overlook the impact of SMEs on local and global economies*. <https://www.weforum>.