

**DIGNIFIED ECONOMIC DEVELOPMENT BY THE
IMPLEMENTATION OF ELECTRONIC PAYMENT SYSTEMS IN
THE POST OF COVID-19 PANDEMIC**

***PEMBANGUNAN EKONOMI YANG BERMARTABAT DENGAN
PENERAPAN SISTEM PEMBAYARAN ELEKTRONIK PASCA
PANDEMI COVID-19***

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Received: August 08, 2023 Accepted: August 16, 2023 Online Published: September 30, 2023.

ABSTRACT

This research studies the application of Article 1 number 1 of Government Regulation Number 23 of 2020 as amended by Government Regulation Number 43 of 2020 regarding the implementation of the National Economic Recovery program to support state financial policies for handling the Corona Virus Disease 2019 (COVID-19) pandemic and dealing with the COVID-19 pandemic. threats that endanger the national economy and/or financial system stability as well as the Rescue of the National Economy, especially in the City of Solo. This study aims to describe the mechanism for implementing payment system electronification in the City of Solo in general, both before the Covid-19 pandemic and during the Covid-19 pandemic, and to describe the efforts of the Bank Indonesia Solo Representative Office in optimizing payment system electronification to support the PEN Program in the time of the Covid-19 pandemic. This research is qualitative research using the type of field research. The approach used is the legal and conceptual approach carried out at Bank Indonesia Solo Representative Office (KPwBI Solo). Data sources are taken from primary data (from first hand), secondary data (Government Regulations), and tertiary data (journals, internet information, legal dictionaries, and other information media). Data collection techniques applied are interviews and interviews and documentation which is analyzed by normative methods. This study shows that the acceleration of digitalization of the payment system in the City of Solo by utilizing the use of QRIS (Quick Response Code Indonesian Standard) can be done easily, cheaply, and reliably. To increase the expansion of the use of QRIS, KPwBI Solo expanded its network and facilities for using QRIS through merchants and increased

socialization and education to the public. So that it can encourage and accelerate the digitization of trade that can support economic and financial inclusion nationally.

Keywords: Economic Development, Electronic Payment Systems, Post Covid-19 Pandemic.

ABSTRAK

Penelitian ini mengkaji penerapan Pasal 1 angka 1 Peraturan Pemerintah Nomor 23 Tahun 2020 sebagaimana telah diubah dengan Peraturan Pemerintah Nomor 43 Tahun 2020 tentang pelaksanaan program Pemulihan Ekonomi Nasional untuk mendukung kebijakan keuangan negara dalam penanganan Corona Virus Disease 2019 (COVID- 19) pandemi dan penanganan pandemi COVID-19. ancaman yang membahayakan perekonomian nasional dan/atau stabilitas sistem keuangan serta penyelamatan perekonomian Nasional khususnya di Kota Solo. Penelitian ini bertujuan untuk mendeskripsikan mekanisme pelaksanaan elektronifikasi sistem pembayaran di Kota Solo secara umum baik sebelum pandemi Covid-19 maupun pada masa pandemi Covid-19, serta mendeskripsikan upaya Kantor Perwakilan Bank Indonesia Solo dalam optimalisasi pembayaran. elektronifikasi sistem untuk mendukung Program PEN di masa pandemi Covid-19. Penelitian ini merupakan penelitian kualitatif dengan menggunakan jenis penelitian lapangan. Pendekatan yang digunakan adalah pendekatan hukum dan konseptual yang dilakukan di Kantor Perwakilan Bank Indonesia Solo (KPwBI Solo). Sumber data diambil dari data primer (dari tangan pertama), data sekunder (Peraturan Pemerintah), dan data tersier (jurnal, informasi internet, kamus hukum, dan media informasi lainnya). Teknik pengumpulan data yang diterapkan adalah wawancara dan wawancara serta dokumentasi yang dianalisis dengan metode normatif. Penelitian ini menunjukkan bahwa percepatan digitalisasi sistem pembayaran di Kota Solo dengan memanfaatkan penggunaan QRIS (Quick Response Code Indonesian Standard) dapat dilakukan dengan mudah, murah, dan andal. Untuk meningkatkan perluasan penggunaan QRIS, KPwBI Solo memperluas jaringan dan fasilitas penggunaan QRIS melalui merchant serta meningkatkan sosialisasi dan edukasi kepada masyarakat. Sehingga dapat mendorong dan mempercepat digitalisasi perdagangan yang dapat mendukung inklusi ekonomi dan keuangan nasional.

Keywords: Pembangunan Ekonomi, Sistem Pembayaran Elektronik, Pasca Pandemi Covid-19.

I. INTRODUCTION

The development of information technology together with innovation gave rise to the concept of digital economy that affects the economic sector, especially in Indonesia. Along with the times, human needs need to be met effectively and efficiently both in terms of time, energy, and cost. These human needs can be met by the existence of a buying and selling system via the internet to carry out their trade in online marketing or commonly referred to

as electronic transactions or e-commerce. There are already many humans who make purchases through online platforms and electronic equipment, food and beverages, clothing, books, and more can be easily obtained through online platforms. By using the internet, users can quickly and practically order the products they want without having to go to a physical store. Humans have the ability to carry out transactions using electronic technology. Electronic payment systems or electronic transactions are activities that use electronic devices by utilizing computers, computer networks, and other electronic media.¹

Online transactions are increasing rapidly through WhatsApp, Messenger, Facebook, Instagram, Twitter, websites, and the like. There is no special monitoring or special registration. Electronic transactions have a high probability of incurring significant losses. Because consumers cannot see the goods directly, they can have difficulty deciding to buy them, customers do not have the opportunity to try, customers cannot meet face to face or meet directly with sellers plus do not know about the location / position of their business. Therefore, when shopping, some people may see e-commerce as an exciting opportunity to expand their business and reach new customers. However, there are also those who view it as an environment fraught with risks and potential security threats. Therefore, the perception of risk towards e-commerce can vary depending on the point of view of each individual or customer.

In public life, order and justice are also important needs in various aspects of life, including in the economic field. This is because of the existence of order and justice in the community, life will run smoothly and orderly. Therefore, riots caused by residents can be avoided (Prana Jaya, 2023). If people's awareness of the importance of justice and order increases, then people will experience a harmonious life. In response to the advancement of the digital economy, the government needs to produce economic legal policies that facilitate the availability of financing for start-ups, provide tax incentives, and provide training in mastery of information and communication technology (ICT) to Small and Medium Enterprises (SMEs).²

According to Prof. Dr. Teguh Prasetyo, S.H., M. Si., dignified justice theory is a form of legal theory that regulates all substantive legal rules, principles, or disciplines. In addition, value networks are also part of substantive legal disciplines that are interconnected and influence each other. This interconnected network of values can be found in various rules, principles, or sets of rules and principles attached to values and virtues that are related and binding on each other.³ Thus the economic law will be able to humanize humans, that the law that is built entirely as a system treats and upholds human values according to the essence and purpose of life. So that

¹ Undang-Undang Republik Indonesia Nomor 11 Tahun 2008 - Wikisumber Bahasa Indonesia, n.d.

² Nidya Waras Sayekti, 'Tantangan Perkembangan Ekonomi Digital Di Indonesia', *INFO Singkat: Bidang Ekonomi Dan Kebijakan Publik; Kajian Singkat Terhadap Isu Aktual Dan Strategis*, 10.5 (2018), 19-24 <<https://doi.org/10.31227/osf.io/d89jm>>.

³ 'Keadilan Bermartabat : Perspektif Teori Hukum/ Prof. Dr. Teguh Prasetyo, S.H., M. Si. | OPAC Perpustakaan Nasional RI.' <<https://opac.perpusnas.go.id/DetailOpac.aspx?id=1156041>> [accessed 10 October 2023].

a dignified society will be created through equitable economic development with dignity in the use of electronic transactions today.

The impact of Covid-19 has resulted in the disruption of a country's economic activities which can become a very fatal problem (monetary crisis). In terms of trade, the COVID-19 pandemic has caused all forms of economic activity to be restricted, so that people who carry out economic activities outside the home are no longer able to be productive, many consumers are reluctant to leave their homes and even go to the market. For producers, the impact of COVID-19 is starting to be felt by starting to reduce production due to a decrease in the number of consumer demand and restrictions on trading activities, and for traders, the decline in the number of purchases is felt by closing access to sell and people's fear of leaving the house, especially by shopping at the market.

One of the government's efforts in overcoming the economic crisis during the COVID-19 pandemic was creating a National Economic Recovery Program (PEN) policy which was ratified through Regulation (PP) Number 23 of 2020 as amended by Government Regulation Number 43 of 2020 concerning the Implementation of the Recovery Program. National Economy in order to support the State Financial Policy for Handling the Corona Virus Disease 2019 (Covid-19) Pandemic to deal with threats that endanger the national economy and/or financial system stability and save the national economy in order to support state financial policies for handling the Covid-19 pandemic.

The PEN (National Economic Recovery) Program is one of a series of activities to reduce the impact of COVID-19 on the economy as stated in Article 1 number 1 of PP Number 23 of 2020 as amended by Government Regulation Number 43 of 2020, the National Economic Recovery Program which is hereinafter The PEN program is a series of activities for the recovery of the national economy which is part of the state financial policy implemented by the Government to accelerate the handling of the Corona Virus Disease 2019 (Covid-19) pandemic and face threats that endanger the national economy and financial system stability and saving the national economy.

Article 2 of PP Number 23 of 2020 states that the PEN Program aims to protect, maintain, and improve the economic capacity of business actors in running their businesses. Business Actors are business actors in the real sector and financial sector which include Micro, Small, Medium Enterprises, Large Enterprises, and Cooperatives whose business activities are affected by the Corona Virus Disease 2019 (COVID-19) pandemic. The PEN program is a form of policy response taken by the Government in an effort to maintain and prevent business activities from deteriorating further. Furthermore, Article 3 of PP Number 23 of 2020 stipulates that the PEN Program is implemented with due observance of the principles: 1. the principle of social justice; 2. the greatest prosperity of the people; 3. support business actors; 4. apply prudential policy principles, as well as good, transparent, accelerative, fair and accountable governance in accordance with the provisions of the laws and regulations; 5. does not cause moral hazard (moral hazard); and 6. there is a sharing of costs and risks among stakeholders according to their respective duties and authorities.

Millennials today are growing up as a society in a network or online on social media applications. They are familiar with computers, the internet, and

internet application user interfaces. This familiarity has made millennials adapt to new programs, operating systems, and devices to perform computer-based tasks easier and faster than previous generations. A survey of millennials in 2015 illustrated that millennials do not tolerate waiting in line. People in this generation expect speed and ease of use. A study by Howe and Strauss reports that millennials tend to adopt new technologies and expect technology to just work. In addition, the millennial generation is a friendly generation. They socialize online as well as in real life. They connect and share virtual socialization habits included in trading activities.⁴

One of the efforts by Bank Indonesia to support the PEN Program is to conduct electronic payment systems. Electronification of financial transactions is a form of GNNT (National Non-Cash Movement) launched by Bank Indonesia in the form of changing the payment method from cash to non-cash (reported from bi.go.id). Central banks in the world encourage the use of non-cash payment instruments. This is because the payment system is relatively safer, more effective, and efficient. In addition, transactions with this system are also cheaper, faster, and easier so that they can increase the productivity of the country's economy.⁵ Bank Indonesia (BI) has launched the National Non-Cash Movement (GNNT) on August 14, 2014, which aims to create a safe, efficient, and smooth payment system, which in turn will be able to encourage the national financial system to work effectively and efficiently. GNNT is also expected to be able to minimize obstacles in cash payments, such as money not being received because it is shabby/torn/not fit for circulation, and to increase efficiency during transactions where people do not need to carry large amounts of money. Thus, it can increase the effectiveness of transactions, namely avoiding calculation errors or human errors. In turn, GNNT will be able to create a cashless society ecosystem. Indonesian people's acceptance of non-cash transactions is still relatively low compared to other countries. Besides being influenced by the inefficiency of the national retail non-cash payment ecosystem, the low acceptance is also influenced by cash transaction habits and the limited awareness of the benefits of non-cash transactions.⁶ (Indonesian Economic Report, 2017:164).

Along with efforts to increase GNNT, BI (Bank Indonesia) realized that the payment system needed to adapt to the presence of digital technology. Increased efficiency, convenience, and inclusiveness are driven by the integration of the digital economy, and finance is expected to contribute positively to strong, balanced, inclusive, and sustainable economic growth even during the Covid-19 pandemic. The efforts of BI (Bank Indonesia) to encourage the integration of the digital economy and finance are carried out through electronification policies and programs that include Electronic

⁴Athapol Ruangkanjanases, 2021, "Predicting Consumer Intention to Adopt Online Grocery Shopping: A Comparative Study between Millennials in Thailand and Indonesia." *International Journal of Electronic Commerce Study* 12, no. 2: 193–208. <https://doi.org/10.7903/ijecs.1894>.

⁵Venti Eka Setya. 2021. "Kajian Singkat Terhadap Isu Aktual Dan Strategis", *Info Singkat: Bidang Ekonomi Dan Kebijakan Publik; Kajian Singkat Terhadap Isu Aktual Dan Strategis*, XIII.No. 2 (2021), 19–24 http://berkas.dpr.go.id/puslit/files/info_singkat/InfoSingkat-XIII-2-II-P3DI-Januari-2021-249.pdf [accessed 3 October 2023].

⁶ www.bi.go.id. Laporan Perekonomian Indonesia 2017.

Transactions for Regional Governments (Pemda), Electronification of Social Assistance, and Electronification of Transportation. This program is expected to contribute to economic growth through improving financial inclusion, fiscal health, and economic efficiency.

The development of digital technology brings many changes, including in economic and financial activities. Diffusion between technology and financial services resulted in a new business model which became known as financial technology (fintech) and e-commerce followed by the emergence of new players (start-ups). The development of innovative fintech and e-commerce business models has penetrated almost all types of financial services. The business model can generally be divided into four categories, namely: (i) lending and capital raising; (ii) payments, clearing, and settlement (PCS); (iii) investment and risk management (IRM); and (iv) market support (MS). Fintech and e-commerce innovations offer a variety of benefits to consumers. Consumers are more flexible in using financial services with transaction patterns that are almost without territorial boundaries. This provides easy, fast, and inexpensive access to financial services so that fintech and e-commerce are believed to be able to encourage financial inclusion. In addition, the fintech business model can encourage the decentralization of financial services while at the same time diversifying the concentration risks that arise in conventional business models that adhere to the single point of failure principle. This makes the fintech and e-commerce business models considered safer than conventional models.

The change in the use of instruments from cash to non-cash has many advantages, namely efficiency in cash handling, more practicality, wider access, transaction transparency, and more accurate identification of economic planning. The electronification program implemented by BI (Bank Indonesia) consists of the Electronification of Regional Government Transactions, the Electronification of Social Assistance, and the Electronification of Transportation. The role of BI (Bank Indonesia) related to electronification includes coordinating and facilitating the implementation of electronification in line with Bank Indonesia's duties in the payment system sector, implementing socialization and education to external stakeholders regarding the implementation of the electronification program including regulations, supporting policies, and publication of educational materials to the public. The public regarding non-cash transaction services through the media in coordination with the Bank Indonesia Representative Office (KPwBI), related Ministries/Institutions, Payment System Service Providers (PJSP), and other parties, and monitoring the effectiveness of the implementation of the electronification program through surveys, Forum Group Discussions (FGD) and/or a site visit to the location.

Bank Indonesia continues to encourage a shift in public transaction behavior from cash to non-cash through 4 (four) electronification strategies that are synergized with government programs, including business model facilitation, supporting regulations and policies, optimizing local resources, education, and monitoring. In the Decision of the Board of Governors Meeting (RDG) of Bank Indonesia on 17 and 18 June 2020, Bank Indonesia continued to take further policy steps in close coordination with the Government and the Financial System Stability Committee (KSSK) to maintain macroeconomic

and financial system stability, as well as to support PEN (National Economic Recovery). Bank Indonesia is committed to funding the APBN through the purchase of SBN (State Securities) from the primary market as well as the provision of liquidity funds for banks to facilitate the credit restructuring program (financing) in support of the PEN program. Bank Indonesia in terms of electronification of the payment system as an effort to encourage the PEN program during the Covid-19 pandemic, to accelerate the digitization of the payment system to accelerate the implementation of the digital economy and finance as part of economic recovery efforts through collaboration between banks and fintech to widen access for MSMEs and the public to economic and financial services.

Quoted from Republika.co.id, the electronification of payment systems that have been implemented in the City of Solo includes the parking payment system or e-parking on Jalan Gatot Subroto. According to the Mayor of Solo at that time, FX. Hadi Rudyatmo, this e-parking service is a collaboration between the Solo City Government and a bank to realize transparency of regional income, especially from parking fees, and become a solution to avoid illegal levies (extortion) on parking. Furthermore, in 2019, the BI (Bank Indonesia) Solo Representative Office attempted to socialize the QR Code Indonesian Standard (QRIS) which was just launched on the commemoration of the Independence Day of the Republic of Indonesia on 17 August 2019. The Head of the Solo BI Representative Office, Bambang Pramono, said the existence of QRIS will increase transaction efficiency, encourage the effectiveness of transaction actors, and encourage the development of micro, small, and medium enterprises (MSMEs) (reported from Republika.co.id). The implementation of payment system electronification in Solo City is still relatively low so the majority of Solo City people tend to prefer conventional or cash payment systems due to limited knowledge about payment system electronification. As a city that occupies the first place as the most populous city in Central Java, Solo is the center of the economy, tourism, and education (quoted from Merdeka.com). The economic cycle, both in terms of trade and tourism in the City of Solo, should be able to contribute to a significant economic increase in the development of the City of Solo. In other words, the City of Solo has great potential in supporting the optimization of payment system electronification in the PEN Program during the COVID-19 pandemic if economic activities can be shifted from cash to non-cash. Based on this description, this study aims to explore the efforts of Bank Indonesia at the Solo Representative Office in optimizing and implementing the electronification of the payment system in Solo City to support the PEN Program during the COVID-19 pandemic.

Based on the explanation that has been put forward, the originality of the research that can be put forward is that this research studies the application of Article 1 number 1 of PP Number 23 of 2020 as amended by Government Regulation Number 43 of 2020 regarding the implementation of the National Economic Recovery program to support state financial policies for handling the Corona pandemic. Virus Disease 2019 (COVID-19) and/or facing threats that endanger the national economy and/or financial system stability and National Economic Rescue, especially in the City of Solo. In addition, this research is original because it has never been carried out before

in an empirical study that discusses specifically a territory regarding the application of Article 1 point 1 PP Number 23 of 2020 as amended by Government Regulation Number 43 of 2020. Bank Indonesia Solo Representative Office is the choice The author's place of research is due to the potential of the City of Solo as an active economic driver that can contribute to the PEN Program during the Covid-19 pandemic.

II. METHOD

This research is qualitative research where qualitative research is the process of analyzing data by conveying descriptively or using words obtained from the findings so that this qualitative research does not use numbers in its research but uses descriptions, this research prioritizes quality over quantity.⁷

The research design applied by the author in this study is Legal Research or Legal Research. Legal Research plays an important role in the framework of the development of Legal Science and reveals the factors that cause problems related to law. From the results of this study, it can be seen the causative factors and how to solve the problem under study. According to Peter Mahmud Marzuki, legal research is a process to find the rule of law and legal doctrines to answer the legal issues faced.⁸

In this study, the author applies normative empirical legal research, namely research by digging up information in the field (Field Research). Empirical normative research is research from inaction on the validity of normative law. The type of this research is field research, namely research that is carried out systematically and methodologically to reveal the data needed in research that comes from the location or field. Normative-empirical research is used to analyze or find out the extent to which regulations or laws and laws are running effectively in society.⁹ Author will examine the extent to which the optimization of the application of payment system electrification as an effort to improve the economy in the context of the National Economic Recovery Program (PEN) during the Covid-19 pandemic in Solo City as stated in Article 1 number 1 PP No. 20 of 2020 which was changed to PP No. 43 of 2020.

The type of research used by the author is to use two approaches, including the legal approach and the conceptual approach. According to Peter Mahmud Marzuki in Muhaimin, the legal approach is carried out by reviewing all laws and regulations related to the legal issues being discussed (researched).¹⁰

In PP No. 43 of 2020 concerning the National Economic Recovery Program (PEN) in Article 1 point 1 which reads "The National Economic Recovery Program, hereinafter referred to as the PEN Program, is a series of

⁷ H Salim HS and Erlies Septiana Nurbani, 2013, "*Penerapan Teori Hukum Pada Penelitian Tesis Dan Disertasi*", Jakarta: PT. Raja Grafindo Persada, Pg. 16.

⁸H Salim HS and Erlies Septiana Nurbani. 2016. "*Penerapan Teori Negara Hukum Pada Penelitian dan Disertasi*", Third Edition, Jakarta: PT. Rajagrafindo Persada. Pg. 5.

⁹Ronny Hanitijo Soemitro, 1990, "*Metodologi Penelitian Hukum dan Jurimetri*", Jakarta: Ghalia Indonesia, pg. 52.

¹⁰Muhaimin, 2020, "*Metode Penelitian Hukum*", Nusa Tenggara Barat: Mataram University Press, Pg. 56-57

activities for the recovery of the national economy which is part of the state financial policy implemented by the Government to accelerate the handling of the pandemic. Corona Virus Disease 2019 (COVID-19) and/or facing threats that endanger the national economy and/or financial system stability and save the national economy.”

The conceptual approach is an approach that departs from the views and doctrines that develop in the science of law. The research approach was chosen to find answers to legal issues in legal research. Therefore, the suitability of the approach with legal issues is the main consideration in making the selection.¹¹ This conceptual approach conceptualizes the efforts made by the Solo Bank Indonesia Representative Office in optimizing the electrification of the payment system so that the goal of PEN is achieved by creating an appropriate concept.

This research was conducted in Surakarta, at the Bank Indonesia Representative Office of Solo.

- 1) Primary Data that is data obtained directly (from first-hand). In this observation, the primary data included are data obtained through direct research at the Bank Indonesia Solo Representative Office. The resource persons of this research are Mr. Nugroho Joko Prastowo the Head of the Representative Office of Bank Indonesia, Solo.
- 2) Secondary data in this study include Government Regulations concerning Amendments to Government Regulation Number 23 of 2020 concerning the Implementation of the National Economic Recovery Program (PEN) to support State financial policies for handling the 2019 Corona Virus Disease (COVID-19) Pandemic and/or Facing Threats will endanger the national economy and/or financial system stability and save the national economy.
- 3) Tertiary legal materials, namely materials that provide information on primary and secondary legal materials, such as journals, internet information, legal dictionaries, and other information media.

To obtain the required data, the authors immediately went to the field to obtain information and several required data related to the problems studied. The steps in data collection are as follows:

- 1) Interview
Interviews are used as a data collection tool by interviewing and asking the parties who carry out the Murabaha implementation, both from the bank concerned. This interview technique is carried out with the aim of:
 - a) To find out how to implement payment system electrification in the Solo City area both before and during the COVID-19 pandemic to carry out national economic recovery (PEN).
 - b) To find out the procedures and concepts used in the implementation of payment system electrification in the context of PEN in Solo City during the Covid-19 pandemic.
- 2) Documentation

¹¹Ibid.

The documentation used is to record everything related to the electronic payment system implemented in the City of Solo, either sourced from interviews or library studies.

In qualitative research, the researcher himself or with the help of others is the main data collection tool.¹² To analyze the data obtained, the normative analysis method will be used, which is a way of interpreting and discussing research results based on legal understanding, legal norms, legal theories, and doctrines related to the subject matter. Legal norms are needed as a major premise, then correlated with relevant facts that are used as a minor premise, and through a syllogism process, a conclusion will be obtained on the problem.¹³

By following the recommendations of the WHO (World Health Organization) regarding Covid-19 and the National Economic Recovery efforts, Bank Indonesia is trying to face the existing challenges. First, the acceleration of economic recovery and efforts to encourage a stronger economy. Second, digitalization of the economy and finance. Third, accelerate economic and financial inclusion. Third, the acceleration of economic and financial inclusion, especially in the MSMEs and the agricultural sector. The digital commerce program offers business partners an electronic payment solution to replace the previously digital cash-based payment system. The digital commerce program offers business partners an electronic payment solution to replace the previously digital cash-based payment system. The emergence of these developments in the global business environment challenges most organizations to automatically switch from conventional paper-based money transactions to electronic payment systems which are widely known as electronic payment systems or e-payments. Generally, payment electrification can be defined as a program or application that is used in making payments for goods or services purchased online or online through the use of the Internet.¹⁴ Fourth, encourage a green economy or green economy. The digitalization of the economy and finance will continue to be encouraged through the acceleration of digital banking, fintech, e-commerce, and the payment system industry through QRIS.

III. ANALYSIS AND DISCUSSION

a. The Mechanism for Implementing the Electronic Payment System Implemented in the City of Solo

Bank Indonesia has accelerated the digitization of the payment system based on the Indonesia Payment System Blueprint (BSPI) 2025 to expand the digital economy and finance as part of efforts to recover the economy and strengthen the structural foundation for the Indonesian economy. Bank Indonesia continues to encourage various digital transformation initiatives in various areas, such as digital payments through the Quick Response Code

¹²Husein Umar, 2000, *“Research Methods In Finance And Banking”*, Jakarta: PT Grafindo Pustaka Utama, pg. 82.

¹³ Johnny Ibrahim, 2006, *“Teori Dan Metodologi Penelitian Hukum Normative”*, Malang: Bayumedia Publishing, pg. 295

¹⁴ Kabir, Mohammad Auwal, Siti Zabedah Saidin, and Aidi Ahmi. 2015. *“Adoption of E-Payment Sitem: A Review of Literature.”* Proceedings of the International Conference on E- Commerce (ICoEC) 2015, no. May 2016: 112–20.

Indonesian Standard (QRIS), banking digitalization, and expanding access for MSMEs and the public to digital economic and financial services with the support of collaboration between banks and fintech. Bank Indonesia also continues the payment electronification program in various sectors to improve economic efficiency and boost economic recovery momentum.

In April 2020, Bank Indonesia set an adjustment to the QRIS Merchant Discount Rate (MDR) to 0% specifically for merchants in the Micro Business (UMI) category, effective from April 1, 2020, to December 31, 2020. In addition to encouraging the digitization of MSMEs, a special pricing policy for This UMI merchant is also in line with the Proudly Made in Indonesia National Movement (Gernas BBI). The expansion of QRIS acceptance is also continuously carried out through feature innovation and education. The remote payment feature, namely QRIS Without Face-to-face (QRIS TTM) was introduced. Furthermore, education on the use of QRIS to merchants and consumers also continues to be expanded. Through QRIS, the digitization of MSMEs can be accelerated to support economic and financial inclusion nationally, including the availability of MSME data which has been one of the obstacles in the development of MSMEs.

Based on the Regulation of the Minister of Home Affairs of the Republic of Indonesia Number 56 of 2021 concerning the Team for the Acceleration and Expansion of the Digitization of Provinces and Regencies/Cities and Procedures for the Implementation of Electronification of Regional Government Transactions, the Electronification of Regional Government Transactions (ETPD) is an effort to change regional government revenue and expenditure transactions from cash to digital-based non-cash. This is in line with the direction of the President of the Republic of Indonesia regarding electronification, namely to prepare a digital transformation roadmap in strategic sectors. The implementation of ETPD can increase the efficiency, convenience, and inclusiveness of local government financial transactions which can then become the basis for strong, balanced, inclusive, and sustainable economic growth. Until now, the Surakarta City Government has conducted electronification of various regional transactions facilitated by Bank Jateng as the holder of the Regional General Cash Account (RKUD), including:

No	Programme	Agency	Information	Status
1.	SP2D <i>Online</i>	Surakarta City Government	Integrated with SIMDA Finance for non-cash shopping	Live
2.	CMS (Cash Management System)	Agencies in Surakarta city government	Web-based banking transaction services.	Live
3.	E-Tax	BPPKAD	Peak Regional Payments Online through various channels/platforms.	Live
4.	E-PBB	BPPKAD	Earth and building tax (PBB) payments on a host-to-host basis, can be accessed via e-wallet & QRIS.	Live

5.	Alat Monitoring Pajak Daerah	BPPKAD	Installation of transaction monitoring tools at the location of Mandatory Pungut 18 tools has been installed.	Live
6.	E-Gembok & E-Derek	Department of Transportation	Payment of Wild Parking Fines & Derek on a non-cash basis	Live
7.	E-UJI / E-KIR Kendaraan	Department of Transportation	Payment of vehicle feasibility tests at Dishub Surakarta, can already be paid with QRIS and Agen Laku Pandai Bank Jateng.	Live
8.	E-Retribusi Tiket Bus Wisata	Department of Transportation	Payment of travel online bus ticket purchases (Technical coordination stage)	On Process
9.	E-Retribusi Pasar	Trade Office	Payment of market levy on a non-cash basis at 10 Market Built by Bank Jateng. 1 additional market in the integration process.	Live
10.	Pembayaran Rumah Sakit	Surakarta Regional General Hospital	Host-to-Host patient bill payments through multiple channels.	Live
11.	E-BPMKS	Department of Education	Distribution and spending of aids to 19,880 poor students from 286 elementary / junior high schools in surakarta city.	Live
12.	E-Sampah	Service Environment	Household and Industrial waste levy payments.	Live
13.	E-Retribusi Perijinan	DPMPTSP	Payment of the license levy on a Host-to-Host basis (in the UAT stage).	On Process
14.	Hospital Payments	Bung Karno Regional General Hospital	Payment of hospital patient bills on a Host-to-Host basis (Technical coordination stage)	On Process
15.	Hospital Payments	Surakarta City Mental Hospital	Payment of hospital patient bills on a Host-to-Host basis (Initial coordination stage)	On Process
16.	PDAM Online	Perumda PDAM Kota Surakarta	Payment of people's water bills online through various channels.	Live

17.	E-SPBU	Perumda Pedaringan Kota Surakarta	Payment of cashless fuel purchases by gas station partners.	Live
18.	Tax Payment Aggregator	People's Credit Bank Surakarta City	Expansion of earth dan building tax payment service facilities & e-Tax online on Teller / Cashier at The People's Credit Bank cooperation.	Live

In addition, the use of card-based electronic money also continues to increase with the implementation of non-cash payments in the transportation sector, such as KRL, Batik Solo Trans, and toll payments. To accelerate and expand the electronification of local governments, members of the Surakarta City Regional Digitization Acceleration and Expansion Team (TP2DD) have been formed by the Mayor's Decree Number: 050.05/34.5 of 2021 dated March 5, 2021. The formation of the Surakarta City TP2DD can encourage the implementation of ETPD, increase transaction transparency in regional finance, as well as support governance and integrate regional financial management systems to optimize regional revenues. The city of Surakarta has successfully entered the top 10 regencies/cities with the Highest Local Government Transaction Electronification Index (IETPD) in Indonesia. The IETPD value of Surakarta City in the second quarter of 2021 has increased to 90.00% and is ranked 7th out of 508 Cities/Regencies in Indonesia. This value is included in the Digital Region Stage (>80%).

In supporting Bank Indonesia's initiatives through digital transformation in various areas, the Solo City government has started implementing one of these transformations, such as digital payments through the Quick Response Code Indonesian Standard (QRIS). The Quick Response Code Indonesian Standard (QRIS) is the standardization of payments using the QR Code method from Bank Indonesia so that the transaction process with the QR Code becomes faster, easier, cheaper, safer, and more reliable. QRIS is not a new application, but a national standard QR Code that is required for all Payment Service Providers (PJP) that use QR. QRIS is one of the implementations of the Indonesian Payment System Vision (SPI) 2025 which was developed by Bank Indonesia as a joint regulator with the Indonesian Payment System Association (ASPI). The launch of QRIS aims to facilitate a secure digital payment system, encourage government efficiency, and accelerate digital financial inclusion. Before being standardized with QRIS, payment applications could only make payments to merchants who had accounts from the same PJP because the QR Code used was not standardized. Currently, with the QRIS standard, all payment applications from any PJP can make payments using a QR Code at all merchants even though the PJP used is different. In addition, the QRIS standard makes it easier for merchants to accept payments from any application by simply opening an account with one of the QRIS providers. Merchants already have many QR Codes from various PJPs which are also facilitated because all their accounts can accept payments with just one QR Code (QRIS).

QRIS is a form of consumer-centric both for end consumers and merchants. It is enough for the public to have one payment system application to be able to scan QR from all payment system service providers. Merchants also only need one QR that can accept payments from all payment system applications. For merchants or merchants, to be able to receive payments through QRIS, they must first register for the QRIS issuance process. The merchant only needs to contact the PJP, the QRIS organizer, fill out the form, and prepare the supporting documents requested by the PJP where the merchant opens an account. Some of the minimum requirements that need to be prepared by merchants include photo ID cards, selfie photos with ID cards, photos of the inside and front of the store, or adjusting the policies of each PJP QRIS. Currently, there are 68 PJP QRIS both Bank and Non-Bank. In the QRIS acquisition process, merchants will receive education regarding the use of QRIS from PJP, including how to view payment notifications from consumers, which can be monitored via email, SMS, or special merchant applications provided by PJP. Merchants can choose the type of payment using QRIS which consists of:

- 1) Static Merchant Presented Mode (MPM), Consists of two kinds, namely:
 - a) Merchant Presented Mode (MPM) Static
This is the easiest type because merchants only need to display one QRIS sticker or print-out and it's free. Users only scan, enter nominal, enter a PIN and click pay. Transaction notifications are immediately received by users or merchants. QRIS MPM Static is very suitable for micro and small businesses.
 - b) Dynamic Merchant Presented Mode (MPM)
QR is issued through a device such as an EDC machine or smartphone and is free. Merchants must enter the nominal payment first, then the customer scans the displayed or printed QRIS. QRIS MPM Dynamic is very suitable for merchants of medium and largescale businesses or with high transaction volumes.
- 2) Customer Presented Mode (CPM)
The customer simply shows the QRIS displayed from the customer's payment application to be scanned by the merchant. QRIS CPM is more intended for merchants who require high transaction speeds such as transportation, parking, and modern retail providers.
- 3) No Face to Face (TTM)
QRIS is transacted without face to face because it can be easily distributed via messaging applications and consumers can easily scan directly the received QRIS file.

On the consumer side, anyone who has a cellphone with a camera and data connectivity, and has an electronic payment account, either server-based electronic money or m-banking that has QRIS service available and has sufficient balance, can make payments through QRIS. The trick is simply to open the payment application you have look for the scan/pay/QRIS menu, then point your camera at the QR code available at the merchant. Or

consumers can also make QRIS payments face-to-face, by uploading a QRIS image in their application. Don't forget to make sure the merchant's name matches the name listed in the application, then enter the nominal and PIN, and the transaction is complete. After the transaction is completed on the consumer side, the merchant will get an incoming notification that the payment has been successful on the merchant's cellphone or cashier application if it has been integrated. The funds will be entered into the merchant account and can be settled or automatically entered into the registered account after H+1. However, several PJPs currently provide same-day settlement or H+0 services, so that the funds obtained can be immediately withdrawn or disbursed on the same day as the transaction. Currently, the QRIS transaction limit is 1 transaction with a maximum of IDR 5 million, and there is no limit on transactions per day.

QRIS has a fairly large influence on economic growth in the City of Solo, including the contactless payment method using QRIS, which is very suitable to be implemented as an alternative to non-cash payments during a pandemic because apart from being practical, it is also more hygienic. This is because QRIS has EXCELLENT characteristics, namely Universal, Easy, Profit, and Direct so that it is expected to encourage transaction efficiency, accelerate financial inclusion, and promote MSMEs, which in turn can encourage economic growth. Thus, the implementation of QRIS in various transactions is expected to encourage the acceleration and expansion of digitalization of payments in Surakarta City which is in line with regional economic recovery efforts and supports National Economic Recovery. In addition, the existence of QRIS as a payment channel in the city of Surakarta is also a solution to revive the tourism sector in the new era of life because it supports clean, health, safety, and environmental sustainability (CHSE) factors because it minimizes physical contact in transactions. QRIS has both advantages and disadvantages. The advantages of QRIS itself include:

- 1) For users of payment applications: just scan and pay
 - a) Fast and up-to-date.
 - b) No need to bother carrying cash anymore.
 - c) No need to bother thinking about whose QR is installed.
 - d) Protected because all PJP providers of QRIS have a license and are supervised by Bank Indonesia.
- 2) Share Merchants
 - a) Sales have the potential to increase as it can accept any QR-based payment.
 - b) Improve branding.
 - c) Contemporary.
 - d) More practical because it is enough to use one QRIS.
 - e) Reduce cash management costs.
 - f) Avoid counterfeit money.
 - g) No need to provide change.
 - h) Transactions are recorded automatically and can be viewed at any time.
 - i) Separate money for business and personal.
 - j) Facilitates reconciliation and has the potential to prevent fraud from accounting for cash transactions.

- k) Build credit profile information to make it easier to obtain credit in the future.

On the other hand, QRIS has weaknesses, namely:

- 1) Not all PJP QRIS can make H+0 settlements, so merchants have to wait for the next day to be able to collect incoming funds.
- 2) Merchants need to go to a bank or ATM to disburse funds, whereas if the transaction uses cash, the merchant can immediately re-spend the money.

b. Efforts by Bank Indonesia for the Solo Representative Office to Optimize Payment System Electronification in Support of the National Export Development Program During the Covid-19 Pandemic

Efforts made by Bank Indonesia Solo Representative Office (KPwBI Solo) in overcoming the weaknesses of the implementation/use of QRIS are by making some efforts to increase/expand the network and facilitate the use of QRIS through merchants and continue to increase socialization and education to the public regarding the use of QRIS and its benefits. for society. In addition, KPwBI Solo also conducts various strategic events to encourage increased public awareness of QRIS, including through:

- 1) Webinar activities, for example, webinars with the theme “Opportunities and Challenges of Regional Digitization”. The implementation of the webinar is expected to encourage increased awareness of digitalization expansion in the regions, especially in the Regional Government Transaction Electronification (ETPD). This is in line with the work plan of the Team for the Acceleration and Expansion of Regional Digitalization (TP2DD) which is currently formed in 7 (seven) regencies/cities in Soloraya.
- 2) Acceleration of Latest Payment Digitization Using QRIS (Adipati QRIS) to encourage acceleration and expansion of payment digitization in Surakarta City. Adipati QRIS is implemented in three sectors, namely traditional markets, modern markets, and MSMEs which consist of outreach, education, and onboarding activities involving Payment Service Providers (PJP) in the regions.
- 3) The Adipati Festival is held to encourage the acceleration and expansion of regional digitalization that supports the acceleration of National Economic Recovery (PEN). The Adipati Festival marks the readiness of Soloraya in digitizing payments, one of which is using QRIS.

According to Panji Achmad, Head of PH Macroeprudential and Financial System Stability Division of DHk BI, Bank Indonesia continues to strengthen synergies with the Government in encouraging the use of cashless transactions in several strategic sectors through the payment electronification program. The electronification of non-cash social assistance payments supports more targeted distribution, the right amount, on time, and also better governance during the Covid-19 pandemic. Electronification of regional government financial transactions has also continued to grow, with 542 regional governments recorded, namely 34 provinces, 93 cities, and 415 regencies. The scope of inter-regional payment electronification varies from

Cash Management System (CMS), and online SP2D, to the use of QRIS, Electronic Money, and online banking. The electronification of regional government financial transactions also applies to the collection of taxes and levies, as well as expenditures and expenditures. With this electronification, it is hoped that tax revenues can be increased, expenditures can be made more efficiently and optimally, and local government financial governance can be strengthened.

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The synergy of MSME development is carried out to encourage MSMEs as a new economic force in the digital era. These efforts are implemented through a series of three series of activities for Karya Kreatif Indonesia (KKI) 2020 with the theme "Encouraging MSMEs as New Powers for the National Economy in the Digital Era". The first, second, and third KKIs focus on efforts to encourage the export MSMEs, Digital MSMEs, and MSMEs for Millennial Friends. The series of activities for the three KKI 2020 series is the result of the synergy between Bank Indonesia and related Ministries/Institutions and showcases superior MSME products fostered by Bank Indonesia. Showcases were held both virtually on the KKI platform on a national scale and physically limited to the COVID-19 protocol at various Bank Indonesia Representative Offices. Workshops, business matching, and coaching activities, international showcases were also held to further strengthen the presence of MSMEs as the new power of the national economy.

The existence of payment electronification or QRIS before the Covid-19 pandemic and during the Covid-19 pandemic, especially in the City of Solo, influenced economic growth, namely the application of electronification in regional financial transactions that could make a positive contribution, namely an increase in Regional Original Income (PAD). In addition, the electronification of regional government transactions is also able to increase transparency and accountability in regional financial management. Especially in the current COVID-19 pandemic situation, Local Governments that have high electronification achievements (indicated by high IETPD scores) tend to be more resilient and therefore have less chance of contraction or decrease in PAD and higher spending realization.

IV. CONCLUSION

Bank Indonesia has accelerated the digitization of the payment system based on the 2025 Indonesian Payment System Blueprint (BSPI) as an effort to recover the economy and strengthen the structural foundation of the Indonesian economy. The payment mechanism for the electrification of the payment system implemented in the City of Solo is to utilize and develop the use of QRIS (Quick Response Code Indonesian Standard). QRIS is a remote payment feature that can be done face-to-face. This is the standardization of payments using the QR Code method from Bank Indonesia so that the transaction process with the QR Code becomes faster, easier, cheaper, safer, and more reliable for all Payment Service Providers (PJP). The QRIS payment system can encourage and accelerate the digitization of MSMEs so that they can support economic and financial inclusion nationally. The Solo Regional Government has also implemented ETPD (Electronification of Regional Government Transactions) which converts regional government revenue and expenditure transactions in cash into digital-based non-cash. This is expected to increase the efficiency, convenience, and inclusiveness of local government financial transactions which can be the basis for strong, balanced, inclusive, and sustainable economic growth. Electronification of the payment system for various regional transactions in the City of Solo is facilitated by Bank Jateng as the holder of the Regional General Cash Account (RKUD).

Bank Indonesia Solo Representative Office (KPwBI Solo) has made several efforts to increase network expansion and facilitate the use of QRIS through merchants and continue to increase socialization and education to the public regarding the use of QRIS and its benefits for the community. In addition, it also conducts various strategic events such as holding webinars, Accelerating the Digitalization of Latest Payments Using QRIS (Adipati QRIS) in the traditional market sector, modern markets, and MSMEs, as well as holding the Adipati festival.

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