Analysis of the Implementation of Cashless Payment System Using Quick Response Code Indonesian Standard (QRIS) at the Cafeterias of UIN Raden Intan Lampung

Alvi Choiriah¹, Alvin Destian Ronaldi², Ghina Asmalia³, Zathu Restie Utamie⁴

alvichoiriah00@gmail.com,¹ alvindestian6@gmail.com,² ghinaasmalia19@gmail.com,³ zathu@radenintan.ac.id⁴

Universitas Islam Negeri Raden Intan Lampung¹²³⁴

ABSTRACT
This research is classified as a type of qualitative descriptive research. Sources of data in this study use the types of primary data and secondary data. Data collection techniques include observations and interviews to find out information about the financing and payment models of the Cashless System which are developing and widely used in UIN Raden Intan Lampung. After getting the data through observation and interviews, the next is the method of data analysis. After getting the data, the next step is data reduction. This is done to make it easier for researchers when looking for data and make it easier to collect data so that it can be more clearly shown in the form of an overview of the data that has been reduced. The next stage is the presentation of the data and then drawing conclusions that can explain the results of the research conducted. The results of this study state that technological advances, especially on the financial transaction side, are also affected, such as Cashless payments with various channels, including E-Wallet, M-Banking, and so on. The community obtains many benefits, especially students in the UIN Raden Intan Lampung in this Cashless / Non-Cash payment system, including Cashless payment transactions in the Campus Canteen area using the QRIS Code with M-Banking BSI, BTN, and so on.

Keywords: Cashless, QRIS, Payment System
A. INTRODUCTION

Money is a legitimate medium of exchange or payment used in the process of exchanging goods between two parties. Money is divided into two forms, namely physical (cash) and non-physical (digital). Physical money exists in the form of coins and paper, while non-physical money includes checks, deposits, and promissory notes. Money serves as a legal tender used in every country worldwide, including Indonesia. The technological advancement in Indonesia is progressing rapidly. Changes are also occurring in terms of models and systems for economic transaction payments (Permatasari & Purwohandoko, 2020).

The payment system is a crucial component in the economy, especially to ensure the execution of payment transactions carried out by the public and businesses. Additionally, the payment system plays a vital role in supporting the stability of the financial system and the implementation of monetary policies. To ensure the smoothness and security of the payment system, Bank Indonesia implements policies focusing on four main aspects: improving security, and efficiency, expanding access in the payment system, and considering consumer protection (Lintangsari et al., 2018).

According to Tazkiyyaturrohmah (2018), a cash payment system can lead to inflation in a country. E-Money represents the monetary value deposited by the owner into a bank or non-cash payment service provider, and this value is stored in a server or chip. According to research by Nursari et al. (2019), non-cash payments offer various advantages over cash payments, including practicality and convenience, time efficiency, no need to worry about change, easy transaction recording, and many other benefits of non-cash payment systems. The canteen
managed by UIN Raden Intan Lampung partially utilizes a cashless payment system, specifically the Indonesian Standard Quick Response Code (QRIS), while some still use a cash payment system. Improving security in the payment system aims to maintain public trust in various alternative payment instruments that can be used in economic activities. Meanwhile, enhancing efficiency through the interconnection of payment systems is crucial so that the payment system industry can share investment in infrastructure development, creating efficiency nationally for both the payment system industry and users who don't have to possess multiple payment instruments for various transactions. Regarding the expansion of access in the payment system, Bank Indonesia consistently encourages the payment system industry to broaden the coverage of payment system services, ensuring wider and more even distribution throughout Indonesia, not just in major cities. Furthermore, consumer protection is an equally important factor in policy determination and payment system development to position consumer users of payment system services on par with payment system providers. This is crucial to ensure that consumers using payment system services are increasingly protected and are no longer in a vulnerable position due to a lack of understanding of the benefits and risks of a payment instrument and mechanism used (Lintangsari et al., 2018).

According to Bank Indonesia, the rapid development of fintech in Indonesia can bring numerous benefits to borrowers, investors, and banks in Indonesia: (1) For Borrowers, the benefits include promoting financial inclusion, providing alternative loans for borrowers who may not qualify for traditional credit, offering a simple and fast process, and
inducing competition that leads to a decrease in loan interest rates. (2) For Fintech Investors, the benefits include an alternative investment with higher returns and diversified default risks spread across many investors, each with relatively low nominal amounts, allowing investors to choose borrowers that match their preferences. (3) For Banks, collaboration with fintech can reduce costs, such as using non-traditional credit scoring for the initial filtering of credit applications, increasing Third-Party Funds (DPK), expanding credit distribution channels, and serving as an investment alternative for banks (Ramadhani et al., 2021). With the presence of fintech in the form of payment gateways, customers can choose their preferred payment methods. An example of a fintech payment gateway is iPaymu.com, and besides that, a nationally promoted product is the National Payment Gateway (GPN) (Aprianti & Nurfadilah, 2019).

B. TEORY

**Technology Acceptance Model (TAM)**

The Technology Acceptance Model (TAM) is an extension of the Theory of Reasoned Action (TRA). TAM is a widely used model for examining research on the acceptance of technology. The widespread availability of information and access in the age of digital technology today necessitates libraries to adapt. Organizations are currently required to evolve and undergo updates to utilize information technology and its operational systems effectively. One effort to ensure that libraries are not left behind by users is to employ information technology that aligns with the times. Nowadays, electronic devices, especially smartphones, have become a primary necessity
for performing various tasks. Smartphones are consistently carried everywhere and have become indispensable. The lifestyle shift in the digital technology era permeates all aspects of life.

![Technology Acceptance Model (TAM)](image)

**Figure I. Technology Acceptance Model (TAM)**

In the above image, the relationships among constructions found in the Technology Acceptance Model (TAM) theory can be understood. The ease of use construction is considered to influence the utility construction.

**The history of the commencement of the Cashless System in Indonesia**

On March 2, 2020, the Indonesian Government declared the COVID-19 pandemic for the first time. The government imposed Large-Scale Social Restrictions (PSBB) and began advocating social distancing and stay-at-home measures. The government emphasized the importance of avoiding physical contact by maintaining distance, frequent handwashing, promptly seeking medical attention when feeling unwell, and consistently wearing masks. On March 18, 2020, the Republic of Indonesia urged the public to maximize the use of non-cash / cashless payment methods in conducting transactions. Citizens were compelled to implement the digital payment system initiated by the government since the issuance of Bank Indonesia Regulation Number 11/12/PBI/2009 concerning electronic money as one of
the supports for Bank Indonesia's (BI) agenda to create a cashless society in the Republic of Indonesia. The cashless society is an inevitable trend resulting from ongoing revolutions and evolutions, including in payment systems. The government must be prepared to establish the infrastructure necessary for the realization of a cashless society. Examples of current non-cash payment systems include ATMs/debit cards, credit cards, electronic fund transfers, and the latest development, electronic money or digital currency (R. I. Lestari et al., 2021). The use of electronic money in digital media has become convenient for the public to conduct various types of transactions, especially amid significant health and socio-economic issues during the pandemic (Syujai, 2022). In fact, since 2014, the public has been encouraged by BI to make non-cash payments. Formally, Bank Indonesia has the National Non-Cash Movement (GNNT) program. This movement aims to increase public awareness of using non-cash instruments, gradually forming a society that predominantly utilizes non-cash instruments in its economy (cashless society). The tangible impact of the COVID-19 outbreak on e-wallet usage is evident, with a surge of up to 300 percent in the use of online shopping applications (Nuha et al., 2020).

**The Emergence of the National Non-Cash Movement (NNCM) in Indonesia**

Cash transactions involve the use of physical money or legal tender, which can be in the form of paper or metal currency, and such currency is only issued by government institutions. In Indonesia, the institution responsible for issuing legal tender is Bank Indonesia, serving as the central bank with exclusive rights to regulate transactions in the country. However, in practice, the
production of legal tender faces obstacles due to the substantial costs involved in printing, circulation planning, withdrawal, and even destruction of expired currency. Recognizing these challenges, a new solution emerged – non-cash transactions.

Non-cash transactions and cash transactions are essentially similar; the value of money between the two types remains the same. The distinguishing factor is the payment medium, where cash transactions still use analog technology in the form of physical money, while non-cash payments have embraced digitized technology. With this problem in mind, Bank Indonesia, as the central bank, introduced the vision of a cashless society. This initiative is better known as the National Non-Cash Movement (GNNT) in Indonesia (Panginan & Irwansyah, 2020). The term "electronic money" can be defined as digital currency, where its value is stored in a specific electronic medium. According to Bank Indonesia Regulation (PBI) No. 16/8/PBI/2014, electronic money is defined as the stored electronic value on a server or chip that can be transferred for payment transactions and/or fund transfers. In other words, electronic money can exist as software or hardware. In software, electronic money usually takes the form of a balance or value storage application, while in hardware, the most common form of electronic money is a card containing a specific amount corresponding to the user's deposit (Ulfi, 2020).

Non-cash transactions can also refer to transactions or payments through media such as debit cards, credit cards, Automated Teller Machines (ATMs), checks, and others. This transaction system has experienced rapid development worldwide, in line with technological advancements and the public's need for easy, secure, and efficient payment methods. As a result, many developing countries are actively implementing non-cash policies,
signifying a shift from paper currency transactions to electronic money (Ulfi, 2020). The National Non-Cash Movement (GNTT) is a form of an initiative by Bank Indonesia as the monetary authority in Indonesia to encourage the use of non-cash instruments as a means of payment. The transition from cash to non-cash usage will undoubtedly have an impact on the existing monetary system. The most basic impact is the reduction in the use of physical cash, resulting in an effect on the acceleration of money circulation, known as the velocity of money (Ulfi, 2020).

Benefits of Using the Cashless System There are numerous benefits for individuals who choose to utilize Cashless methods in their payment systems. According to Ulfi (2020), some of the advantages include: Enhancing Small and Medium-Sized Business Growth: Electronic money has the potential to boost the growth of Small and Medium-Sized Enterprises (SMEs). The macro-level growth of SMEs can impact a country's economic growth through increased GDP. Although non-cash policies may not fully embrace informal SMEs, they can improve the financial performance of these enterprises. Job Creation: Despite not fully incorporating the informal sector, non-cash transactions have the potential to create new jobs in both urban and rural areas.

With an online system, distances and time seem limitless, leading to the establishment of numerous online stores that no longer require physical or cash transactions. Additionally, various marketplace platforms facilitate anyone entering the buying and selling business. Positive Impact on Convenience and Security: Non-cash policies, by increasing electronic payment channels, positively impact consumer convenience and security in transactions. This also reduces the risk of crime and lowers administrative costs. Government Benefits: The government stands...
to gain from non-cash policies through increased tax collection, improved financial inclusion, and economic development (Ulfı, 2020).

The Government's Steps in Supporting the Cashless System

Financial Authorities in Indonesia, namely Bank Indonesia (BI) and Otoritas Jasa Keuangan (OJK), have introduced a national inclusive financial strategy outlined in 6 pillars: Financial education. Public financial facilities. Financial information mapping. Supportive policies or regulations. Intermediary and distribution facilities. Consumer protection (Ramadhani et al., 2021). The main targets of formulating these 6 pillars are two groups in society: migrant workers and residents in remote areas, classified into four categories - very poor, working/potentially productive poor, nearly poor, and not poor. This targeting is expected to improve the access of these two groups to financial products and services overall.

When people can easily access financial products and services, they become more productive and have greater purchasing power, achieving the goals of the inclusive financial strategy: (1) Income distribution across all regions of Indonesia, from Sabang to Merauke. (2) Organic reduction in poverty rates in various regions. (3) Creation of a stable financial system (Ramadhani et al., 2021). A set of rules and mechanisms for the third system within the GPN (National Payment Gateway) is as follows: The GPN standard is a standardized technical and operational specification. GPN switching is infrastructure that serves as a center and/or connector for forwarding transaction data through a network using payment instruments such as Cards (APMK), electronic money, and/or fund transfers. GPN
Not only that, the Indonesian government has launched a movement to support non-cash payment systems in Indonesia, creating an interconnected ecosystem for payment systems, enhancing consumer protection, and improving financial system efficiency by Bank Indonesia called GPN. The National Payment Gateway (GPN) consists of Standards, Switching, and Services. These three systems in the GPN are built through a set of rules and mechanisms to integrate various payment instruments and channels nationally. Additionally, Bank Indonesia has introduced the Quick Response Code Indonesian Standard (QRIS) for payments through server-based electronic money applications, e-wallets, electronic wallets, or mobile banking. The use of QRIS is a form of Central Bank support to promote transaction efficiency, accelerate financial inclusion, and advance micro, small, medium enterprises in Indonesia (Ulfi, 2020). By utilizing QRIS, mobile phone users can use a single application with a QR Code for payments at various merchants (Kurniawati et al., 2021).

The Quick Response Code Indonesian Standard (QRIS) or KRIS is the unification of various QR codes from various Payment System Service Providers (PJSP) using QR Codes. QRIS was developed by the payment system industry in collaboration with Bank Indonesia to make QR Code transactions easier, faster, and more secure. All Payment System Service Providers using Payment QR Codes are required to implement QRIS. Currently, with QRIS, all payment applications from both bank and non-bank providers used by the public can be used at all stores, merchants, stalls, parking.
lots, tourist tickets, donation (merchants) with QRIS logo, even if the QRIS provider at the merchant is different from the application provider used by the public. Merchants only need to open an account with one of the QRIS providers authorized by BI. Afterward, merchants can accept payments from the public using QR codes from any application provider (Bank Indonesia, 2023).

Bank Indonesia records that, as of February 2023, the number of QRIS merchants has reached 24.9 million, with a total of 30.87 million QRIS users. Furthermore, the transaction amount through QRIS until February 2023 is recorded at IDR 12.28 trillion, with a transaction volume of 121.8 million. In Lampung, the BI Provincial Office of Lampung has set a target of 475,907 new users by the end of 2023. Based on realization data, it is known that as of March 2023, there are a total of 756,869 QRIS users in the Lampung Province. In terms of additions, there are 105,474 new QRIS users in March 2023, achieving 22.16% of the 2023 target.

QRIS in Indonesia is an innovative concept of a new product, and as a new product, it requires public opinions, especially from business actors as users, regarding factors influencing the decision to use QRIS as a payment system in their business transactions (Palupi et al., 2021). The use of QRIS has been growing since its effective implementation at the beginning of 2020, both from users as a payment tool by consumers and users as a payment acceptance tool by producers. QRIS is a QR Code standard created by Bank Indonesia to facilitate digital payments through server-based electronic money applications, electronic wallets, and mobile banking (Nainggolan et al., 2022). QRIS can be used at all stores,
Analysis of the Implementation of Cashless Payment System …

Alvi Choiriah¹, Alvin Destian Ronaldi², Ghina Asmalia³, Zathu Restie Utamie⁴

merchants, stalls, parking lots, tourist tickets, donation (merchants) with the QRIS logo, even if the QRIS provider at the merchant is different from the application provider used by the public (Sriekaningsih et al., 2022).

C. RESEARCH METHODOLOGY

The type of research conducted is qualitative descriptive. Primary data sources were utilized for this study. Data collection techniques involved observation and interviews to gather information about the evolving and widely used cashless payment system models in 36 canteens at UIN Raden Intan Lampung.

During interviews, researchers diligently recorded information from the interviewees, ensuring accuracy and alignment with the facts observed in the field. To test the validity of this research, the researcher conducted credibility testing, which includes: (1) Extending the research period, specifically by re-interviewing informants to verify the accuracy and validity of previously obtained information. (2) Member checking, involving additional interviews with informants to address any unexplored or previously discussed aspects with student informants in this study. (3) Auditing, the final step in validating findings, involves cross-referencing research results with field data through a review of report notes, data collection methods, and analytical techniques.

D. RESULTS AND DISCUSSION

RESULTS

Based on field observations, it is noted that the UIN Raden Intan Lampung campus canteens are categorized into several types/locations, namely the ushuluddin canteen, food court, the photocopy area in front of the Sharia Faculty, and various other
canteens. According to interview data from 36 canteens that have implemented cashless payment systems, only 11 canteens have adopted cashless payment systems using QRIS. Specifically, in the Ushuluddin canteen, there are 18 canteens, with 4 canteens using QRIS and 14 not using QRIS. In the Foodcourt, there are 4 canteens, with 3 using QRIS and only 1 not using QRIS. In the photocopy area in front of the Sharia Faculty, there are 8 shops, with 3 using QRIS and 5 not using QRIS.

Furthermore, in other canteens within the UIN Raden Intan Lampung campus, there are 6 canteens, of which 1 uses QRIS, and the remaining 5 do not. UIN Raden Intan Lampung canteens still predominantly use cash transactions, although some have started implementing cashless payments (QRIS). With the advancing world of the internet, there is a push towards using electronic wallets as more efficient transaction tools than traditional banking methods. This is evident in various websites and e-commerce applications that utilize electronic wallets for transactions, as seen at UIN Raden Intan Lampung. Digital financial products include BSI Mobile, Lampung Mobile, Go-Pay, Ovo, Dana, and others. Additionally, there is an alternative payment method using QRIS. By using QRIS, mobile users only need one application with a QR code commonly used for payments at various merchants. Therefore, consumers do not need to download multiple banking applications for payments at different merchants.

E. DISCUSSION

Based on observations and interviews with business operators in the UIN Raden Intan canteen, it is evident that several business operators are familiar with the QRIS digital payment system. As we know, knowledge about QRIS impacts the willingness to use this digital payment system. The canteen
owners are aware that QRIS is a cashless payment method, they understand the digital technology behind QRIS payments, are familiar with the QRIS payment mechanism, and are aware of the procedures and rules for using QRIS. Knowledge can influence an individual's decision to adopt a technology or otherwise.

**Business Actors' Knowledge About QRIS**

Based on observations and interviews with business operators in the UIN Raden Intan canteen, it is found that several business operators are familiar with the QRIS digital payment system. As we know, knowledge about QRIS impacts the desire to use QRIS digital payment. Canteen owners are aware that QRIS is a cashless payment method, they understand the digital technology behind QRIS payments, are familiar with the QRIS payment mechanism, and are aware of the procedures and rules for using QRIS. Knowledge can influence someone's decision to adopt a technology or otherwise.

**The Ease of Business Actors Using QRIS**

The convenience of using QRIS digital payment is influenced by the ease offered by the payment system. The majority of business operators in the UIN Raden Intan Lampung canteen agree that QRIS can facilitate transactions, is flexible, easy to use, and easy to learn. Additionally, the ease of using QRIS has a significant impact on the transaction process, as it eliminates the need to search for change, avoids the risk of lost or counterfeit money, and prevents theft.

**The Benefits of Business Actors Using QRIS**

Analysis of the Implementation of Cashless Payment System …
Alvi Choiriah¹, Alvin Destian Ronaldi², Ghina Asmalia³, Zathu Restie Utamie⁴
The benefits of business operators using digital payment QRIS are because this payment method provides an alternative, given that the respondents in this study are business operators in the UIN Raden Intan canteen. Therefore, it is highly beneficial in completing tasks, influencing perceptions to adopt the system, being functional and useful, and improving work performance. The usefulness of using QRIS is also influenced by the trust of business operators in the technology's ability to be beneficial and efficient in their work. The utility is directly proportional to the usefulness, where utility represents the rationality level of someone who feels that using a system can enhance their performance activities.

F. CONCLUSION

Based on the interview results, it can be concluded that currently, the Quick Response Code Indonesian Standard (QRIS) in the UIN Raden Intan Lampung canteen is still limited compared to cash payment systems. Only 11 out of 36 canteens have implemented QRIS as a cashless payment method at UIN Raden Intan Lampung. This means that less than half of the total canteens at UIN Raden Intan Lampung have adopted the QRIS payment system. Although cash payments are still more dominant than non-cash payments (QRIS) at UIN Raden Intan Lampung. Therefore, the hope is that in the future, the canteens at UIN Raden Intan Lampung can maximize the implementation of economic digitization, thus facilitating the buying and selling transactions in the canteens. The author suggests for future research to assess the effectiveness of QRIS among students and canteen owners at UIN Raden Intan Lampung.
REFERENCES


Analysis of the Implementation of Cashless Payment System …
Alvi Choiriah¹, Alvin Destian Ronaldi², Ghina Asmalia³, Zathu Restie Utamie⁴


Analysis of the Implementation of Cashless Payment System

Alvi Choiriah¹, Alvin Destian Ronaldi², Gchina Asmalia³, Zathu Restie Utamie⁴

105
Analysis of the Implementation of Cashless Payment System …

Alvi Choiriah¹, Alvin Destian Ronaldi², Ghina Asmalia³, Zathu Restie Utamie⁴


Analysis of the Implementation of Cashless Payment System …  
Alvi Choiriah¹, Alvin Destian Ronaldi², Ghina Asmalia³, Zathu Restie Utamie⁴