BIEJ Business Innovation and Entrepreneurship Journal

Volume 8 No.3 2026

Analyzing the Convenience and Challenges of Transitioning from Physical to Digital Wallets: A Case Study of QRIS Adoption in Small Businesses

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Abstract*– The switch from payments to digital payment systems is really important in Indonesia especially with the introduction of Quick Response Code Indonesian Standard also known as QRIS. This study is about looking at how easy or hard it's for small businesses to use QRIS as a way to pay digitally. We used a method to gather information, where we talked to five small business owners in South Sumatra who already use QRIS in their daily work. We found out that QRIS has a lot of things like making transactions faster, cashless, and more efficient. Most customers also like using QRIS because it's easy to use and convenient. We think that QRIS is a thing for small businesses, in Indonesia and it can help them a lot. However, The study found some problems with QRIS. For example the internet connection is not always working there are system errors people need to use their smartphones some customers do not know how to use things and there are fees for transactions. These problems show that even though QRIS helps people move to payments there are still some technical and operational issues that make it hard for small businesses to use QRIS. Overall, This study says that QRIS is good for businesses and customers. We need to keep helping people learn about digital things and make the internet work better so that digital payments can really work well in Indonesia. We need to do more to make sure it works properly for small businesses and customers, in Indonesia.

***Keyword: QRIS, digital payment, digital wallet, small businesses, transaction efficiency, financial technology*.**

I. INTRODUCTION

The way people make payments has changed a lot because of technology. One big change is that people are using cash and more digital payments. Digital wallets make it easy for people to pay for things using their smartphones. This is good for both customers and sellers because they do not have to carry cash and it is faster. Some researchers have written about this. They agree that it is a good thing [1].

In Indonesia digital payments have become very popular in years. This is because technology is getting better and better. The government and banks are helping to make it easier for people to use payments. They want to make Indonesia a cashless society. One way they are doing this is with something called QRIS. QRIS is a payment system that uses a special code. People can use this code to pay for things with their wallets. It is easy to use. It helps businesses keep track of their money [2]. QRIS is also good because it makes it easy for different businesses to work together and it makes payments faster [3].

QRIS is good for people who buy things and for businesses. It helps businesses keep track of their money. It reduces the risk of losing cash. It also makes it easier for businesses to be transparent about their money [4]. Other researchers have found that using payments can help small businesses be more efficient and successful [5].

Some studies have looked at how QRIS's used in Indonesia. They found that it can help businesses be more efficient and that it can make customers happier [6]. Other studies found that QRIS can help small businesses compete with businesses by giving customers more ways to pay [7].

Researchers have also found that how much people like QRIS depends on things like how they understand technology and how much the government supports it [8]. However, some studies have also found that small businesses have a time using digital payments because they do not understand technology very well and it can be expensive [9]. However, some studies have also shown that using QRIS can be bad for businesses. One big problem is that QRIS needs the internet to work and if the internet is slow or not working it can slow down or stop transactions. Some people who own businesses do not know much about technology so they have a hard time using QRIS.

The people who help with payments also charge fees and this can make it harder for small businesses

e-ISSN : 2684-8945
DOI: https://doi.org/10.35899/biej.v8i3.1241

BIEJ Business Innovation and Entrepreneurship Journal
Volume 8 No.3 2026

to make money. Sometimes the system does not work right. This can be a problem, for both the people selling things and the people buying things. We also have to think about people trying to cheat us or getting our information and this is a big concern. All these problems show that even though QRIS is a thing it is still hard for small businesses to use it.

Even though there have been studies about digital payments and QRIS most of them have focused on the technology or how customers behave. There have not been studies about how small businesses feel about switching from cash to digital payments. This is a process that can be difficult for businesses.

Most studies have talked about the things about QRIS but they have not talked about the challenges that small businesses face. So it is important to understand how small businesses feel about using QRIS and what challenges they face when they switch from cash to payments.

II. LITERATURE REVIEW

This study is about businesses and how they use digital payment systems. It examines the challenges faced by small businesses when adopting QRIS technology for digital payments. According to the Technology Acceptance Model (TAM), technology adoption is influenced by perceived usefulness and perceived ease of use, while barriers such as limited digital literacy, internet connectivity issues, and security concerns may affect adoption [10]. The main question this study is trying to answer is: How does using QRIS technology affect businesses when they switch from using physical payments to digital payments.

This study should help people who study business learn more, about how small businesses use payments. It should also help the government, banks and small businesses make plans to get more people to use digital payments and to fix the problems that small businesses have with digital payments.

The switch from paying with cash to using wallets is a big deal these days. A lot of people like payments because they are easy to use, fast and get the job done quickly. Digital wallets are like a place to store money on your phone or computer. You can use them to pay for things without needing cash, which is really helpful when you are doing everyday business things [1].

QRIS is a payment system that is helping people in Indonesia make this switch. It is special because it lets you use different payment apps all with one QR code making it easy for people who are buying and selling things to complete transactions. Some studies have shown that QRIS is good because it makes transactions faster helps people keep track of their money better and makes customers happier [11].

Using QRIS can also help small businesses compete with ones. When businesses start using payments, they can get more customers and do a better job. Some other studies have also found that digital payments can help businesses work smarter and reduce mistakes when people are paying [12].

Even with all these good things there are still some problems with using QRIS. Some people who own businesses have a hard time figuring out how to use digital technology because they do not know much about it [13]. Also, QRIS needs the internet to work so if the connection is bad, it can cause problems. Some businesses do not like that they have to pay fees when people use QRIS because it takes away from the money they make.

People are also worried about security when they use payments. Some people are scared that someone might try to trick them or steal their information when they use QRIS. Sometimes the system can have problems like when the transaction does not go through which can be frustrating.

From what we have learned QRIS can be both good and bad for businesses. There is not a lot of research, about what small business owners think about QRIS and what problems they have when they start using it. So this study is going to look at how small businesses using QRIS and what challenges they are facing when they switch from paying with cash to using digital payments

III. RESEARCH METHODS

This study uses qualitative methods with a descriptive design to analyze the ease and challenges of transitioning from physical payments to digital wallets, specifically the use of QRIS in small businesses. A qualitative approach was chosen to gain a deeper understanding and to understand the experiences and perceptions of small business owners regarding the use of digital payments. Qualitative

e-ISSN : 2684-8945
DOI: https://doi.org/10.35899/biej.v8i3.1241

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Volume 8 No.3 2026

methods are used to explore social phenomena in depth through the perspectives of participants [14].

Research data was collected through semi-structured interviews using open-ended questions. This study involved five small businesses (two males and three females) in South Sumatra that have used QRIS as a payment method. The respondents' businesses varied from beverages to food to gain a broader perspective on QRIS use among small businesses.

Table 1. Characteristics of the informants in this study are presented

Code	Type of Business	Business Age (Years)	Long Use of QRIS
R1	Culinary	10	Six months ago
R2	Culinary	2	One years ago
R3	Cosmetics Shop	2	One years ago
R4	Coffe Shop	20	Four years ago
R5	Printing	5	Five years ago

The collected data was analyzed using thematic analysis. The process began by transcribing the interviews and reviewing the responses to understand the data. The researcher then identified data related to the research objectives, such as QRIS ease of use, transaction efficiency, customer perceptions, and technical problems. The identified data was grouped into main themes and compared to identify similarities and differences in participants' experiences. This method is used to identify patterns or themes in qualitative data [15].

The results of this analysis were then thought about carefully to understand how using QRIS affects small businesses both in terms of how convenient it is and the problems that businesses face. The process of analysing the data was done step by step through reducing the data presenting it and drawing conclusions [16].

A qualitative method was chosen because it provides a deeper understanding of the experiences, perceptions, and challenges faced by small business owners. During the research, challenges such as limited interview time and participants giving brief responses were addressed by using flexible interview schedules and follow-up questions.

IV. RESULT AND DISCUSSION

Result

This study involved five small business owners in South Sumatra who have used QRIS as a digital payment method. Based on interviews, several key themes related to QRIS use emerged, including ease of transactions, customer response, usage challenges, and the impact on business operations. The research findings are presented based on interviews with each informant.

Table 2. Main findings of QRIS implementation

Positive Effect	Negative Effect
Faster transactions	Internet connection problems
Easier financial recording	System errors during payment
Reduced use of cash	Some customers prefer use cash
More practical payments	Dependence on smartphones
Reduced risk of fake money	Transactions fees

4.1 Ease of Use of QRIS

Based on interviews, the majority of respondents stated that using QRIS facilitates transactions. These benefits include speed of payment, ease of recording transactions, and the elimination of the need for change.

"...transactions between buyers and sellers are faster, eliminating the need to count change. (R1)

"Payments are more efficient, faster, and ultimately more convenient." (R4)

"I don't have to worry about counting change, which is a definite plus." (R3)

QRIS is also considered to provide security in transactions by reducing the use of cash.

"...and can minimize the risk of counterfeit money circulation." (R1)

Furthermore, the interviewee stated that QRIS helps reduce cash usage and simplifies financial management.

"QRIS makes it easier for me to save money." (R2)

This response indicates that using QRIS provides convenience in terms of transaction speed

4.2 Customer Response to QRIS

Interview results show that the majority of customers responded positively to the use of QRIS. Customers are considered more interested in using digital payments because they are considered more practical and easier to use.

"Customer response is very good because they only need to scan the QRIS code for payment." (R2)

e-ISSN : 2684-8945
DOI: https://doi.org/10.35899/biej.v8i3.1241

"The response tends to be positive, because most customers don't need to prepare cash, and just open their cellphone and scan" (R4)
"Customer response has been very receptive, because there is no need to carry cash anymore." (R5)

However, sources said that there were still responses from customers who had difficulty with QRIS.
"... sometimes there are still responses from parents who are still confused or don't understand how to use QRIS." (R4)

These findings show that customer responses to using QRIS tend to be positive, although there are still some customers who are not used to using digital payment methods.

4.3 Challenges in Using QRIS

Even though it provides various conveniences, several sources also mentioned that there are challenges in using QRIS. The obstacles that most often arise are internet network problems and system disruptions.
"If the internet quota runs out, the signal is interrupted or the battery runs out, the payment process will be hampered." (R1)
"Sometimes network problems often occur, so QRIS transactions have to wait." (R3)
"... once QRIS couldn't be used because the system had an error." (R4)
Several sources also stated that there are still customers who are not used to it and have not used QRIS.
"…there are still many customers who do not use digital payments." (R2)
"Some customers still need help when using QRIS." (R4)

These findings indicate that the main challenges in using QRIS are related to internet connection, system disruption, and user adaptation.

4.4 Impact of Using QRIS on Business

Most interviewees stated that the use of QRIS had a positive impact on their business operations. These impacts include increasing transaction efficiency, ease of financial recording, and improving service quality.
"Makes it easier to record finances, both income and expenses," (R2)
"All transactions go directly to the application, just look at the transaction history." (R3)
"Improving the efficiency of transactions in my coffee shop." (R4)

Overall, the research results show that using QRIS makes transactions easier, getspositive responses from customers, and has a positive impact on small business operations, although there are still several challenges in its use.

The results of our research match what other studies have found. They said that digital payment systems make transactions faster. They also help small businesses run smoothly. Digital payment systems are really helpful, for businesses.

Discussions

They improve how fast transactions happen and make operations more efficient [5]. Previous research showed that QRIS makes things easier, for sellers and customers. This is because transactions can be done fast using smartphones. QRIS helps both parties [1]. In this study, participants admitted that QRIS helps make payments more practical and supports smoother business activities.

People in this study often talked about how easy it's to make transactions. A lot of people said that QRIS makes paying simpler because sellers do not have to figure out change. They also said that QRIS is really helpful when a lot of people are shopping at the time. This is because people can pay faster with QRIS. This is what we learned from the study about QRIS. QRIS is helpful because it makes transactions faster and easier. The people in the study liked using QRIS during times because it saves time. This is similar to what other people found out about wallet systems like QRIS. They said that digital wallet systems, like QRIS make transactions faster and more efficient. QRIS is an example of a digital wallet system that makes paying easier and faster [17].

This study also found that QRIS is really helpful for business owners when it comes to managing their records. Business owners said that because digital transactions are recorded automatically it is easier for them to keep track of how much money's coming in and the cash flow of their business. These results are similar to what other studies have found, which is that QRIS helps small businesses manage their finances better and reduces mistakes that can happen when recording transactions, by hand. QRIS makes it easier for business owners to manage their finances. QRIS helps reduce errors in financial records [4]. Therefore, QRIS not only functions as a payment method but also assists business owners in organizing their financial activities more effectively.

Another important thing is about keeping transactions safe. One of the people in the study said

e-ISSN : 2684-8945
DOI: https://doi.org/10.35899/biej.v8i3.1241

that QRIS is helpful because it reduces the risk of money. This is because when people use QRIS they do not have to give each cash. They just do the transaction on their devices. This is what other studies have said too. They said that when people use payments it is safer than using cash. This is because digital payments can help prevent things, like money and mistakes that people make when they are handling cash. QRIS is a payment system so it helps with transaction security [2]. In this regard, QRIS provides additional security benefits for both business owners and customers.

Despite its advantages, the researchers found some problems that small business owners have when they use it. One big problem is that the internet connection is not always stable. Some of the people in the study said that when the internet is slow it can make payments take a time or even fail. Small business owners who use QRIS have to deal with this issue. Other studies about QRIS have found the thing. QRIS needs a good internet connection to work well. This is a weakness of QRIS and other digital payment systems that use QRIS. Small business owners have trouble, with QRIS because of this [9]. This situation shows that technological infrastructure plays an important role in supporting the successful implementation of QRIS.

Furthermore, this study found that some customers still prefer cash payments and are not familiar with QRIS technology. Participants explained that older customers sometimes experience difficulties in using digital wallets or scanning QR codes. This finding is consistent with previous research which found that limited technological understanding becomes a challenge in digital payment adoption among certain groups of society [8]. Therefore, although digital payments are becoming increasingly popular, cash payments are still widely used by some customers.

Another challenge identified in this study is the dependence on smartphones and digital devices. Participants stated that QRIS transactions cannot be completed when smartphones experience technical problems such as low battery, application errors, or poor signal connection. In addition, several participants mentioned transaction fees as another concern in using QRIS. Although the fees are relatively small, some business owners still consider them as an additional operational cost. Similar findings were also discussed in previous studies regarding the financial and technical barriers of digital payment implementation in small businesses [18].

Overall, the findings of this study suggest that QRIS has a positive role in helping small businesses transition from physical payments to digital payments. QRIS improves transaction efficiency, simplifies financial management, and increases payment security. However, internet connection problems, limited digital literacy among customers, and technical dependence on smartphones remain important challenges in its implementation. Therefore, better internet infrastructure, digital education programs, and continuous support for small business owners are necessary to improve the effectiveness of QRIS adoption in the future.

The results of this study are important because they help us understand how small businesses deal with changing from cash payments to wallet systems. This study is also a part of a conversation about using digital payments in Indonesia particularly when it comes to small businesses. We think that future studies should include people from different types of businesses and areas so we can learn more about how digital wallet systems, like QRIS are used in Indonesia.

V. CONCLUSION AND SUGGESTION

This study looks at how small businesses in Palembang're switching from physical payment methods to QRIS. The results show that QRIS has a lot of things to offer such as making transactions faster and easier simplifying the payment process helping with cashless transactions and making it easier to keep track of money. The study also found some problems with QRIS, like internet connections that do not always work people not knowing much about things, mistakes when making transactions needing to have a smartphone and having to pay fees for transactions.

Overall QRIS can really help small businesses start using payments. To make the most of these things the internet needs to be better people need to know more, about digital things and the system needs to be more consistent. So the government, banks and companies that help with payments need to keep making the internet better teach people about payments and make QRIS safer and work better. In the future studies should talk to people from different places and types of businesses to get a better idea of how QRIS is working in Indonesia.

e-ISSN : 2684-8945
DOI: https://doi.org/10.35899/biej.v8i3.1241

VI. REFRENCE

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e-ISSN : 2684-8945
DOI: https://doi.org/10.35899/biej.v8i3.1241