

## Financial and Digital Literacy: Their Impact on Interest Use of QRIS and Entrepreneurial Behavior

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### ABSTRACT

*The Quick Response Code Indonesia Standard QRIS service has supported payments from bank and non-bank providers used in the community. This payment system through QRIS can not only be done in malls or large shopping centers but can also be used in stalls, tourist attractions, even traditional markets or traditional markets if they already use the QRIS logo. Pasar Manis Purwokerto was the location of the study with 49 respondents. The analysis technique used was multiple linear regression analysis. The results of the study showed that financial literacy, digital literacy and the use of the QRIS application had a positive and significant influence on entrepreneurial behavior. Digital literacy is the most dominant variable in influencing entrepreneurial behavior in the Pasar Manis Purwokerto.*

*Keywords: Financial Literacy, Digital Literacy, Entrepreneurial Behavior, Use of QRIS*

### ABSTRAK

Layanan *Quick Response Code Indonesia Standard QRIS* telah mendukung pembayaran dari penyelenggara bank maupun non bank yang digunakan dalam masyarakat. Sistem pembayaran melalui QRIS ini tidak hanya bisa dilakukan di mall atau pusat perbelanjaan besar saja tetapi dapat juga digunakan di warung, tempat wisata, bahkan pasar rakyat atau pasar tradisional pun bisa apabila sudah menggunakan logo QRIS. Pasar Manis Purwokerto menjadi lokasi pada penelitian dengan jumlah responden sebanyak 49 responden. Teknik analisis yang digunakan adalah analisis regresi linier berganda. Hasil penelitian menunjukkan bahwa literasi keuangan, literasi digital dan penggunaan aplikasi QRIS memiliki pengaruh yang positif dan signifikan terhadap perilaku berwirausaha. Literasi digital merupakan variabel yang paling dominan dalam mempengaruhi perilaku berwirausaha di pasar Manis Purwokerto.

Kata Kunci: Literasi Keuangan, Literasi Digital, Perilaku Berwirausaha, Penggunaan QRIS

### Introduction

A country's economy depends on its payment system, and an efficient payment system supports an effective economy. The financial sector has undergone a major transformation thanks to technological advancements, including payment systems. In 2019, the Ministry of Cooperatives and SMEs reported that 3.79 million MSMEs in Indonesia use online platforms to market their products, which is 8% of the total MSMEs in Indonesia. To increase the digitalization of MSMEs, the government launched the "8 Million MSMEs Go Online" program together with the Ministry of Communication and Information Technology and e-commerce players. Technological advancements affect people's behavior by popularizing cashless transactions, such as electronic money, digital wallets, and debit cards, which offer convenience and incentives such as cashback and discounts.

Technological advancements have driven transformation in the payment system, making it more efficient and effective. In 2019, Kemenkop UKM reported that 3.79 million MSMEs have utilized online platforms, equivalent to 8% of the total MSMEs in Indonesia. To accelerate the digitalization of MSMEs, the government launched the “8 Million MSMEs Go Online” program, in collaboration with the Ministry of Communication and Information and e-commerce players. The development of information technology also affects people's transaction behavior, which is increasingly shifting from cash to non-cash. People now prefer transactions using electronic money, digital wallets, and debit cards because of the convenience and various benefits such as cashback and discounts offered.

To encourage the growth of the digital economy in Indonesia, Bank Indonesia (BI) plans to launch several initiatives for digital rupiah development. One of the key strategies is to expand the use of national standards in the payment system. According to a BI report, the Quick Response Code Indonesia Standard (QRIS) service is expected to reach 45 million users and one billion transactions by 2023 (BI, 2023). In addition, BI will promote collaboration between village banks and industry sectors, and unify the national payment system as a whole to improve efficiency (Bank Indonesia, 2023).

Translated with DeepL.com (free version)As part of its digitalization strategy, BI also plans to encourage banking digitalization and support e-commerce to achieve unicorn status. Research shows that banking digitization can expand access to financial services and improve financial inclusion (Smith et al., 2022). BI also plans to increase engagement with the e-commerce sector by providing support to achieve unicorn status (Doe, 2023).

At the 2022 Bank Indonesia Annual Meeting (PBTI), BI launched a white paper on the development of a Central Bank Digital Currency (CBDC) or digital rupiah. This project, named Project Garuda, signals Indonesia's readiness to follow in the footsteps of countries that have already implemented legal tender digital payments (BI, 2022). This white paper outlines the strategic and technical steps for the launch of CBDC in Indonesia (O'Brien, 2022).

According to recent data, BI also plans to consolidate the national payment system industry end-to-end to improve efficiency and security. Research shows that payment system integration can reduce transaction costs and increase processing speed (Adams et al., 2021). BI will focus its efforts on payment system integration to make it more efficient in supporting the digital economy (Lee, 2021).

These digitization initiatives also involve upgrading existing payment systems with the adoption of the latest technologies. Reports from BI show that the use of QRIS has accelerated cashless transactions in Indonesia (BI, 2023). With the adoption of these technologies, it is expected that there will be a significant increase in the number of digital transactions and the use of payment apps (Miller & Roberts, 2022). BI also underscores the importance of support for MSMEs to adapt to digital changes. Data shows that digitizing MSMEs can significantly improve their competitiveness (Wilson, 2022). Through these programs, BI hopes to accelerate the digital transformation of MSMEs and expand their market access (Green, 2023).

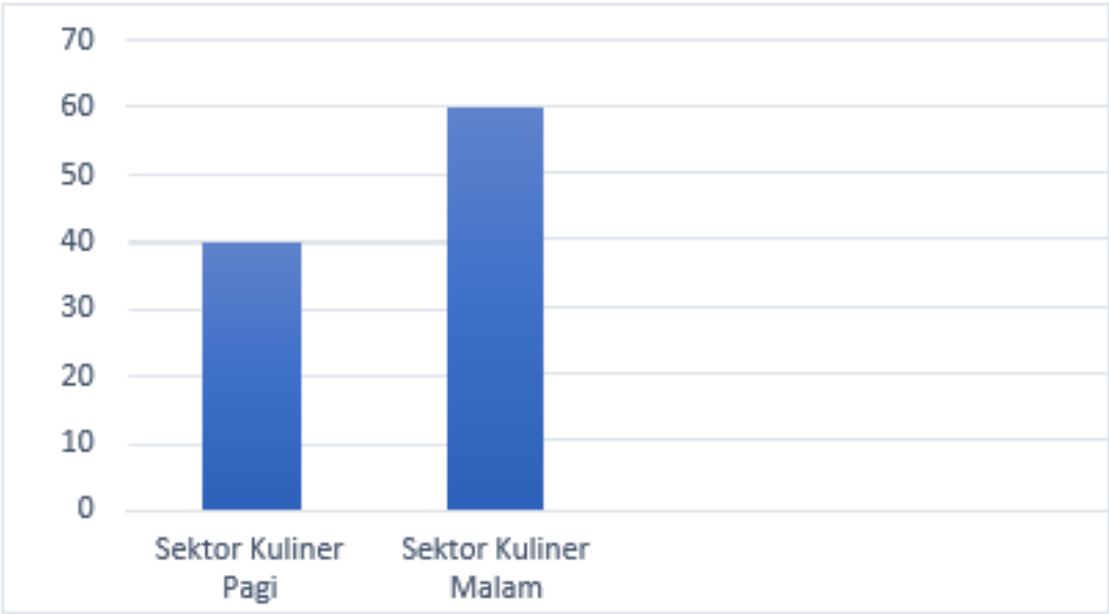
Pasar Manis in Purwokerto was chosen by Bank Indonesia and the local government as the QRIS pilot project location because it has been recognized by the Ministry of Trade as the best traditional market. This market meets the QRIS S.I.A.P standard (Healthy, Innovative, and Safe to Use) which is expected to be a successful example in the implementation of non-cash payments. The pandemic has changed people's payment habits, which are now more inclined towards cashless transactions. Even so, the adoption of QRIS in public markets still

faces challenges and requires adjustments from both traders and buyers (Febrinda & Ningsih, 2022).

The selection of Pasar Manis by BI Purwokerto and the local government as a QRIS pilot project is based on the Ministry of Trade's recognition of superior market management. This market meets the QRIS S.I.A.P qualifications and is expected to become a successful model. With the change in payment habits post-pandemic, public markets need to adapt to the cashless payment system. Challenges in implementing QRIS include the readiness of market managers, traders, and the community in adopting this technology (Febrinda & Ningsih, 2022).

Bank Indonesia and the local government chose Pasar Manis as the QRIS implementation location because this market has received an award from the Ministry of Trade as the best traditional market. This market meets the QRIS S.I.A.P standard and is projected to be successful in its implementation. Changes in payment habits during the pandemic accelerated the adaptation of cashless transactions. However, the implementation of QRIS in public markets requires adjustments as the technology is still new to many merchants and buyers (Febrinda & Ningsih, 2022).

**Figure 1.** Number of QRIS Users in the Culinary Sector in Pasar Manis



Source: Primary data 2024

Based on the data, the number of culinary sectors in Pasar Manis is around 97 outlets which are divided into two, namely in the morning and at night. The morning culinary sector has a smaller number than the evening culinary sector. In the morning the types sold are not as varied as at night, at night the variety of food is more diverse ranging from heavy food to desserts available and many choices. 80% of the total traders use QRIS in transactions and the rest choose to use cash due to difficulties in financial management.

Financial literacy and digital literacy factors are very important in the use of non-cash payments (Smith et al., 2021). Pasar Manis Purwokerto has been assessed as a people's market that meets the S.I.A.P QRIS (Healthy, Innovative, and Safe to Use) qualifications and is expected to succeed as a pilot project (Bank Indonesia, 2022). However, an initial survey

shows that many merchants in the culinary sector are reluctant to use QRIS due to payment fraud (Febrinda & Ningsih, 2022). Further research is needed to find out if a lack of financial and digital literacy affects this entrepreneurial behavior (Jones & Taylor, 2021).

Financial literacy helps individuals understand the benefits and risks of using cashless payments (Adams & Brown, 2021). Pasar Manis in Purwokerto has been recognized as the best traditional market and complies with the S.I.A.P QRIS standard (Ministry of Trade, 2021). However, some culinary traders in the market refuse to use QRIS due to concerns about fraud (Febrinda & Ningsih, 2022). Further research needs to be conducted to determine whether this resistance is due to low financial and digital literacy among merchants (Wilson, 2022).

Payment digitization requires a good understanding of financial and digital literacy (Lee & Johnson, 2021). Pasar Manis Purwokerto was assessed to meet the S.I.A.P QRIS standard and was selected as a pilot project by Bank Indonesia (Bank Indonesia, 2022). However, a survey shows that some merchants in the culinary sector are still hesitant to use QRIS due to fraud concerns (Febrinda & Ningsih, 2022). This research is important to find out whether the hesitation is due to a lack of financial and digital literacy among merchants (Taylor, 2022). The importance of financial literacy in the use of cashless payment systems cannot be ignored (Miller & Roberts, 2022). Pasar Manis Purwokerto was chosen as an example of QRIS implementation because it meets the S.I.A.P QRIS qualification (Ministry of Trade, 2021). However, many culinary traders in the market choose not to use QRIS due to the risk of fraud (Febrinda & Ningsih, 2022). Further research is needed to understand whether this is due to low financial and digital literacy among merchants (Green, 2022).

The implementation of cashless payments requires a good understanding of financial and digital literacy (O'Brien & Clark, 2022). Pasar Manis in Purwokerto has met the S.I.A.P QRIS qualification and was selected for a pilot project by Bank Indonesia (Bank Indonesia, 2022). Despite this, surveys show many culinary traders are reluctant to use QRIS due to concerns over payment fraud (Febrinda & Ningsih, 2022). Further research is needed to determine whether a lack of financial and digital literacy is a major factor in this hesitation (Smith & Taylor, 2022).

## **Literature Review and Hypothesis Development**

The Indonesian Standard Quick Response Code (QRIS) is the result of a merger of various QR codes provided by various Payment System Service Providers (PJSP). In an effort to improve the payment system in Indonesia, Bank Indonesia together with ASPI (Indonesian Payment System Association) has developed this payment QR code standard. QRIS is expected to accelerate financial inclusion in Indonesia, support the progress of MSMEs, and encourage economic growth through lowering transaction costs or increasing payment efficiency (Sriekaningsih, 2020).

Transactions through QRIS can use a source of funds in the form of deposits or payment instruments such as debit cards, credit cards, and electronic money with server-based storage media. The maximum QRIS transaction limit is ten million rupiah (Rp10,000,000.00) per transaction. Currently, all provinces in Indonesia and almost all municipal districts have been connected to the QRIS service. Small businesses have utilized QRIS in various locations, including traditional markets, shopping centers, universities, schools, and places of worship. QRIS has also been implemented for payment of parking fees, local government levies, as well

as various other types of fees at tourist sites. QRIS has advantages that are summarized in the characteristics of UNGGUL (BankIndonesia, 2022).

According to Garman and Forge (in Kartawinata & Mubaraq, 2018), financial literacy is an understanding of the facts, concepts, principles, and technological tools that underlie the ability to use money wisely. Financial literacy plays an important role in shaping smart and responsible transaction behavior. Financial literacy is a process or activity that aims to increase the knowledge, skills, and confidence of consumers and the community so that they are able to manage personal finances effectively. The main objective of financial literacy is to educate consumers about their rights and responsibilities, and to explain the benefits and risks of various financial products, so that they can make more informed financial decisions that suit their needs. Financial literacy is a crucial factor in money management, where individuals with high financial literacy tend to be wiser in managing money, avoid consumptive behavior, and be more frugal in spending.

Gilster (in Herlina, 2012) defines digital literacy as the ability to utilize technology and information from digital devices effectively in various contexts, including academic, career, and daily life. Donny (2018:4) defines digital literacy as the ability to use information and communication technology (ICT) to find, evaluate, utilize, create, and communicate content or information with cognitive and technical skills. Meanwhile, Hague and Payton (in Akbar, 2017: 13) explain that digital literacy involves an individual's ability to apply functional skills to digital devices, so that he can find and select information, think critically, be creative, cooperate with others, communicate effectively, and still pay attention to electronic security and the prevailing socio-cultural context.

## Method

The type of research used for this study is quantitative research. As an initial step, data collection related to the topic was carried out using journals and books that were used as reference sources in obtaining theoretical foundations and how to analyze data. This study used a quantitative approach carried out at Pasar Manis Purwokerto with a sample size of 49 people with accidental sampling. Quantitative research is often used in research that requires objective and measurable measurements, so that researchers can draw conclusions that apply more widely. Sekaran and Bougie (2016) in their book *Research Methods for Business* state that this method is very suitable for research that requires generalization of results. In addition, an article from the *Journal of Quantitative Research* (Smith, 2018) also provides guidance and examples of relevant cases in applying this method in various fields. Data was obtained through the distribution of questionnaires which were then analyzed using multiple linear regression analysis.

## Results and Discussion

Validity is intended to state the extent to which the instrument (questionnaire) measures what you want to measure. This means that the measuring instrument used can actually measure the nature of the object under study or measure other properties. Researchers used SPSS (Statistical Product and Service Solutions) Version 17.00 for windows to conduct data validation tests. The data obtained from the field is processed into the application program to

determine the validity of the instrument in this study. To assess the validity of each question item, it can be seen from the corrected item total correction of each question item.

The results of the validity test of this research questionnaire are as follows:

**Table 1.** Validity Test Results

VARIABEL	ITEM	<i>Person Correlation (r hitung)</i>	r tabel	Significance	Description
X1	P1	0,345***	0,163	0,000	VALID
	P2	0,487***	0,163	0,000	VALID
	P3	0,502***	0,163	0,000	VALID
	P4	0,247**	0,163	0,000	VALID
	P5	0,345***	0,163	0,000	VALID
	P6	0,590***	0,163	0,000	VALID
X2	P1	0,499***	0,163	0,000	VALID
	P2	0,495***	0,163	0,000	VALID
	P3	0,467***	0,163	0,000	VALID
	P4	0,436***	0,163	0,000	VALID
	P5	0,601***	0,163	0,000	VALID
	P6	0,582***	0,163	0,000	VALID
	P7	0,480***	0,163	0,000	VALID
	P8	0,505***	0,163	0,000	VALID
X3	P1	0,335***	0,163	0,000	VALID
	P2	0,395***	0,163	0,000	VALID
	P3	0,317***	0,163	0,000	VALID
	P4	0,339***	0,163	0,000	VALID
	P5	0,290**	0,163	0,000	VALID
	P6	0,398***	0,163	0,000	VALID
Y	P1	0,432***	0,163	0,000	VALID
	P2	0,320***	0,163	0,000	VALID
	P3	0,323***	0,163	0,000	VALID
	P4	0,392***	0,163	0,000	VALID
	P5	0,375***	0,163	0,000	VALID

Reliability has the nature of trust. In other words, a measuring instrument has reliability if the measurement results are relatively consistent when the measuring instrument is used repeatedly by the same researcher or other researchers. Therefore, the questions in the questionnaire should be made as well as possible, so that when filled in by respondents the results are relatively consistent. In this study, researchers used SPSS (Statistical Package for Social Science) version 17.00 for windows to conduct a reliability test. One method of testing reliability is to use the Cronbach Alpha method. The test results can be seen in the reliability level table, then the results are compared with the reliability level based on the Alpha value if the calculated Alpha value is greater than the r table, the research instrument is declared reliable. The results of the reliability test of this research variable are as follows:



**Table 2.** Reliability Test Results

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.784	0.788	4

Source of data processed 2024

The test results can be seen in the statistic reliability level table, based on the Alpha value, the calculated Alpha value is greater than the r table, namely  $0.784 > 0.05$ , so the research instrument is declared reliable.

**Table 3.** F Test Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	227.891	3	75.964	17.253	0.000 <sup>b</sup>
Residual	202.529	46	4.403		
Total	430.420	49			

a. Dependent Variable: Entrepreneurial Behavior

b. Predictors: (Constant), Interest in using the app, Financial Literacy, Digital Literacy

Source of data processed 2024

The decision-making criteria in tests using p-value or Fcount are if  $p\text{-value} < 0.05$  or  $F_{\text{count}} \geq F_{\text{table}}$  then  $H_a$  is accepted. Conversely, if the  $p\text{-value} \geq 0.05$  or  $F_{\text{count}} < F_{\text{table}}$  then  $H_a$  is rejected. SPSS processing results show that the significance value of the F test is 0.00 or  $< 0.05$  so that the variables of digital literacy, financial literacy and interest in using the application have a simultaneous influence on entrepreneurial behavior.

**Table 4.** Regression Analysis Results

Dependent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	10.660	2.402		4.438	0.000
Financial Literacy	0.322	0.106	0.470	3.048	0.004
Digital Literacy	0.418	0.101	0.681	4.125	0.000
Interest in using the application	0.282	0.075	0.430	3.736	0.001

a. Dependent Variable: Entrepreneurial Behavior

Source of data processed 2024

The significance value for the variables of financial literacy, digital literacy and interest in using the application on entrepreneurial behavior is 0.004, 0.000 and 0.001 respectively so that the significance value  $< 0.05$  and can be explained the data above meets the T test with each for the T table value is 3.048 for financial literacy, 4.125 for digital literacy and 3.736 for interest in using the application. It can be concluded that the variables of financial literacy, digital literacy and interest in using the application have a partial influence on entrepreneurial behavior.

## Discussion

This study shows that the initial hypothesis is accepted, with a positive coefficient of 3.048 and a significance level of 0.004. The data supports that financial literacy significantly affects entrepreneurial behavior. This means that as financial literacy increases, MSMEs tend to be more proactive in entrepreneurial activities. Financial literacy has been recognized as a key factor in the development of entrepreneurship. Research by Rahmawati (2019) found that entrepreneurs who have good financial understanding tend to be more successful in managing their businesses, including in terms of planning and decision-making related to finance. This study supports the finding that financial literacy has a positive influence on entrepreneurial behavior.

This study found that increasing digital literacy has a significant impact on entrepreneurial behavior in MSMEs. With a positive coefficient of 4.125 and a significance of 0.000. An increase in digital literacy is expected to increase MSME participation in digital-based entrepreneurial activities. This suggests that mastery of digital technology is a key factor that can strengthen the competitiveness of MSMEs in facing challenges and opportunities in the digital era. Previous studies have shown that digital literacy plays an important role in supporting entrepreneurship, especially in the ever-evolving digital era. According to research by Putri et al. (2020), high digital literacy allows MSMEs to more easily adopt digital technology in their business operations, which ultimately increases efficiency and competitiveness. The results of this study are in line with the findings in the current analysis, which shows that digital literacy contributes significantly to entrepreneurial behavior with a positive coefficient.

This study reveals that the results of the analysis are in accordance with the proposed hypothesis, with a positive coefficient of 3.736 and a significance level of 0.001. This data shows that interest in using apps has a significant influence on entrepreneurial behavior. An increase in interest in using is expected to increase MSME participation in entrepreneurial activities. This highlights the important role of digital technology and apps in facilitating and encouraging entrepreneurial growth among MSMEs. Previous studies by Nugraha and Santoso (2021) revealed that interest in using digital applications is one of the factors that encourages MSMEs to be more actively involved in entrepreneurial activities. Their research shows that ease of access and use of digital applications can increase productivity and innovation in MSME businesses. This finding is consistent with the results of the analysis which shows that interest in using applications has a significant impact on entrepreneurial behavior, as seen from the positive coefficient in this study.

## Conclusion

Based on the results of data analysis and discussion that have been described previously, it can be concluded that Financial Literacy, Digital Literacy, interest in using applications have a positive and significant influence on entrepreneurial behavior. Thus, the higher the financial literacy, digital literacy and interest in using applications will increase the interest in entrepreneurship. Based on the results of the study, it can be suggested that further research can be carried out to develop research variables, expand research objects and subjects that are relevant to current problems.



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