Analysis of QRIS Implementation in Increasing Digital Payments in Samarinda, East Kalimantan

Muhammad Zulfariansyah*

* Lecturer of Informatics Engineering Study Program, Faculty of Engineering, Universitas Nahdlatul Ulama Kalimantan Timur

Correspondence Author: zulfariansyah@unukaltim.ac.id

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ABSTRACT

QRIS (Quick Response Code Indonesian Standard) is a national electronic payment standard that aims to facilitate financial transactions via QR codes. However, QRIS implementation in Samarinda still faces various challenges. The purpose of this study is to analyze the challenges of QRIS implementation in Samarinda and find solutions to overcome them. The method used in this research is descriptive qualitative research with a case study approach. Data is collected through in-depth interviews with various related parties, such as merchants, users, and banks as a payment service provider partner. Data collection was also carried out through field observations and documentation. The results of the study show that the main challenges in implementing QRIS in Samarinda are the lack of public knowledge and understanding of QRIS, inadequate infrastructure, and low participation of merchants. The solution to overcome these challenges is to increase outreach and education to the public, strengthen infrastructure and technology support, and provide incentives to merchants to encourage their participation in using QRIS. The conclusion from this research is that the implementation of QRIS in Samarinda requires greater efforts to increase public understanding, strengthen infrastructure, and provide incentives to merchants. In the long term, implementing QRIS can provide many benefits, such as reducing transaction costs, simplifying payments, and increasing payment system efficiency.

1. INTRODUCTION

QR code (quick response code) is a is a type of two-dimensional barcode that contains more information than a barcode and can be read from various directions horizontally and vertically (Indonesia, 2019). QR Code is used to provide easy access to online information through the digital camera on a smartphone or tablet. A barcode reader in the camera interprets the bar code, which typically contains a link to view a webpage, send an SMS text message or call a phone number. The technology for QR codes was developed by Densa-Wave, a Toyota subsidiary. The codes were originally used for tracking inventory and required a separate reader app, but beginning with iOS 11 and Android 8.0, readers are native to most mobile device cameras (Contributor, 2013).

Electronic Payment (E-payment) system is the means of making payment and/or transaction for goods and services on an e-commerce website or electronic environment without any need to use cash or check. E-payment system is also known as online payment system. It has many forms such as credit card, virtual card, mail order, e-wallet, mobile payment, cryptocurrency, etc. (Kuscu, et al., 2020)

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QRIS (Quick Response Code Indonesian Standard) is QR Code payment standard for Indonesian payment systems developed by Bank Indonesia and the Indonesian Payment System Association (ASPI) (Indonesia, 2019). QRIS is a further development of E-Payment. By reducing the use of cash and increasing the efficiency of the payment system, QRIS is seen as a solution to facilitate financial transactions.

QRIS is a digital payment system that is considered to have great potential in changing the way transactions are made in Indonesia. QRIS allows users to make payments through mobile banking applications or digital wallets using QR (Quick Response) codes that are easily read by smartphone cameras. Since its introduction in 2019, QRIS has been adopted by many merchants and users throughout Indonesia. Samarinda as a big city in East Kalimantan has significant potential to implement QRIS as a more efficient electronic payment method.

However, the implementation of QRIS in Samarinda is still uneven. Even though paying using QRIS is easy, there are still many merchants who don't have QRIS or refuse to pay using QRIS. This research was conducted to deepen the implementation of the use of QRIS as a digital payment instrument in Samarinda - East Kalimantan, as well as to identify the factors that influence the acceptance and use of QRIS by merchants and users.

Therefore, research on the implementation of QRIS in Samarinda - East Kalimantan is imperative to do. This study analyzes the challenges of QRIS implementation in Samarinda, and find solutions to overcome these challenges. With this research, it is hoped that useful information will be obtained to improve QRIS implementation in Samarinda. This will contribute to the development of electronic payment systems in Indonesia.

2. METHOD

The methodology used in this is a descriptive qualitative research method with a case study approach. Qualitative descriptive method is a research approach that focuses on describing and interpreting a phenomenon in a detailed and holistic manner. This method involves collecting and analyzing data through various techniques such as observation, interviews, and document analysis (Nawawi & Martini, 1996). The main objective of this method is to provide a comprehensive and accurate description of the phenomenon under study. The qualitative descriptive method is particularly useful when the research question is focused on exploring a particular phenomenon or when the existing knowledge is limited.

This method was chosen because this study aims to describe in detail the challenges faced in QRIS implementation in Samarinda. It also aims to find solutions to overcome these challenges. The data in this study were obtained through in-depth interviews with various related parties, such as traders, users and payment service providers. In addition, data were collected through field observations and documentation. The data obtained was then analyzed descriptively to describe in detail the challenges and solutions found.

During the data collection process, researchers maintain openness, neutrality, and thoroughness in collecting and analyzing data. In addition, researchers also pay attention to research ethics by seeking consent from participants and maintaining confidentiality of data. In conducting data analysis, the researcher used a qualitative descriptive analysis technique by paying attention to the existence of patterns in the data found and describing them systematically. The results of the analysis are then used to understand the challenges of QRIS implementation in Samarinda and find solutions to overcome these challenges.

By using a descriptive qualitative method, this research is expected to provide a detailed description of the challenges of QRIS implementation in Samarinda. It is also expected to provide solutions to overcome these challenges. The results of this study are expected to contribute to electronic payment systems development in Indonesia.

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3. RESULTS AND ANALYSIS

The use of QRIS for transactions involves at least three parties, namely Banks, Merchants, and Users. Innovative Banks collaborate with payment service providers to develop the QRIS mechanism as a transaction tool. The QRIS is then distributed to merchants who have had prior relationships with the bank, such as bank debtors. Merchants receive a QRIS QR Code from the Bank and can accept payments using QRIS. Meanwhile, users are individuals who make payments by scanning the QR code provided by the merchant using a payment application that is compatible with the bank or payment service provider being used.

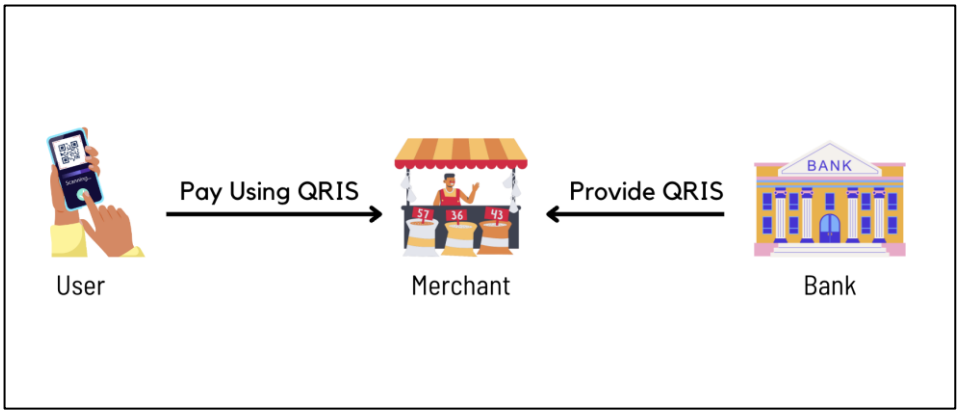

Figure 1. The Relation Between User, Merchant and Bank in the Context of QRIS Payment

3.1. QRIS from Merchants Point of View

Merchant is person who owns or runs a shop, store, or other business. (Dictionary, n.d). the merchant provides the QRIS that the user uses to make payments. QRIS can be an effective solution for merchants to improve efficiency and security when receiving payments from customers. By utilizing QR codes, QRIS enables merchants to accept e-payments easily and quickly by scanning the QR code. In Samarinda, QRIS implementation is performing well for merchants with a target market of 15-35 years, such as cafes, coffee shops, and mini-market retail outlets.

Bahruddin (Male 32 Years) Bahruddin as a food and beverage entrepreneur in Samarinda has benefited from using QRIS in his business transactions. By using QRIS, Bahruddin found it easier and faster to transact. Apart from that, Bahruddin also feels safer with QRIS because he doesn't need to touch cash. This has the potential to carry bacteria and germs that are not good for his business in the food and beverage sector. As an entrepreneur, Bahruddin realizes the importance of following technological developments and innovation in his business. The use of QRIS is an example of technology that can facilitate business transactions, especially in today's digital era. Bahruddin realized that by using QRIS, he could speed up the payment process and avoid errors in counting money. In addition, Bahruddin also realized that using QRIS could increase customer confidence in his business. Customers will feel more comfortable and secure in making transactions using QRIS. This can help increase customer loyalty and give Bahruddin's business a good reputation.

Nevertheless, QRIS is not accepted by all merchants in practice. The majority of these merchants are street vendors. During an interview with 10 merchants who did not use QRIS, seven of them admitted that they did not have sufficient insight and understanding regarding QRIS use. As a result of this lack of insight, they do not feel confident in using QRIS, which leads them to decide not to use it. Three of them are still hesitant to abandon cash payments. One of them are already using Electronic Data Capture (EDC) as a form of electronic payment, but there are frequent interruptions in payment transactions, so they return to using cash. This has contributed to a decline in confidence in new payment technologies.

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3.2. QRIS from Users Point of View

User is someone who makes a purchase at a merchant. In this context, the User is the party that uses the smartphone as a tool for reading the QR Code in QRIS QRIS is an easy, fast and secure payment solution. As stated by Liris Kinanda (Male, 22 Years) said that using QRIS makes it very easy for him to make payment transactions because he doesn't need to took the wallet to take the card or save change. Likewise, what was said by Eka Rizky (Female, 30 years old) was that she felt QRIS was a practical solution to making purchases. Apart from being able to pay without carrying a wallet, Eka realized that QRIS, all transactions could be recorded properly. So she can manage finances better. Rizky Kurniawan (Male, 35 Years) also feels the benefits of paying with QRIS. According to Rizky, QRIS speeds up payment queues. However, he complained that QRIS payments could not be made in the Batu Cermin area, Sempaja Ujung. This is because most of these areas have not been covered by cellular internet signals. Because QRIS payments are highly dependent on internet signals, QRIS implementation in these areas is less than optimal.

3.3. QRIS from Payment Services Provider

A payment service provider (PSP) refers to a third-party company that provides payment services to businesses that accept online payment methods. These methods may include credit cards, debit cards, e-wallets, cash cards, bank transfers, and much more. Examples of PSPs include Amazon Pay, PayPal, Stripe, and Square. A payment service provider helps merchants accept digital payments. To do this, PSPs work with merchants, banks, and e-channel network to manage the entire transaction process (Hare, 2021).

PT. BPD Kaltim Kaltara is a regional bank belonging to the provincial and city governments in East Kalimantan and North Kalimantan. As a regional bank, PT. BPD Kaltim Kaltara is one of the providers of QRIS in East and North Kalimantan, including Samarinda City. The BPD Kaltim Kaltara QRIS was launched in May 2020 (Metropolis, 2020).

The results of interviews with Ery Pratama as Prospect Customer Staff, show that so far the number of Merchants assisted by PT. BPD Kaltim Kaltara who use QRIS in the Samarinda area are 2078 Merchants. QRIS offers many merchants, but 6% refuse to use it. The reason for the refusal is because not all merchant owners understand QRIS. This problem has been accommodated by PT BPD Kaltim Kaltara by conducting education in stages. However, traders who reject this feel that transactions using QRIS are more complicated when compared to cash transactions. They refuse because they are used to and comfortable using cash as a transaction tool instead of learning new transaction methods.

PT. BPD Kaltim Kaltara admits that since QRIS was launched in 2020, payments using QRIS have increased every year, this supports the increase in third party funds due to the ease of transactions through QRIS. However, this has implications for a decrease in transactions using other electronic payments, namely EDC (Electronic Data Capture).

Other benefits obtained by PT. BPD Kaltim Kaltara with QRIS implementation is a small operational cost and no rental costs are borne by PT. BPD Kaltim Kaltara. So that the digitization of PT. BPD Kaltim Kaltara can also further develop through a positive response through QRIS.

3.4. QRIS Implementation Analysis

Based on the collected data, all parties involved, including merchants, users, and payment service providers, have implemented QRIS as a payment tool and experienced the benefits of using QRIS. Merchants have experienced the fast payment processing and calculation of money, users have found it convenient to make payments using the devices they carry every day, and payment service providers have also benefited from the increase in third-party funds with minimal operational costs.

However, there are also issues with QRIS implementation in Samarinda from all three perspectives. These issues can be divided into technical and non-technical issues.

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1. Technical Issues

The problem found by users is that there are several areas in Samarinda that are not yet covered by cellular internet signals. The use of electronic payments not only requires the right application or technology but also a good internet network infrastructure. Internet signal is a mandatory requirement in internet-based electronic payments. If an area does not have internet signal, then that area cannot accommodate internet-based electronic payments. Therefore, the technical problem in implementing QRIS in Samarinda is the lack of internet network infrastructure in some remote areas

2. Non-Technical Issues

From Explanation that described by merchants and PT. BPD Kaltim Kaltara as a Payment Service Provider is that there are still some merchants who are unwilling to adopt QRIS as a payment service at their outlets. This is because they are accustomed to using cash as a transaction tool and QRIS disrupts that habit. Some of them admit that they do not understand how to use electronic payment tools because they are not dependent on electronics in their daily lives. This results in a lack of trust in technology, even though it makes their work easier. Although they are given training gradually, it does not have a significant impact on the level of acceptance of QRIS as a payment tool for merchants who reject it.

The problem of QRIS adoption, which is still lacking among merchants, is one of the concerns of PT. BPD Kaltim Kaltara as a Payment Service Provider. Although many merchants have used QRIS as a payment tool, there are still some who are unwilling to adopt it. This is because they are used to using cash as a transaction tool and they feel less familiar with the use of electronic payment tools.

One reason that poses a challenge is the lack of understanding and awareness of digital payment technology. Some merchants feel that QRIS technology is not relevant to their business and changing their transaction habits with cash is too cumbersome. Therefore, even though they have been given gradual training, it does not have a significant impact on the level of acceptance of QRIS as a payment tool for merchants who reject it from the start.

In addition, there are merchant also experience technical difficulties in using their previous electronic payment tools, namely the EDC. These difficulties can be in the form of technical problems with the EDC device itself or with the payment system, which can sometimes be problematic and time-consuming. Merchants who experience technical difficulties often find it challenging and sometimes choose to revert to using cash as a transaction tool. This lowers the level of trust that merchants have in new payment technology.

3.5. Solution

The solution to the technical issue mentioned above is to improve the internet network infrastructure in the remote area of Samarinda. This can be achieved through cooperation between the local government of Samarinda and private or state-owned internet service providers. This will also accelerate the development of internet network programs in the Samarinda region. By improving the internet network infrastructure, more areas in Samarinda will have access to reliable internet signals, enabling them to use electronic payments more efficiently.

As for the non-technical issues, the solution is to increase efforts in educating merchants about the use of QRIS. The education provided should be private, gradual, and intensive so that merchants can understand how QRIS works and the benefits of using it as a payment tool. In addition, payment service providers can provide incentives to the most active QRIS users among merchants. This will encourage those who initially rejected the use of QRIS to become more interested in using it, as they will see the additional benefits they can gain besides the convenience of payment.

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4. CONCLUSION

In conclusion, the implementation of QRIS in Samarinda has brought many benefits to all parties involved. However, there are still technical and non-technical issues that need to be addressed to increase the acceptance and usage of QRIS among merchants. Improving the internet network infrastructure in remote areas and providing private and intensive education to merchants on how to use QRIS can help to address these issues. Additionally, providing incentives to the most active QRIS users can encourage more merchants to adopt QRIS as a payment tool. QRIS implementation can offer long-term benefits, such as cost reduction, simplified payments, and increased efficiency of the payment system.

5. DECLARATION OF COMPETING INTEREST

We declare that we have no conflict of interest.

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