

The Impact of the QRIS Payment System on the Digital Economy Development

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Abstract

The digital economy continues to experience rapid development in Indonesia, especially in the fields of e-commerce and financial technology. Cashless payments are increasingly becoming a trend among Indonesians both in urban and rural areas. The use of the QR Code Indonesian Standard (QRIS) payment method began to be used as a merchant transaction tool. Since November 1, 2021, the number of QRIS merchants has exceeded 12 million. The use of QRIS is an opportunity in the development of the digital economy. This research is a literature study research that is analyzed using a qualitative-descriptive approach in explaining phenomena related to QRIS implementation of the digital economy. The data sources used are secondary data sources derived from books, journals, and reports related to economic digitization. The results of the study found that QRIS has a positive influence on the development of the digital economy in Indonesia. This is marked by the increase in Indonesia's Gross Merchandise Value (GMV). The comprehensive use of QRIS can also help the country in controlling the inflation rate to be low and stable because it reduces cash printing activities and transactions to be transparent with a structured system.

Keywords: Cashless Payment, Digital Economy, QRIS

INTRODUCTION

The digital economy continues to grow rapidly in Indonesia, especially in e-commerce and financial technology. The digital economy is a transaction or market that occurs in the internet world, or simply the digital economy is the application of information technology in the economic field. Data in 2021 shows that Indonesia's population is 274.6 million, with 202.6 million internet users, 170 million active social media users, 177.9 million mobile phone users and 120 million active mobile social users. This situation is an opportunity for the development of the digital economy (Indonesian Payment System Association, 2022).

Indonesia's digital economy in 2021 is recorded as the highest in Southeast Asia, amounting to US\$70 billion, and is estimated to reach US\$146 billion by 2025. In addition, 40% of the market share of Southeast Asia's internet economy is in Indonesia. This data was conveyed by the Coordinating Minister for Economic Affairs (2022), Airlangga Hartarto, in a press release on the arrival of IBM Asia Pacific General Manager Paul Burton in Jakarta.

To encourage the development of the digital economy as a new source of economic growth, Bank Indonesia has three main payment system strategies in the digital economy era. First, establishing the Indonesia Payment System Vision 2025. Five Indonesian Payment System Vision 2025 implemented by five working groups (Bank Indonesia, 2019). The five include Open Banking, Retail Payment System, Large Value Payment System and Financial Market Infrastructure, Data and Digitization, and Regulatory, Licensing, and Supervision Reform. Second, encourage the increase in electronic payment transactions. Third, encourage MSME online marketing preparation programs (onboarding MSMEs) to the digital economy. With the digitalization trend, Bank Indonesia's participation in accordance with its position as the Indonesian payment system authority is also involved to understand the shifting public needs, opportunities, and risks that can affect the smooth running of the payment system in the era of digital technology development (Atmaja & Paulus, 2022).

Electronification of financial transactions is a change in the payment method from cash to non-cash. Non-cash payments are increasingly becoming a trend for Indonesian people in urban and rural areas. Non-cash money is considered more effective as a means of payment transactions and is the main driver of current economic growth. This situation is marked by an increase in the

provision of the QR Code Indonesian Standard (QRIS) as a merchant transaction tool. The number of QRIS Merchants in 2020 -2021 can be seen in Figure 1 below.

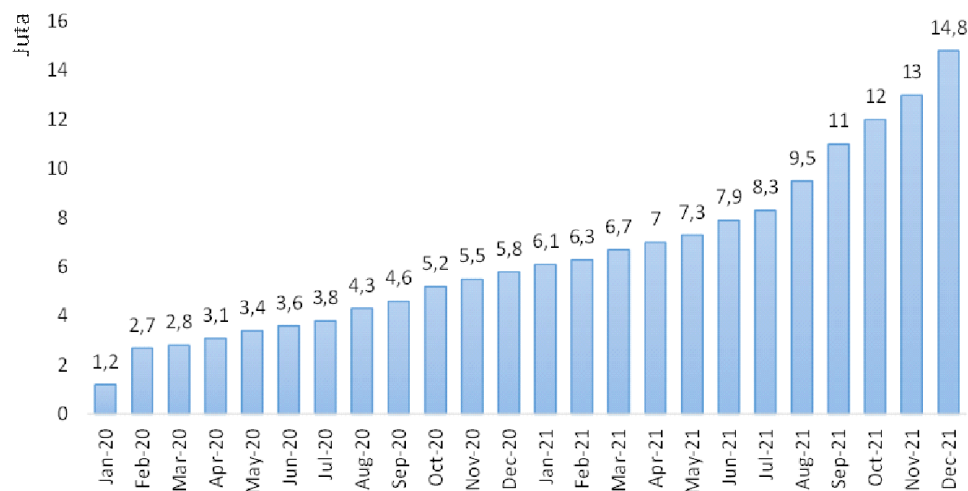


Figure 1. Number of QRIS Merchants in 2020 – 2021
Source: Indonesian Payment System Association (2022)

Based on Figure 1, in December 2021, the number of QRIS merchants crossed the 14,8 million mark. QRIS has been used by micro, small, medium and large traders in various business sectors and for socio-religious donations in all provinces and districts or municipalities. Since being implemented on January 1, 2020, Bank Indonesia has continued to strengthen the QRIS policy to encourage the acceleration of inclusive and efficient economic and financial digitisation, as well as to support the Government's programs through the Gerakan Nasional Bangga Buatan Indonesia (Gernas BBI) and Bangsa Berwisata Indonesia (GBWI).

Sari and Adinugraha, in their research in 2021, used a qualitative-descriptive approach in explaining phenomena related to the implementation of QRIS in MSMEs. The easy use of QRIS provides benefits for both merchants and buyers, especially for users of non-cash payment applications. For merchants, QRIS helps increase sales, practicality, branding, saving, avoiding counterfeit money, and segregating business funds and credit profiles. For users, the benefits of QRIS are flexible, safe and practical. In this case, QRIS is the driving force behind the acceleration of digitalisation for economic recovery. This study's data sources are secondary sources originating from journals and reports related to the digitisation of MSMEs.

Another research from Wahyudin, et al. in 2022 discusses about competitive digitization of MSMEs by utilizing information technology through e-commerce and supporting Bank Indonesia in accelerating the digitization of the payment system as an implementation of the Indonesian Payment System Blueprint (BSPI) 2025 through the Quick Response Code Indonesia Standard (QRIS). This study uses quantitative research with a survey approach to 150 respondents. The results of the study partially show that e-commerce and QRIS have a positive and significant effect on sales performance and competitive advantage.

LITERATURE REVIEW

Digital Economy

The digital economy is the overall economic activity obtained from digital technology, so various emerging economic activities can be identified, namely e-commerce, e-services, e-travel, digital media, fintech, and digital advertising. According to Setyobudi (2021), the digital economy in each field has its dynamics, which are the meeting point between consumer adoption and the readiness of players in these categories to carry out their business processes. The digital economy is one of the solutions expected to increase Indonesia's economic resilience, given that Indonesia's digital economy is developing rapidly. The wave of the digital economy comes with a sloping

topography, is inclusive, and spreads equal opportunity. This characteristic has the concept of competition which is the spirit of the industry which is easily picked up by startup actors who prioritize collaboration and synergy. Because of that, the digital economy is a sharing economy that has encouraged many small and medium businesses to enter the world business (Kumala, 2021). There are 4 (four) potential sectors in the digital economy: the Financial Sector, the Culture, Tourism and Creative Economy Sector, the Agricultural Sector and the Agrological Sector.

Financial Sector

The emergence of various digital applications as a payment means proof that Indonesia's payment system shows significant developments in the financial sector in the current digital economy era. The Payment System is one of the groups from the Financial Sector in the Digital Economy. The Payment System and its instruments continue to evolve in line with technological developments. According to Sriekaningsih (2020), initially, the transaction was carried out by exchanging goods or services for other goods or services as a payment system, then evolved to use currency instruments, namely metal and paper, to exchange goods and services evolved again to use paper-based as instruments such as checks, demand deposits, debit notes and credit notes whose payment system service providers are central banks and commercial banks with mechanisms of authority, clearing and settlement.

Furthermore, a card-based payment system with a debit card, credit card, and electronic money (chip-based) instruments continued again until, in the current era, cash and payment systems have evolved into the virtual currency. The payment system is developing as a non-cash payment instrument that can be used for transactions with merchants. Electronification and digitisation of payments is an integrated effort to replace payment methods from cash to non-cash, non-cash transactions will encourage economic efficiency, and there will be cost savings in printing, money distribution, cash handling, to administrative management. Non-cash transactions provide convenience in transactions with convenience and lower cost.

QR Code Indonesia Standard

QR Code Indonesia Standard (QRIS) is a payment QR Code standard for Indonesian payment systems developed by Bank Indonesia and the Indonesian Payment System Association (ASPI). Bank Indonesia deliberately issued QRIS to prevent industrial fragmentation and streamline transactions carried out in the market. Sriekaningsih (2020) said that with QRIS it is hoped that payment transactions will be more efficient or cheaper, financial inclusion in Indonesia will be faster and ultimately can encourage economic growth with the goal of making digital payments easier for the community and can be supervised by regulators from one system for all models payment. Following the PADG Consideration No. 21/18/PADG/2019, this QRIS is available because the digitalisation of payment system services needs to be developed to support the integration of the national digital economy and finance while maintaining a balance in preserving innovation and healthy business for the national interest. QRIS can be used at all merchants that work with PJSP, such as OVO, Gopay, DANA, LinkAja, and others.

METHOD, DATA, AND ANALYSIS

Data collection was carried out using the literature study method. The literature study method is carried out by collecting data from various sources such as books, journals, articles, and previous studies related to developing the digital economy in Indonesia with the QRIS payment system. Based on the type of information, this qualitative research aims to provide a description, explanation and validation of the phenomenon being studied (Ramdhan, M., 2021).

This phenomenon is the implementation of the QRIS payment system and its impact on the development of the digital economy. Data obtained from various references are critically, and in-depth analysis to support propositions and ideas.

RESULT AND DISCUSSION

QR Payment as a Payment Method in Indonesia

In Indonesia, mobile payments are not evenly distributed to everyone. However, many financial institutions and startups have started releasing and developing this payment system.

The development of payment via mobile devices in Indonesia began with payment methods through telecommunication providers. Over time, payment methods grew rapidly. The development of digital technology and people's lifestyles that increasingly demand speed and convenience in transactions have resulted in payment system choices that are now more flexible, thus forming payments via QR codes.

QR Code is a payment method that is increasingly in demand and popular among Indonesians because it is considered more pragmatic, makes transactions faster, more efficient, cashless, and, of course, without the hassle of carrying cash. In Indonesia, the government has supported payment methods using the QR Code. As the central bank, Bank Indonesia (BI), supporting payment transactions anywhere, anytime, and by anyone, has created a digital payment standardization using the Indonesian QR code, QRIS (Quick Response Code Indonesian Standard). Mastercard, a global payment technology provider, supports the implementation of QR Code Payment in several countries, including Indonesia. With the rapid growth of the middle class and a very tech-savvy young population, start-up companies, banks, and telecommunications have introduced various types of payments. Using cashless payments is becoming more common, and the pandemic has increased the need for this payment method. Indonesia has made rapid progress in recent years in terms of financial inclusion. Based on OJK data, more than 76% of Indonesian people have accessed financial products and services.

Consumer enthusiasm in Indonesia has increased since the pandemic accessing various payment technologies. As a payment technology, QR Code offers the principle of universality for both consumers and merchants. The use of the QR Code payment system gives consumers many benefits, payment transactions for millions of MSMEs in Indonesia and around the world using only a cellphone, fulfilling the needs of a fast-paced lifestyle in the digital era. The advantage for business owners, including MSMEs, is the experience of payment methods without additional tools and costs at Point-of-Sale and Mobile-Point-of-Sale. This method is used by partners who acquire SMEs and equip them with capabilities for online and offline trading capabilities. Additionally, QR Codes allow banks to offer a better payment experience by accepting unattended transactions, thereby expanding the payment acceptance network and enabling consumers to transact in more places than ever.

QR Code Payment is provided by the Payment System Service Provider (PJSP) based on the QR code of each PJSP. Transactions using QR codes can only be made by fellow QR codes issued by each Payment System Service Provider (PJSP). Merchants must have various QR codes to accommodate the needs of consumers who use various PJSPs. In the past, payments using OVO, Gopay, Dana, and others had their QR Code, so every merchant with various payment options had to provide their respective QR Code at their counter to make payments with consumers. Until 2020 the emergence of QRIS was supported by PJSP interconnection so that consumers could scan various QR codes with various payment services in one QR code.

History and Development of the Use the Indonesian Standard Quick Response Code (QRIS)

Quick Response Code Indonesian Standard (QRIS) is a unification of various types of QR from various Payment System Service Providers (PJSP) using the QR Code. QRIS was launched to coincide with the 74th Anniversary of Indonesian Independence on August 17, 2019. Implementation of QRIS nationally effectively took effect on January 1, 2020, to provide a preparatory transition period for Payment System Service Providers (PJSP). The launch of QRIS is one of the implementations of BSPI 2025. The implementation of QRIS carries the UNGGUL theme, which contains meaning, firstly Universal, namely the use of QRIS is inclusive for all levels of society and can be used for payment transactions domestically and abroad. Second, Easy (Gampang) for people can transact quickly and safely using gadgets. The third is Untung, transactions with QRIS benefit buyers and sellers because transactions occur efficiently through a single QR code that can be used for all payment applications on gadgets. The fourth is Langsung. Transactions with QRIS occur immediately because the process is fast and instantaneous (Bank Indonesia, 2019).

There are two payment methods using a QR code. First, Merchant Presented Mode (MPM). This QR method can be static or dynamic. Static QR is a QR that does not change (usually in the

form of a sticker/acrylic). Dynamic QR can change and is generally printed via EDC or shown by merchants through electronic device screens. The second method is Customer Presented Mode (CPM). The consumer shows the QR Code while the merchant scans the QR. In this model, the QR Code is only dynamic because this QR code is generated by the user every time he makes a transaction.

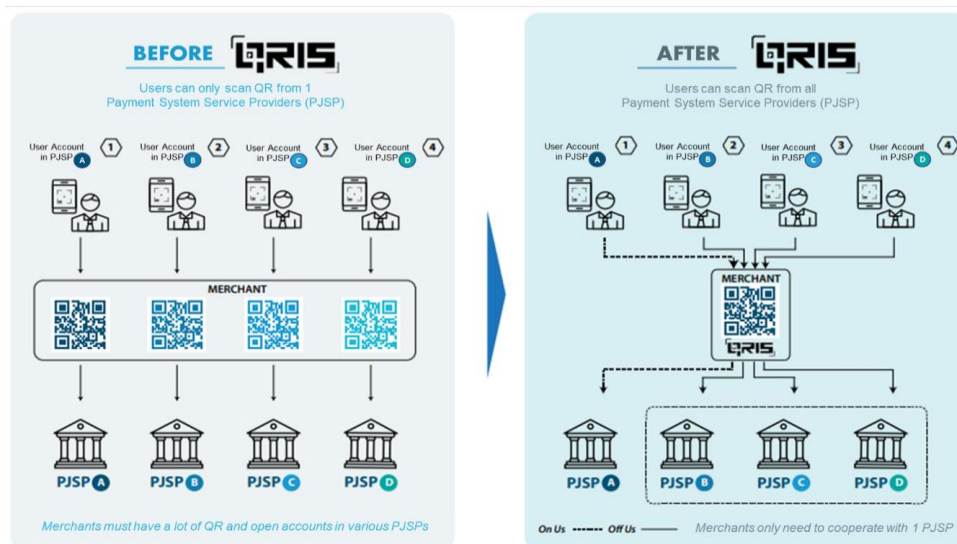


Figure 2. Before and After the Implementation of QRIS

Source: Bank Indonesia (2022)

Figure 2 above is a comparison before using QRIS and after using QRIS. Today's most common QRIS transaction method is the merchant-presented mode (MPM) method. Payment in this way can make it easier for buyers and sellers (merchants) because transactions take place efficiently through one QR code that can be scanned using all PJSPs. This condition is in line with research conducted by Silalahi, P.R. et al. (2022), who concluded that perceptions of ease of use and perceived risk either partially or simultaneously have a significantly positive impact on the decision variables to use QRIS-based electronic money. Carera, W.B. et al. (2022), in their research using a sample of MSME actors in Purwokerto, concluded that using QRIS positively increased sales turnover received by MSME actors.

Bank Indonesia continues to strive to expand QRIS payment services through the QRIS program between countries. BI cooperates with Central Banks in several Asian countries. QRIS between countries makes it easier for Indonesians to shop abroad by simply using QRIS in financial service applications that support QRIS services between countries. Thus, people no longer need to bother exchanging money at foreign exchange offices or ATMs with debit or credit cards. This program is intended to expand the use of Local Currency Transaction Payments (LCS).

Five confirmed countries are collaborating with Bank Indonesia to realize cross-border payments, including Thailand, Malaysia, Singapore, the Philippines, and Japan. However, only Thailand has been able to implement this cross-border transaction. Malaysia is expected to start implementing cross-border payments in late 2022 or early 2023, Singapore in Semester II 2023, then the Philippines. Meanwhile, with Japan, it is still being determined when the cooperation will officially launch, whether it is a trial run or a complete implementation. Deputy Governor of BI, Dody Budi Waluyo, said that this cooperation is also the implementation of the G20 Roadmap for Enhancing Cross-border Payments.

Advancement of Indonesia's Digital Economy with the Implementation of QRIS

Indonesia's economy is experiencing rapid growth, based on the McKinsey Report, Indonesia ranks first as the country that records the fastest growth in adopting the digital economy (McKinsey, 2019). Currently, QRIS is a payment system that facilitates trading activities in Indonesia. QRIS can be one of the solutions to restoring and increasing economic growth by

reducing costs incurred by business actors related to payments and making it easier to obtain capital. Digital economic and financial integration through QRIS has shown significant progress since it was first launched in 2019. QRIS volume and transactions in Indonesia from January 2020 to August 2022 can be seen in Figure 3 below.

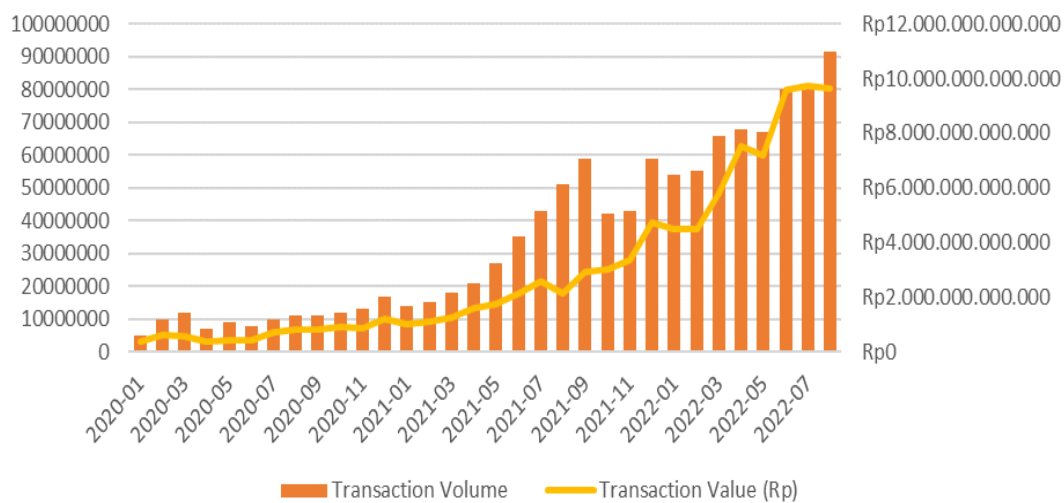


Figure 3. QRIS Transaction Volume and Value in Indonesia

Source: Indonesian Payment System Association (2022), Bank Indonesia (2022)

Based on Figure 3, it is known that the volume of QRIS transactions grew 184 percent on an annual basis or reached 91.73 million transactions with a value of IDR 9.66 trillion in August 2022, with the number of merchants reaching 20.82 million merchants. Bank Indonesia (BI) noted that the total QRIS transaction volume from the beginning of 2020 to September 2022 has reached 281.7 million times. This achievement soared 182% on an annual basis. From this description, digital transactions in the country are projected to get thicker. The successful implementation of QRIS proves the government's success in encouraging payment system innovation to become more cashless and electronic. The existence of QRIS has the potential to improve economy (Muditomo and Setyawati, 2022).

According to reports by Google, Temasek, and Bain & Company (2022), Indonesia is one of the countries with the most significant economic development in Southeast Asia; the value of its digital economy has grown significantly to US\$77 billion or around IDR 1,198.3 trillion in 2022. This value increased by 22% compared to last year, which amounted to US \$ 63 billion. Indonesia's Digital Economy Gross Merchandise Value (GMV) can be seen in Figure 4 below.

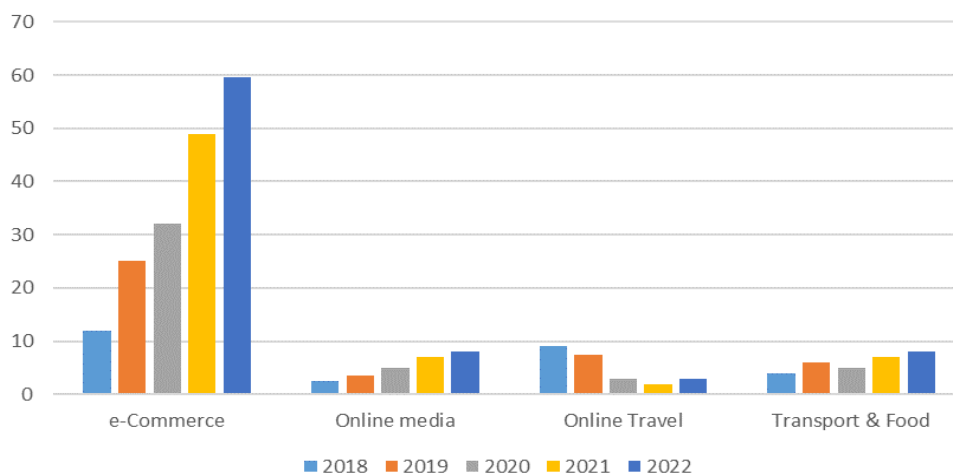


Figure 4. Indonesia's Digital Economy Gross Merchandise Value (GMV) (US\$ billion)

Source: Google, Temasek, & Bain Company (2022)

Based on Figure 4, it is known that the highest value of Indonesia's Gross Merchandise Value (GMV) is e-commerce. In e-commerce in 2020 and 2021 there was a significant increase, this increase occurred due to the provision of QRIS facilities in several e-commerce sites. As one example, in 2021 Tokopedia e commerce began to provide QRIS facilities for its partners (Rahadian in CNBC Indonesia, 2021).

In the last few years, Indonesia's Gross Domestic Product (GDP) has tripled, and one of the keys is the rapid development of the digital economy. Currently, the digital economy's contribution to Indonesia's GDP is 5 percent. The Minister of Finance Sri Mulyani revealed three conditions underlie economic growth supported by the digital economy and fintech in Indonesia. First, around 30% of Indonesia's GDP is digital-based, and more than 55% of the Indonesian people are Gen Z and Millennials, who incidentally are digital natives. Second, internet penetration in Indonesia, although still at a low level, is starting to grow by 15-20%, which is higher than economic growth. Third, the pandemic forced people to turn to the digital economy, both from the demand and supply sides (Jawas, 2022).

CONCLUSION AND SUGGESTION

QRIS has a positive influence on the development of the digital economy in Indonesia. This is marked by an increase in Indonesia's Gross Merchandise Value (GMV). Using a comprehensive QRIS can also help the country control the inflation rate to be low and stable because it reduces cash printing activities and transactions become transparent with a structured system. Bank Indonesia also strives to expand its reach to realize financial integration, especially in Southeast Asian countries. The increase in transaction volume and the number of QRIS users is one of the factors for advancing the digital economy. Even though it has shown significant progress, several steps must be taken to strengthen the digital economy in Indonesia. First, strengthening the ecosystem. Second, establish collaboration with local markets. Third, strengthening micro, small and medium enterprises (MSMEs). Fourth, improving the expanded communication and information technology (IT) network and infrastructure so that all groups in Indonesia can enjoy it.

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