

## CHAPTER 1

### INTRODUCTION

#### **Paper I : Analysis Of The Use Of The Qris Payment Method In Msmes: A Bibliometric Study**

Technological progress has a multiplier nature because it provides benefits, namely, progress in various fields, one of which is the payment system (Sumarwan, 2015). According to Marshall, someone holding money is for transaction purposes. Before technology entered Indonesia, the majority of people in Indonesia used the payment method using cash. Cash was the primary payment method in almost all sectors, such as traditional markets and street food. In addition, the payment methods commonly used in Indonesia are Debit Cards and Credit Cards. Financial Technology (Fintech), a combination of technology and financial features, can also be interpreted as innovation in the financial sector with a touch of modern technology (Pribadiono, 2016). the emergence of fintech was accompanied by changes in people's lifestyles which users of information technology and fast-paced life demands currently dominate. According to the summary of Bank Indonesia Regulation No.19/12/PBI/2017 concerning the Application of Financial Technology accessed from the Bank Indonesia website (2017), FinTech consists of 5 categories. The regulation explains that the five categories of Financial Technology Operators are payment systems, market support, investment management and risk management, lenders, financing and capital, and other financial services. Each category has different uses for financial transactions according to the community's needs.

The first category, payment systems (payment, settlement, and clearing), includes authorization, clearing, final settlement, and execution of payments.

The second category is market support (market support or market aggregator), which provides information facilities to the public more quickly and cheaply about financial products or services such as investment, insurance, credit, deposits, or even savings. Product.

The third category is investment and risk management, where financial technology providers can provide forms of online investment and online insurance products.

The fourth category, namely loans (lending), financing (financing or funding), and providers of capital (capital raising) as financial technology managers who provide information technology (peer-to-peer lending) and lending or fund-based services.

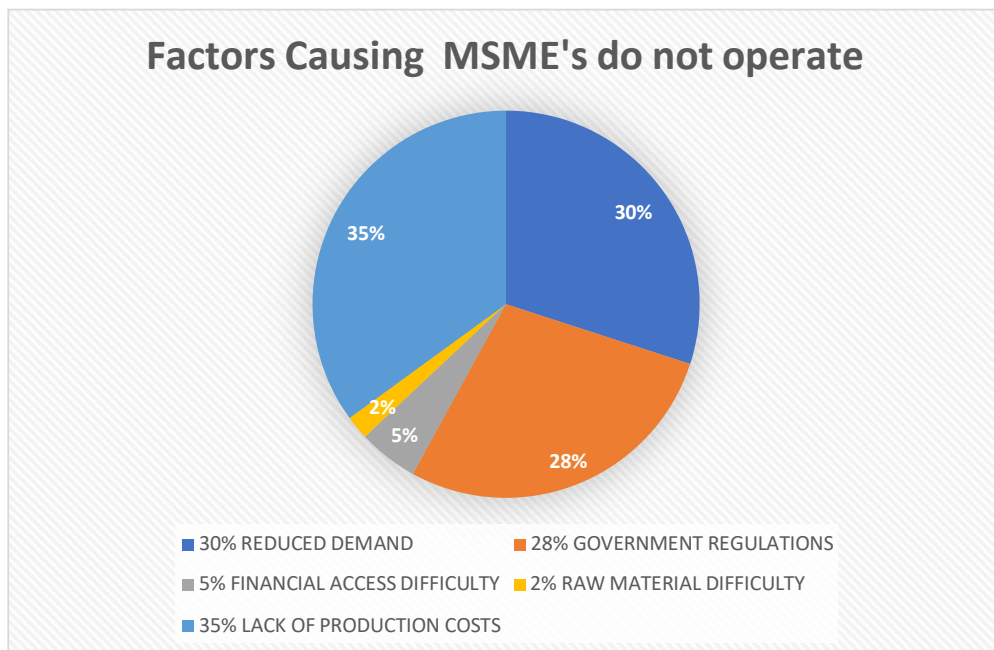
The use of fintech can maximize banking services to consumers. Problems in buying and selling transactions and payments. Fintech helps to buy and sell transactions so that the payment system becomes more efficient and economical but still effective (Bank Indonesia, 2018).

The application of financial technology will create a disruptive environment in line with the rapid development of technology and digitization. With this situation, it is estimated that there will be many changes that we will see or experience directly, for example, in conducting financial transactions, utilizing financial products and services, or finding sources of income. Funding for economic activity. In the financial industry, there is a demand for continues to adapt and adjust its business processes as the industry dynamics change rapidly. Micro, small and medium enterprises have become one of the priorities on the development agenda in Indonesia. The MSME sector's survival evidences this during the great crisis in 1998. Compared to other larger sectors, they could not survive the crisis. (Sumawiredja, 2003). Indonesian business world is currently dominated by Micro, Small and Medium Enterprises (MSMEs). The number of these businesses reaches 64.2 million businesses or 99.99% of the total business actors in Indonesia (Medcom.id, 2021). MSMEs can absorb a large number of workers and make a significant contribution to Gross Domestic Product. According to the Ministry of Cooperatives and Small and Medium Enterprises, MSMEs absorb up to 119 million workers or 97% of the absorption capacity of the business world (Medcom.id, 2021)

Since Covid-19 hit Indonesia, from 2020 to December 2021, around 30 million MSMEs went bankrupt, especially micro-businesses," he said in virtual BI training. This condition also impacted the workforce, who had to lose their jobs. Last year

around 7 million MSME workers had to be laid off. According to him, the MSME sector that went bankrupt the most was tourism. The primary factor is that the Covid-19 pandemic forced the Government to issue a policy of social restrictions. Social restrictions were held, thus hindering some business growth. (cdcindonesia.com)

The Ministry of Cooperatives and Small and Medium Enterprises reports that MSMEs in Indonesia are facing problems in the form of decreased business turnover, hampered distribution, and capital constraints (Medcom. id, 2021). A survey by the United Nations Development Program (UNDP) showed that 24% of Micro, Small and Medium Enterprises (MSMEs) in Indonesia did not operate during the corona virus-19. The closure of small and medium enterprises (MSMEs) was closed for several reasons, starting from a need for more funds. Production, Decreased Demand, Government Regulations, Difficulties in Access to Finance, and Difficulties in Raw Materials.



**Figure 1. Factors Causing MSME's do not operate**

The efforts to save the business are collaborating with digital platforms such as QR Codes.

Mulyadi (2015:14) "Production costs are costs incurred to process raw materials into finished products that are ready for sale. Production costs are divided into rawmaterials, direct labor, and overhead. On the other side, it can be concluded that if the product cannot be sold, the seller will not get a profit. Another influencing factor is social restrictions that prevent

MSME players from running their businesses. President Jokowi said, "This pandemic must be used as a momentum to accelerate digital transformation, which has indeed become part of the National Medium Term Development Plan (RPJMN)." efforts that can be made are carrying out digital transformation, such as working with merchants (OVO, Gopay, Dana, etc.) and other efforts such as making digital payment methods such as QRIS.

Developing a comprehensive non-cash payment system is becoming increasingly important (Au & Kauffman, 2008; Dahlberg et al., 2008, 2015; Dermish & Kneiding, 2012; Duncombe, 2011; Mallat, 2007; Pousttchi, 2008 ).

## **1.1 QRIS**

QRIS (QR Code Indonesia Standard) is a payment system based on a shared delivery channel that standardizes payment transactions using the QR Code. The system was pioneered by Bank Indonesia and the Indonesian Payment System Association (ASPI). The International Standard EMVCo (Europe MasterCard Visa) is the primary standard for preparing QRIS. This standard is used to support interconnection and interoperability between providers, instruments, and countries so that it can be open/open source (Adibah et al., 2019). The government presents the Quick Response Code Indonesia Standard (QRIS) in Indonesia.

A Quick Response (QR) Code can be made into a document validation application that can determine whether the document is genuine or fake. QR Code reader and generator software that is freely circulating so that everyone can create and constitute a QR Code, but counterfeiting practices can still be carried out on the contents of QR Codes. For this reason, it is necessary to carry out the process of encrypting the content before converting it into a QR Code. The purpose of encryption is so that the content converted into a QR Code cannot be directly identified by the format and contents of other people. QR Codes can store all data types, such as numeric, alphanumeric, binary, and kanji/kana. In addition, the QR Code has a smaller display than the barcode. QRIS is a barcode for digital payments that banks and other financial institutions can use. QRIS can be used for long-distance and short-distance payments; QRIS is short because it only uses a smartphone, and the receipt process is direct.

QRIS has superior values that encourage people to choose it:

- I. Universal, which means one QRIS can be used for all agencies
- II. It is easy; the payment method via QRIS is straightforward; that is, you must scan the barcode provided using your smartphone.
- III. Fortunately, QRIS was issued to benefit both users and merchants. QRIS users can use any account, and from that point on, it is enough for a merchant to have one account to receive all QR code distributions.
- IV. The receipt is immediate, the payment process via QRIS can be processed instantly, and users and merchants will receive transaction notifications if the payment has been successful.

QRIS can be used on digital platforms such as shopeepay, DANA, OVO, Gopay and Linkaja. This process helps the economy turn around and helps save MSMEs.

QRIS can be done online or offline, and online implementation can be seen by presenting the QRIS at the MSME cashier's desk, which is not much different from using QRIS offline, which can be done by receiving a barcode image to scan

## **1.2 Growth of QRIS**

Bank Indonesia (BI) noted that as of May 2022, the number of Indonesian standard QR code merchants or QRIS had exceeded 18.7 million users. The statement means that the use of QRIS as a digital payment from the MSME segment (micro, small and medium enterprises) has become increasingly widespread. (Liputan6.com).

In this case, Bank Indonesia (BI) continues to encourage the number of QRIS users so that the public increasingly uses them. BI targets the number of QRIS users to reach 26 million by the end of 2022. So far, BI has launched QRIS between countries that can be used in ASEAN countries, namely Thailand, Malaysia, the Philippines and Singapore, at the end of February 2022, the number of QRIS users reached 15.99 million. The value and volume of QRIS transactions reached IDR 4.51 trillion (305% YoY) and 54.91 million (269% YoY). The central bank is now continuing to build money market infrastructure to be interconnected, integrated and able to exchange information with payment systems,

especially in the development of the Quick Response Code Indonesian Standard (QRIS), BI-FAST, and the Multi-Matching Electronic Trading Platform (ETP). purpose of this study is to provide an overview of the literature regarding the role of Financial Technology in the QRIS payment method for MSME growth based on bibliometric analysis of several journal articles published on Google Scholar. The common goal is identifying scientific gaps as a reference for further research.

Based on these conditions, the authors are encouraged to research under "The role of Financial Technology in the qris payment method for MSME growth." To find out whether QRIS can play an active role in helping save their MSMEs during a pandemic, the next chapter will explain the factors driving and inhibiting the growth of QRIS for MSMEs

## **Paper II : A Systematic Literature Review on Quick Response Code Indonesian Standard (QRIS)**

Due to the fact that technological progress is inextricably intertwined with the development of science and human civilization, technological advancements are accelerating at an unstoppable rate . As a result of the advancement of this technology, people must rapidly adapt to new circumstances . The financial sector is one of the industries that has adapted to modern technological advancements. With financial technology (fintech), the problem of buying and selling transactions and making payments can be simplified for everybody, and fintech is very useful for making buying and selling transactions and payment systems more efficient, inexpensive, and effective . In the last five to six years, the phenomena of cashless transactions has grown quickly .

The Indonesian government has a plan to establish a cashless society, often known as a digital society, where people can purchase and sell products and services online . A society where people only use electronic money for transactions is known as a cashless society . Indonesia is rapidly and steadily evolving toward a cardless society, where transactions use e-wallets rather than cards, from the post-cashless state, when transactions do not require the usage of cash .

A server-based e-wallet system, often referred to as the Indonesian Standard Quick Response Code (QRIS), is beneficial for processing payments . Bank Indonesia has released a payment system in the form of a Quick Response, or generally known as a QR Code . On January 1st, 2020, QRIS went into effect nationwide to alter the timing of the implementation of Payment

System Services . The use of QRIS is a realization of the 2025 Indonesian Payment System's vision, which was originally scheduled for last May 2019 .

QRIS has been then regarded as a standardization of the QR Code utilized in Indonesian digital transaction methods . A QR Code National Standard is important because it seeks to project technological renewal and growth of QR Code-based payment channels, which has the potential to fragment the payment transaction industry . Effectively expanding the adoption of non-cash payment systems within the country is facilitated by the existence of QRIS . Because merchants can use a single QRIS, they do not require a variety of QRIS .

The development of QRIS technology in Indonesia is increasing due to its convenience and utility . The benefits provided by QRIS are verifiable aspects that occur rapidly . However, some organizations do not fully comprehend the QRIS payment method at this stage in its development . Due to a lack of knowledge about the interest in utilizing suboptimal payment methods and information regarding the use of QRIS, there appear to be a number of obstacles, as people are not sufficiently familiar with QRIS and its application .

Therefore, comprehending the perception of QRIS has a significant impact on its use [21]. This research seeks to provide educators and researchers with a comprehensive understanding of the potential benefits and challenges of this cutting-edge technology by conducting a systematic literature review on the QRIS in payment.