

Effect of the Technology Acceptance Model on the Use of QRIS on The Financial Literacy Needs of Surakarta Klewer Market Traders

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ABSTRACT

The spread of technology and the increasing number of internet users have significantly impacted society and individuals in the era of the fourth industrial revolution. This research aims to determine the influence of the technology acceptance model perspective (perception of usefulness, perception of ease of use), product knowledge, social influence on the financial literacy needs of Klewer Market traders in the city of Surakarta, using data collection techniques through questionnaires. Samples were taken using probability sampling, namely, proportionate stratified random sampling with a sample of 325 traders. The instrument validity test in this research used Pearson product moment and the instrument reliability test used Croanbach alpha. Research data analysis techniques use descriptive statistics, multiple regression analysis, and t-test analysis. The results of this research show that there is a significant influence between perceived usefulness of QRIS, perceived ease of use of QRIS, knowledge of QRIS products, social influence on the financial literacy needs of Klewer Market traders in Surakarta city.

Keywords: Financial Literacy, Perceived Ease Of Use, Perceived Usefulness, QRIS, Technology Acceptance Model.



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INTRODUCTION

The spread of technology and the increasing number of internet users have significantly impacted society and individuals in the era of the fourth industrial revolution. This is evident in the continuous development of the digital economy sector, particularly in Indonesia, where the number of internet users has reached 210.03 million in the 2021-2022 period. The majority of these users access the internet through smartphones. With the rapid growth of internet users across all segments of society, there is fierce competition in the economy 4.0 (Ike Yuliarni et al., 2019). It is possible that Micro, Small and Medium Enterprises (MSMEs) may surpass multinational companies in this new economic landscape. As technology continues to advance and shape our lives, it is clear that it has become an integral part of everyday life, transforming the way we work, communicate, and access information (Rahmiati & Susanto, 2022).

The rapid growth of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia has not been accompanied by national economic growth. This can be attributed to various issues such as limited capital, inadequate utilization of information and technology, and low financial literacy (Ningsih & Tasman, 2020). Additionally, the increasing number of MSMEs in Indonesia has brought about numerous challenges. The COVID-19 pandemic has further exacerbated these challenges, necessitating swift government action for economic recovery. While governments worldwide have implemented various economic policies and initiatives in response to the global impact of the pandemic, there is currently no globally implemented international legal policy due to the intimate connection between economic problems and individual lifestyles and social structures. To address these issues, efforts should focus on aligning perceptions and fostering greater interest between the government and merchants to realize a cashless society, in line with the Indonesian Payment System 2025 vision (Bank Indonesia, 2020).

The payment system has seen significant progress with the rise of cashless transactions, which offer speed, security, and efficiency. Various parties, including banks and non-banks, have developed the non-cash payment system (Suryani et al., 2017). The government and the central bank, Bank Indonesia (BI), have implemented policies to enhance the effectiveness of monetary policy, prepare a digital transformation roadmap, and increase the digital capacity of Human Resources (HR) (Aginta et al., 2020). Electronic money has become popular in business activities and requires continued government innovation in non-cash payment systems. The implementation of the Quick Response Indonesia Code Standard (QRIS) in traditional markets throughout the country is one such innovation. QRIS is a tangible form of using electronic money that has gained wide acceptance among the community. Digitalization has also transformed traditional markets, allowing market traders to engage with customers across regions and even internationally, thanks to digital tools, mobile payment systems, and digital marketing channels (Ariani & Nurcahyo, 2014)

Financial literacy refers to having the understanding, knowledge, and skills to manage personal finances, while financial capability goes beyond literacy and involves putting that knowledge into practice. The combination of financial literacy and digital transformation leads to financial capability, which encompasses both the ability and opportunity to take action (Goyal & Kumar, 2021). As more people rely on digital money for their financial needs, it is important to have financial literacy to make informed decisions about using digital currencies. The use of non-cash transactions has been increasing globally, nationally, and regionally, indicating a growing trend towards digitalization in market shopping transactions. The growth in non-cash transactions emphasizes the need for financial literacy as individuals navigate the implications of using digital money. The trend of using non-cash transactions has increased significantly on a global, national and regional scale. (Chayanon et al., 2020; Nurhapsari & Sholihah, 2022; Prasetya & Lestari, 2023)

Klewer Market in Surakarta City has implemented non-cash transactions using QRIS (Quick Response Code Indonesian Standard). The majority of merchants in the market use virtual accounts and QRIS for e-retribution payments and cashless transactions. The Surakarta City Government has been promoting non-cash transactions and organized the Solo Great Sale event to encourage their use. During the event in 2022, Klewer Market had good results with 212 non-cash transactions and a total non-cash payment amount of Rp 327,565,300. However, the market still predominantly relies on cash payments. This is noteworthy as Klewer Market is a large market with significant economic transaction turnover, but the adoption of non-cash transactions remains low. The initial research conducted in Pasar Klewer, Surakarta City aimed to assess the level of financial literacy and the use of digital payment technology among traders. The study found that 83.6% of merchants in Pasar Klewer have adopted cashless payment transactions, with 75.4% utilizing digital payment transactions through the QRIS method. The majority of traders (55.7%) have a good understanding of digital transaction systems. However, despite the availability of digital payment options, 88.5% of merchants in Pasar Klewer still prefer cash payments. The research also revealed that a significant portion of traders (54.1%) lack clear knowledge of financial literacy, as evident from their low understanding of basic financial concepts. Additionally, 60.7% of traders have not integrated

technology into their decision-making processes. This lack of financial management and utilization of digital payment methods may result in improper income management and a decrease in earnings.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Technology Acceptance Model

The Technology Acceptance Model (TAM) theory was first introduced by Fred. Davis (1989). Several previous studies that raised issues about the use of new information technology found it helpful with this TAM theory (Chohan, 2022; Gumussoy et al., 2018). In developing this TAM model based on technology users' acceptance of information systems, technology users will be able to decide a rational conclusion regarding the use of a technology. The ease and usefulness felt by technology users must be accountable, as a determinant of user attitudes and behavior (Kasilingam, 2020). Acceptance of the use of information technology is defined as the willingness of user groups to use information technology in carrying out an activity (Dillon & Morris, 1996). The theory promoted by Davis (1989) assumes that the acceptance of information systems by users of this technology is determined by two main constructs, namely: a. Perceived Usefulness (PU), and b. Perceived Ease of Use (PE).

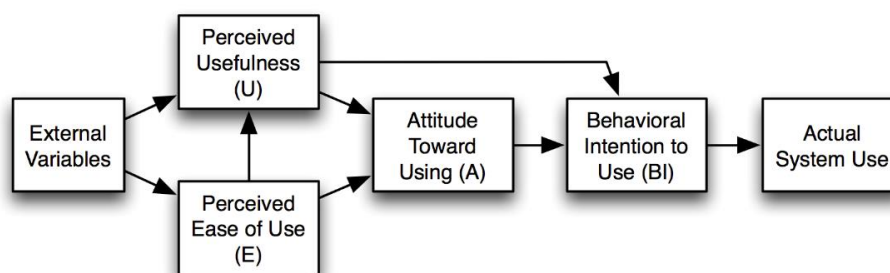


Figure 1. Technology Acceptance Model

Source : (Davis & Venkatesh, 2000)

Research conducted by (Sharp et al., 2007) on the growth and implementation of TAM highlights three main areas for further development, application of information technology including: (1) The combined impact of perceived practicality and easy usability as a stronger indicator. (2) Users' attitudes towards compulsory or voluntary use of technology play an important role in its acceptance. (3) In addition, the environment that encourages or hinders its use also has a significant impact. Previous studies utilizing the Technology Acceptance Model (TAM) have yielded positive results. For instance, Muliati (2019) found that perceived usefulness, perception of self-efficacy, and subjective norms had a positive but statistically insignificant effect, while perceptions of compatibility and attitudes had a positive and statistically significant effect. Therefore, the TAM theory suggests that the use of information systems or technology, such as QRIS, incorporates elements of perceived usefulness and perceived ease of use. Moreover, (King & He, 2006) conducted a meta-analysis on TAM and concluded that it is a valid and reliable model that has been successfully applied across various fields, demonstrating the potential for broader technological applications. They also argue that the intention to express one's behavior is influenced by attitudes or beliefs towards a particular thing and its performance is linked to behavioral factors. Therefore formed hypothesis :

H1 : There is an influence between the perceived usefulness of QRIS on the need for financial literacy.

H2 : There is an influence between the perceived ease of use of QRIS on the need for financial literacy.

Product Knowledge and Social Influence

QRIS product knowledge is all information from potential users related to products and services. Moreover, all information obtained by users will be an initial consideration before deciding to use it (Arifiyanto. & Kholidah, 2021). In research conducted by Ezech & Nwankwo (2018) also argues that users will pay more attention to and understand a new product before using it, a person's high level of understanding of a product and service can affect their intended use.

Social influence can affect traders' interest in using technology and learning financial management and financial literacy (Sarker & Wells, 2003). The impact of social influence has been widely used in technology acceptance model (TAM) theory. This concept has been analyzed as a subjective norm that determines an individual's perception of whether most people who are important to him believe that he should or should not perform a certain behavior in the theory of planned behavior (TPB) (Ajzen, 1991). Therefore formed hypothesis :

H3 : There is an influence between QRIS Product Knowledge on the need for Financial Literacy.

H4 : There is an influence between Social Influence on the need for Financial Literacy.

Financial Literacy Needs

Financial literacy refers to a person's understanding and skills in managing their finances, including investments, savings, and expenses (Chen & Volpe, 1998). It involves making informed decisions about finances to achieve future well-being. Financial literacy is often used interchangeably with financial knowledge and is linked to other concepts like financial capability and management awareness (Liu & Zhang, 2021). Having knowledge of basic financial concepts is crucial for making sound financial decisions. However, simply having knowledge doesn't guarantee financial capability. Financial capability is reflected in one's actual behavior in managing finances effectively. In summary, financial literacy encompasses understanding, skills, and behaviors related to managing finances, and it plays a vital role in achieving financial well-being.

Research Framework

This research empirically tests the influence of technology acceptance theoretical models on financial literacy needs. Product knowledge and social influence were added in this study as independent variables. Therefore, the following research framework was formed:

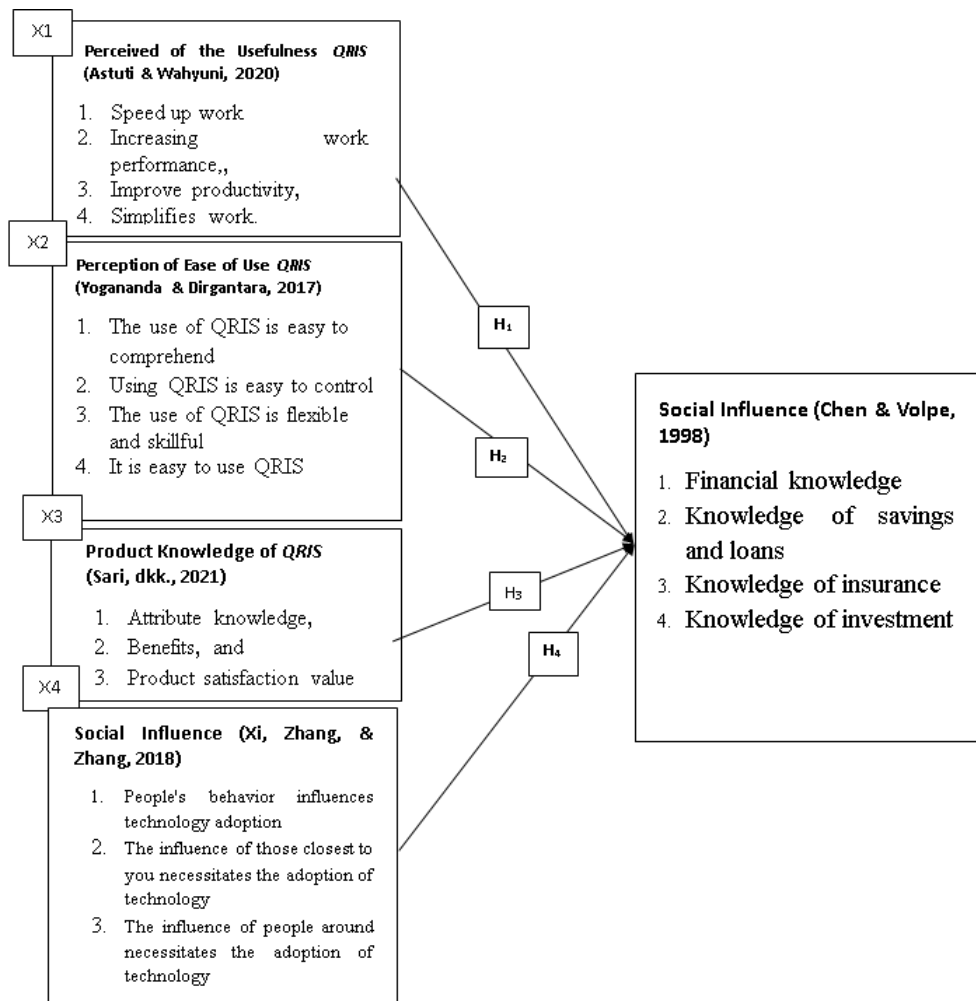


Figure 2. Reserach Framework

Source: primary data

METHODS

Sample selection and Data collection

This research uses descriptive quantitative research, which is a research method carried out by explaining events that focus on problems. The research was conducted to provide a more detailed description of a phenomenon with research results in the form of patterns of the phenomenon being discussed. The research location is in Klewer Market, Surakarta Regency, Central Java, Indonesia. The object of research was conducted by focusing on the phenomenon of financial literacy of Klewer market traders in the use of non-cash payments and the factors that influence it. The research population are Klewer Market traders who have been classified based on blocks/kiosks that have been adjusted to the grouping by relevant stakeholders. Furthermore, in the facts on the ground, the majority of the population are registered QRIS users and/or service providers, both administratively in the market with the ownership of the Klewer Market Merchant Identification Card (KTTP) or with the Payment System Service Provider (PJSP) merchants (such as Central Java bank, Mandiri bank, and BTN bank). Determination of sampling is using a probability technique with purposive sampling, namely the *Proportionate Stratified Random Sampling*. This technique can be used when

a population has elements that are not homogeneous and stratified proportionally (Sugiyono, 2013: p. 82). The sample size for each trader is carried out by proportional allocation, sampling in each selected market block and is carried out proportionally taking into account the consideration of elements in the research population, then sampling is carried out randomly (random).

Analysis Methodology

Analysis of the data to be taken using descriptive statistics. The data analysis technique refers to the interactive analysis model, including the stages of data reduction, data display and data verification. Data reduction is the selection, simplification, abstraction and transformation of data to obtain relevant data. Display or data presentation is in the form of narrative text or exposure consisting of text and images, so that it is easy to understand. Verification is data validation or proof, using the technique of Multiple Linear Regression Analysis which is an analysis used to trace the relationship pattern between the dependent variable and two or more independent variables Türker et al. (2022) and Ulansari & Yudiantara (2021). The t test is used to measure the effect between each independent variable on the dependent variable partially and using the coefficient of determination method which is aims to measure the percentage level of contribution of the influence of the independent variable on the dependent variable.

Research Model and Variable Measurement

This research is quantitative research with a type of research in the form of a questionnaire survey where the type of data used is the type of data in the form of numbers and can be operated in mathematical form and it is necessary to conduct a survey by distributing questionnaires or questionnaires. The data collection method used in this research is an online questionnaire via google form. Questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer (Sugiyono, 2016: p. 142). This research uses a questionnaire with a Likert scale.

Table 1. Likert Scale

Criteria	Value
Sangat Setuju (SS)	5
Setuju (S)	4
Kurang Setuju (KS)	3
Tidak Setuju (TS)	2
Sangat Tidak Setuju (STS)	1

Source: Sugiyono (2016: 94)

Validity test is a measure that shows the levels of validity and validity of an instrument. The instrument is said to be valid if it can reveal the data variables studied precisely. The method used to assess the validity of the questionnaire is moment product correlation using SPSS 25. The provisions for the validity of the instrument are valid if the results $r_{count} > r_{table}$. The following is the product moment formula used to test validity. Validity tests were carried out on 53 respondents in the study population. Valid questions will be used by researchers to collect data, and vice versa. In this study, the product moment correlation coefficient of each question item was used with the r table used, which is 0.270. The validity test results are as follows.

Table 2. Validity Test

Variable	Indicator	r count	r table (N=53)	5%	Evidance
Perceived of Usefulness QRIS (X ₁)	PK1	0,722	0,270		Valid
	PK2	0,744	0,270		Valid
	PK3	0,683	0,270		Valid
	PK4	0,574	0,270		Valid
	PK5	0,437	0,270		Valid
	PK6	0,631	0,270		Valid
	PK7	0,697	0,270		Valid

Perceived Ease of Use QRIS (X ₂)	PKP8	0,654	0,270	Valid
	PKP9	0,654	0,270	Valid
	PKP10	0,603	0,270	Valid
	PKP11	0,728	0,270	Valid
	PKP12	0,565	0,270	Valid
	PKP13	0,543	0,270	Valid
	PKP14	0,607	0,270	Valid
Product Knowledge QRIS (X ₃)	PP15	0,428	0,270	Valid
	PP16	0,285	0,270	Valid
	PP17	0,616	0,270	Valid
	PP18	0,617	0,270	Valid
	PP19	0,619	0,270	Valid
	PP20	0,664	0,270	Valid
	PP21	0,609	0,270	Valid
	PP22	0,520	0,270	Valid
	PP23	0,684	0,270	Valid
	PP24	0,673	0,270	Valid
Social Influence (X ₄)	PS25	0,449	0,270	Valid
	PS26	0,591	0,270	Valid
	PS27	0,625	0,270	Valid
	PS28	0,571	0,270	Valid
	PS29	0,609	0,270	Valid
	PS30	0,572	0,270	Valid
	PS31	0,606	0,270	Valid
	PS32	0,706	0,270	Valid
Financial Literacy (Y)	LK33	0,401	0,270	Valid
	LK34	0,489	0,270	Valid
	LK35	0,482	0,270	Valid
	LK36	0,536	0,270	Valid
	LK37	0,492	0,270	Valid
	LK38	0,410	0,270	Valid
	LK39	0,279	0,270	Valid
	LK40	0,459	0,270	Valid
	LK41	0,475	0,270	Valid
	LK42	0,399	0,270	Valid
	LK43	0,387	0,270	Valid
	LK44	0,5881	0,270	Valid
	LK45	0,470	0,270	Valid
	LK46	0,502	0,270	Valid
	LK47	0,497	0,270	Valid

Source: Primary Data

Instrument reliability is needed to obtain data in accordance with the measurement objectives. The method used to conduct the reliability test is Cronbach Alpha measured based on Cronbach Alpha 0 to 1. Reliability tests were carried out on 47 separate question items on each variable. In this study, the Alpha Croanbach correlation coefficient was used for each question item with the reliability limit used, namely 0.60.

Table 3. Reliability Test

Variable	Number of Questions	Alpha Croanbach	Realibility Tolerance	Evidence
Perceived of Usefulness QRIS (X ₁)	7	0,758	0,60	Reliable

Perceived Ease of Use QRIS (X ₂)	7	0,733	0,60	Reliable
Product Knowledge QRIS (X ₃)	10	0,782	0,60	Reliable
Social Influence (X ₄)	8	0,736	0,60	Reliable
Financial Literacy (Y)	15	0,722	0,60	Reliable

Source: Primary Data

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistical analysis was carried out to get an overview of the data by analyzing the value of the mean, minimum, maximum and standard deviation values for each variable. Descriptive statistical analysis was performed on all variables used in this study using SPSS 25. Table 4 show the result of descriptive statistical analysis.

Table 4. Statistic Descriptive Analysis

	N	Min	Max	Mean	STD. Deviation
X1	325	13	35	25,05	4,180
X2	325	7	39	25,34	4,870
X3	325	18	44	35,85	5,501
X4	325	14	38	29,05	4,506
Y	325	33	66	53,87	5,708

Source: Primary Data

Classical Assumption Test

The classical assumption tested to ensure the regression model obtained the best model in term of estimation, unbiased and consistent. The model in this research tested by multicollinearity test, normality test, and heteroscedasticity test.

Table 5 shows Multicollinearity test is conducted to determine whether or not there is a relationship between independent variables in it. In this multicollinearity test, the tolerance value > 0.10 and VIF < 10.00 are the basis for decision making by researchers. If this basis can be met, there is no multicollinearity problem in this study. The results of the study as a whole the research variables used in this study have no relationship between variables or there are no symptoms of multicollinearity of each independent variable.

Table 5. Multicollinearity Test (VIF)

Model	Collinearity Statistic	
	Tolerance	VIF
Perceived of Usefulness QRIS (X ₁)	0,854	1,171
Perceived Ease of Use QRIS (X ₂)	0,839	1,191
Product Knowledge QRIS (X ₃)	0,750	1,333
Social Influence (X ₄)	0,819	1,221

Source: Primary Data

Table 6 report the Normality Test is carried out to determine whether the data that has been obtained during the study can be spread normally or not. This can be seen using the One Sample Kolmogorov-Smirnov test with the condition that the regression model can be said to be normal if the Asymp. Sig (2-tailed) is greater than 0.05. Based on table 6 obtained a significance value of unstandardized residual 0.200. These results show that sig > 0.05, it means that the research data is normally distributed.

Table 6. Kolmogrov-Smirnov Test

		Unstandardized Residual
N		325
Normal Parameters^{a,b}	<i>Mean</i>	.0000000
	<i>Std. Deviation</i>	5.30642996
Most Extreme Differences	<i>Absolute</i>	.038
	<i>Positive</i>	.030
	<i>Negative</i>	-.038
Test Statistic		.038
Asymp. Sig. (2-tailed)		.200 ^{c,d}

Source: Primary Data

The data that has been processed produces a scatterplot of the Financial Literacy variable (Y) as in Figure 3. These results show that the distribution of data does not cluster at a point but spreads. A research model is said to be good when there are no symptoms of heteroscedasticity in each variable. According to Figure 3. shows that there is no certain pattern that appears on the graph because the dots have spread on the upper side and on the lower side of the number 0 on the X axis and the Y axis, so the heteroscedasticity problem does not occur.

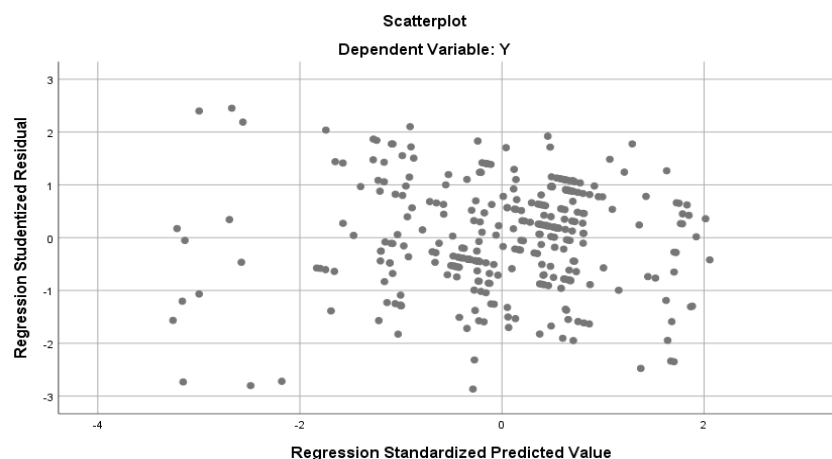


Figure 3. Scatterplot Test

Source: Primary Data

Hypothesis Test

Multiple Regression Analysis

The multiple regression analysis test was carried out to determine the influence between the independent (dependent) variable and the dependent (independent) variable through the regression equation. The results of the simple regression analysis test are shown in Table 7 below.

Table 7. Multiple Regression Analysis Test

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	57.537	1.958	
	Perceived of Usefulness QRIS (X ₁)	-.603	.062	-.441
	Perceived Ease of Use QRIS (X ₂)	-.364	.053	-.311

Product Knowledge QRIS (X ₃)	.188	.044	.181
Social Influence (X ₄)	.479	.053	.378

Source: Primary Data

From table 7 above, the following explanation is obtained:

- 1) The constant value of 57.537 means that if the variable perceived usefulness of QRIS (X₁), perceived ease of use of QRIS (X₂), product knowledge (X₃), social influence (X₄) is zero, the value of financial literacy will be 57.537.
- 2) The regression coefficient value of the perceived usefulness of QRIS (X₁) obtained a value of -0.603 which means that the perceived usefulness of QRIS (X₁) has a negative influence on the financial literacy of Surakarta city Klewer Market traders. When the perceived usefulness of QRIS (X₁) increases by 1, the level of financial literacy needs (Y) will decrease by 0.603 and vice versa.
- 3) The regression coefficient value of the perceived ease of use of QRIS (X₂) is obtained at -0.364, which means that the perceived usefulness of QRIS (X₂) has a negative influence on the financial literacy of Surakarta city klewer market traders. When the perceived ease of use of QRIS (X₂) increases by one, the level of financial literacy needs (Y) will decrease by 0.364 and vice versa.
- 4) The product knowledge regression coefficient value is 0.188, which means that product knowledge (X₃) has a positive influence on the financial literacy of Surakarta city klewer market traders. When product knowledge (X₃) increases by one, the level of financial literacy needs will increase by 0.188 and vice versa.

T-test

The t-test was carried out to see the magnitude of the influence of the independent variable (dependent) on the dependent variable (independent) partially. In this study, the t table value was determined through the Excel formula, namely, TINV (probability; df) with the significance of the probability level of 0.05 (5%) and with the degrees of freedom obtained by the formula ($df = n - k - 1$), where n is the amount of data, and k is the number of research variables. Thus, $df = 325 - 4 - 1 = 320$ and the t table value is 1.967 and / or -1.967. The t test results can be seen in Table 8 below.

Table 8. Regression Model t-statistical Test

Model	t	Sig.
(Constant)	29.387	.000
Perceived of Usefulness QRIS (X ₁)	-9.775	.000
Perceived Ease of Use QRIS (X ₂)	-6.819	.000
Product Knowledge QRIS (X ₃)	4.260	.000
Social Influence (X ₄)	9.117	.000

Source: Primary Data

The results of the analysis comparing the t table with the t count values indicate the following conclusions:

- 1) The perceived usefulness of the QRIS variable has a t_{count} value of -9.775, which is lower than the critical t_{table} value of -1.967. This shows a negative influence between the perceived usefulness of QRIS and the need for financial literacy. In terms of statistical significance, the p-value is 0.000, which is less than the significance level of 0.05. Therefore, we can conclude that hypothesis 1 is rejected, and the alternative hypothesis (H_a) is accepted.
- 2) Similarly, the perceived ease of use of QRIS has a t_{count} value of -6.819, which is lower than the critical t_{table} value. This indicates a negative influence between the perceived ease of use of QRIS and the need for financial literacy. The p-value is also 0.000, indicating statistical significance. Therefore, hypothesis 2 is rejected, and H_a is accepted.
- 3) The conclusions for hypotheses 3 and 4 are based on Table 23, which presents the t_{count} values for the perceived usefulness of the QRIS variable. For hypothesis 3, the t_{count} value is 4.260,

which is greater than the t_{table} value of 1.967. This indicates a significant positive influence of product knowledge on the need for financial literacy. The probability of significance is 0.000, which is less than 0.05, further supporting the rejection of H_0 and acceptance of H_a for hypothesis 3.

- 4) Similarly, for hypothesis 4, the t_{count} value is 9.117, which is greater than the t_{table} value. This suggests a significant positive influence of social influence on the need for financial literacy. The probability of significance is again less than 0.05, leading to the rejection of H_0 and acceptance of H_a for hypothesis 4.

In summary, both hypotheses suggest a negative and significant influence of perceived usefulness and perceived ease of use of QRIS on the need for financial literacy. Otherwise, product knowledge of QRIS and social influence show significant and positive influences on the need for financial literacy.

Coefficient Determination

The coefficient of determination is used to measure the extent to which independent variables in a regression model can influence the dependent variable. In a study analyzing the relationship between perceived usefulness of QRIS, perceived ease of use of QRIS, product knowledge, and social influence on financial literacy, it was found that these variables accounted for 54.9% of the variation in financial literacy. This means that the ability of these variables to influence the need for financial literacy is 54.9%, while the remaining 45.1% is influenced by other factors not considered in the study. According to previous research (Amaliyah & Witiastuti, 2015; Ansong & Gyensare, 2012), other factors that can affect the need for financial literacy are gender and supporting infrastructure and facilities. Table 9 below shows us the report of R-square test.

Table 9. Regression Model R-square Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741 ^a	.549	.543	3.858

Source: Primary Data

Perceived Usefulness of QRIS Impact on Financial Literacy Needs

This research focused on traders' perception of the usefulness and benefits of using QRIS (Quick Response Indonesian Code Standard) for non-cash payments. The results indicated that an increase in the perceived usefulness of QRIS led to a decrease in the need for financial literacy. The study conducted a questionnaire survey, which confirmed that the use of QRIS technology helped traders to expedite their work, improve their performance, increase productivity, and streamline their work processes. Furthermore, the researchers also found that traders considered QRIS as their secondary choice for transactions, indicating that they did not perceive tangible benefits from using this technology. Despite this, the study found that using QRIS technology had a positive impact on work performance. It increased work productivity and effectiveness, thereby improving the overall performance of the traders. These findings highlight the potential benefits of QRIS technology in facilitating non-cash transactions and enhancing work performance for merchants. However, the facts in the field themselves, researchers found different things, traders tend to accept the use of QRIS as a technology that actually makes it difficult and complicated for their productivity and performance so that the majority of them stick with cash transactions.

The majority of traders at the Klewer Market in Surakarta City are not yet aware of the benefits of using technology to carry out transactions quickly and effectively with the presence of QRIS. This is not in line with the vision and mission of SPI 2025 by Bank Indonesia with the GNNT program which is being implemented to realize a cashless society. So it can be said that the perception of the usefulness of QRIS can negatively influence financial literacy needs.

Perceived Ease of Use of QRIS Impact on Financial Literacy Needs

This research also focused on traders' perception of the ease of use and benefits of using QRIS (Quick Response Indonesian Code Standard) for non-cash payments. The results indicated that an increase in the perceived ease of use of QRIS led to a decrease in the need for financial literacy. The results shows that the traders at Pasar Klewer Surakarta do not have much faith in non-cash payment technology, such as QRIS, can improve their financial understanding. They find the use of QRIS to be complicated and troublesome in their payment transactions. The researchers also discovered that the perceived ease of use of QRIS is influenced by the availability of technology support facilities, like internet access, which could provide financial knowledge information. However, the lack of such facilities in the vicinity of Pasar Klewer is another factor contributing to the traders' reluctance to use QRIS and their limited financial management understanding. Additionally, the imposition of a 10% Merchant Discount Rate (tax) on QRIS usage negatively affects the traders' perception of the payment method. They would reconsider using QRIS if they have to pay high taxes and might prefer to stick with cash transactions instead.

Product Knowledge of QRIS Impact on Financial Literacy Needs

The results of a multiple regression analysis on the relationship between product knowledge and financial literacy needs of Klewer Market traders in Surakarta show a positive relationship, with a result of 0.188. Previous studies by Kotler & Keller (2009), Mailizar et al. (2021), and Martono et al. (2020) also support the importance of having good product knowledge in improving financial literacy, specifically in understanding the technology and facilities offered by financial institutions. This understanding is expected to lead to increased income and welfare for traders. Consequently, it can be concluded that product knowledge significantly influences the need for financial literacy. As a result, hypothesis H_03 is rejected and H_a3 is accepted, indicating that product knowledge can indeed affect the financial literacy needs of Klewer Market traders in Surakarta.

Social Influence Impact on Financial Literacy Needs

The results of a multiple regression analysis on the relationship between social influence and financial literacy needs of Klewer Market traders in Surakarta show a positive relationship, with a result of 0.479. Previous studies by Muliati (2019), and Putro & Santika (2020) also support the importance of having impactful social influence can improving financial literacy. The test results show that the majority of traders tend to be encouraged by the influence of people's behavior in adopting new technology, besides that the influence of the closest people and people around the work environment in requiring the adoption of technology also influences a person in using this QRIS technology and also increases their financial literacy needs due to excessive curiosity. So it can be concluded that the hypothesis H_04 is rejected and H_a4 is accepted or social influence can affect the strong or weak financial literacy needs of Pasar Klewer traders in Surakarta.

CONCLUSION

Research results can be concluded that there is a significant negative effect between perceived usefulness of QRIS and perceived ease of use of QRIS (partially) on the need for financial literacy. Also, there is a significant positive influence between product knowledge and social influence (partially) on the need for Financial Literacy.

This research found that the perceived usefulness and ease of use of QRIS has a negative effect, meaning that higher levels of perception decrease the need for financial literacy among traders. Traders feel that QRIS does not offer benefits or help facilitate their financial management. There is also a lack of common perception between non-cash payment service providers and a lack of supporting facilities like internet connectivity, making it more challenging for merchants to adopt QRIS technology. Additionally, the process of disbursing funds through QRIS is not straightforward for merchants, and they may not be aware of the fees and taxes associated with its use. The study suggests that policymakers should consider these factors when promoting a cashless society in line

with the vision of SPI 2025 by Bank Indonesia. Besides, there is a positive and significant influence between product knowledge on the financial literacy needs of Surakarta City Klewer Market traders. This influence means that understanding QRIS products is an important part of increasing the financial literacy needs of traders. And also, there is a positive and significant influence between social influence on the financial literacy needs of Klewer Market traders in Surakarta. This influence means that social influence is an important part of increasing the financial literacy needs of traders.

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