



Implementation of QRIS-Based Electronic Transaction Policies by Local Governments to Improve Efficiency in Paying Worker Housing Service Fees in Pangkajene and Islands Regency

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ABSTRACT

Muhammad Rifat Rauf, 2026, Implementation of the Local Government Transaction Electronification (ETPD) Policy based on QRIS in improving the efficiency of rental payments for worker housing in Pangkajene and Islands Regency (Reviewed by Nur Insan and Rosnaini Daga). This study uses a qualitative approach with a descriptive method. The research informants included the Secretary of Bapenda of Pangkajene and Islands Regency, the manager of the UPTD Rusunawa Workers' Housing, representatives from the partner bank (Bank Sulselbar), and the workers living in Rusunawa. Data was collected through in-depth interviews, direct observation at the Rusunawa area, and document studies, then analyzed qualitatively through stages of data reduction, data presentation, and drawing conclusions and verification. This study aims to analyze the implementation of QRIS in improving efficiency, transparency, and real-time recording of Rusunawa Workers' fees in Pangkajene and Islands Regency. Additionally, the study aims to identify driving factors (regulations, support from officials, and partnership with Bank Sulselbar) as well as challenges in the field (technophobia, low digital literacy among island workers, and building signal dead spots). Furthermore, the study formulates strategies for optimization through the integration of a single window system, door-to-door helpdesk services, and adjusting services to workers' shift schedules to support regional digitalization

INTRODUCTION

The development of information and communication technology in today's digital era has brought significant changes in various aspects of life, including in government administration and public services (Pratama, R & Sari, 2021; Sari, 2020). Digital transformation has become a must for the government to improve the quality of services to the public, especially in providing services that are effective, efficient, transparent, and accountable (Dewi, 2023; Rahman, 2021). One tangible example of this transformation is the implementation of digital payment systems in managing regional finances (Putri & Andini, 2022). Along these lines, the government, together with Bank Indonesia, is promoting the implementation of Local Government Electronification (ETPD) as an effort to optimize regional revenue while also improving transparency and accountability in financial management (Nugroho, 2019; Yusuf, 2022). ETPD is realized through the use of digital payment instruments, one of which is the Quick Response Code Indonesian Standard (QRIS), which allows payments to be made cashlessly in a faster, easier, and safer way (Hidayat, 2020; Mardani, 2023).

The use of QRIS in regional payment systems has great potential to improve the efficiency of public services, including paying taxes and fees (Kurnia et al., 2021). With digital payment systems, transactions that used to be done manually can be simplified, helping to reduce queues, speed up service times, and minimize mistakes in administrative records (Dewi, 2023). Moreover, using QRIS also makes it easier for people to make payments anytime and anywhere (Putri & Andini, 2022). However, the implementation of the QRIS-based ETPD policy in the regions is not without various challenges, whether from the technology side, human resources, or community readiness (Yusuf, 2022). This situation is also reflected in the payment services for Rusunawa rents in Pangkajene and Islands Regency, which still face various problems that affect the optimal efficiency of the services.

In fact, the payment process for workers' Rusunawa in Pangkajene and Islands Regency is still mostly dominated by a manual payment system, where Rusunawa residents are required to come directly to the service location to make transactions. This situation makes the payment process less effective and efficient because it takes relatively more time compared to a digital payment system. In addition, during certain periods, especially approaching payment deadlines, there is often an increase in the number of service users, which leads to service queues. Manual payment systems can also lead to errors in administrative records, delays in reporting regional revenue, and limited access to services for people who have time and mobility constraints. According to Fahrinda et al. (2024), payment services that are still done manually tend to face challenges in terms of transaction speed, data accuracy, and transparency in managing regional revenue. Therefore, implementing a QRIS-based digital payment system becomes one alternative solution that can improve efficiency, convenience, and accountability in regional levy payment services. Based on the table of service conditions for Rusunawa levy payments, there is a noticeable gap between the actual conditions and the ideal conditions expected in digital-based services. The relatively long transaction times, high queues, and ongoing recording errors

show that the manual payment system is not yet able to provide efficient service (Sari, 2020). In addition, the level of payment method usage shows that the community is still dominated by cash payments. The fact that 70% of payment transactions for fees are still done in cash and QRIS adoption has only reached 10% shows that the ETPD policy hasn't been fully internalized at the grassroots level (Mardani, 2023). This indicates that the implementation of the QRIS-based ETPD policy isn't running optimally. This issue is also reinforced by the low digital literacy of the public and the limited capacity of human resources among officials in managing digital payment systems (Putri & Andini, 2022; Yusuf, 2022).

From the theoretical framework of public policy implementation, the failure or success of transmitting an ETPD policy cannot be understood partially just based on the technical superiority of its features. George C. Edwards III (1980) in his theory states that the effectiveness of policy implementation is determined by the linear interaction of four key variables, namely: Communication in program socialization, adequacy of Resources such as infrastructure and human resource competence, Disposition or commitment of field implementers, and Bureaucratic Structure reflected through the readiness of Standard Operating Procedures (SOPs). If any of these variables is hindered – for example, limited socialization (communication) or weak internet networks in the building area (resources) – then the acceleration of QRIS adoption will stall at the conceptual level. Along with the development of academic studies, research on the digitalization of public services and electronic payment systems has been widely conducted. Various studies show that the implementation of digital payments, including QRIS, can improve transaction efficiency, speed up services, and increase transparency and accountability. In addition, research on policy implementation has also identified key factors that influence the success of policies (Rahman, 2021).

Those studies generally still look at these aspects separately. Research on digital payments tends to focus more on the MSME sector and consumer behavior (Hidayat, 2020; Mardani, 2023), while studies on ETPD tend to emphasize increasing regional revenue and financial transparency (Nugroho, 2019). On the other hand, research on public service efficiency usually discusses digitalization in general without specifically linking it to QRIS-based ETPD policy (Sari, 2020). In addition, there is still limited research that specifically examines the implementation of QRIS-based ETPD policy in the context of public services, especially in the sector of Rusunawa fee payments, as well as the lack of studies in regions like Pangkajene and Islands Regency. Based on these conditions, there appears to be a research gap showing that there haven't been many studies that comprehensively integrate policy implementation, the use of QRIS as a digital payment system, and public service efficiency within a complete analytical framework. This study offers substantial novelty by combining perspectives from public policy, financial technology, and service quality comprehensively in one analysis framework. The focus of the study is not only limited to evaluating the implementation of QRIS-based digital transactions for Rusunawa Worker payments, but also examines its impact on the efficiency of

local administrative governance. The empirical strength of this research is further reinforced by choosing Pangkajene and Islands Regency as the study location and applying a qualitative approach to deeply explore the real dynamics on the ground.

Based on the explanation, it can be concluded that the implementation of the QRIS-based ETPD policy plays a strategic role in improving the efficiency of Rusunawa rental fee payment services. However, various existing problems indicate a gap between the policy and its implementation in the field. Therefore, this study is important to explore in depth how the implementation of the QRIS-based Regional Government Transaction Electronification (ETPD) policy affects the efficiency of Rusunawa rental fee payment services for workers in Pangkajene and Islands Regency.

LITERATURE RIVIEW

Research on the implementation of digital policies in regional payment systems, especially through the QRIS-based Regional Government Electronic Transactions (ETPD), has been extensively carried out by both academics and public policy practitioners. Several previous studies emphasize that the implementation of ETPD, driven by Bank Indonesia, is an important tool for increasing transparency, accountability, and efficiency in regional financial management. Research focusing on the implementation of ETPD in tax and regional levy collection shows that digital payment systems can reduce cash transactions, minimize potential leakage, and make the payment process more convenient, although there are still challenges in terms of infrastructure and human resource readiness.

Other studies highlight the role of QRIS as a national standard for digital payments in supporting transaction efficiency. The results of these studies reveal that using QRIS can speed up payment processes, reduce queues, and improve access for the public. However, the effectiveness of QRIS implementation largely depends on the level of digital literacy, trust in the system, and adequate technological facilities and infrastructure. Some studies also point out challenges such as resistance to switching from manual to digital systems, limited internet connectivity in certain areas, and a lack of outreach and education for users. Mardani's (2023) research on optimizing the use of the Indonesian Standard Quick Response Code (QRIS) for Small and Medium Enterprises (SMEs) in Majenang District showed that QRIS can make payment transactions easier and faster. The study indicated that QRIS can improve transaction efficiency, which aligns with the dependent variable in research on Rusunawa levy payments.

Pratama and Sari (2021), through research on digital payment and transaction efficiency, showed that using digital payments significantly improves transaction efficiency compared to conventional methods. The results suggest that implementing QRIS-based ETPD has the potential to improve the quality of Rusunawa tax payment services. Sari (2020), in research on the digitalization of public services to improve service efficiency, shows that the use of information technology through the digitalization of public services can increase the speed and accuracy of services. This research provides a basis that digitalization, including QRIS in ETPD, can improve the quality of public services.

Rahman (2021), through research on digital systems in E-government services, showed an increase in transparency and tax efficiency. This study supports the context of local taxes in this research. Hidayat (2020), in research on the implementation of QRIS in SMEs, showed that adopting QRIS makes transactions easier and boosts financial inclusion. These results indicate that QRIS can improve transaction efficiency, which aligns with the service efficiency variable in this study.

Research on public policy implementation, as stated by George C. Edward III, highlights that the success of a policy is greatly influenced by factors like communication, resources, disposition, and bureaucratic structure. In the context of QRIS-based ETPD, these factors are important because policy implementation isn't just about technology, but also about organizational readiness and the behavior of the implementing officials. So, implementing QRIS-based ETPD policy isn't just a tech innovation in the payment system, but also part of transforming public services, involving policy, institutional aspects, and community behavior.

Policy Implementation

According to Van Meter and Van Horn (Wahab, 2005), implementation is all activities carried out by individuals or officials within a group or organization in an effort to achieve common goals. Implementation can be defined as execution or application. According to Pratama (2015), implementation is one of the stages in the public policy process in a country. Implementation takes place after a policy is formulated with clear objectives, including short-term, medium-term, and long-term goals.

Edward III (Subarsono, 2011) offers the view that policy implementation is an activity in which interactions among the involved parties can be found, which can influence the implementation of a policy. There are four variables that can affect policy implementation: communication, resources, disposition, and bureaucratic structure. Communication is the implementer's ability to be a role model and guide the activities that need to be done to achieve successful policy implementation. Resources are elements that must be available because a lack of resources can become an obstacle in the implementation process. Disposition relates to the nature and characteristics of the parties carrying out the implementation activities, such as honesty, commitment, and democratic traits. The bureaucratic structure is an aspect present in the organizational structure, namely the Standard Operating Procedure (SOP) and fragmentation.

According to Ripley and Franklin, policy implementation is what happens after a law is established that grants authority to programs, policies, benefits, or some kind of tangible output. Mazmanian and Sabatier (1983) explain implementation as the effort to carry out policy decisions. The theory focuses on issues within the policy, setting policy goals, and structuring the implementation process to align policy outputs and policy outcomes.

According to Abidin (Tahir, 2014:57), the implementation of a policy is related to two main factors: internal factors, which include the policy to be implemented and supporting factors, and external factors, which include environmental conditions and related parties. According to Rusdiana (2021), a policy at the very least contains four components: a series of actions that are deliberately and genuinely carried out, actions taken by an individual or a group of actors, the existence of a specific problem or issue being faced, and actions taken to achieve certain objectives. *Elektronifikasi Transaksi Pemerintah Daerah (ETPD)*. Regional Government Transaction Electrification, or ETPD, is an effort to change regional government revenue and expenditure transactions from cash to digital non-cash methods, covering revenue transactions like taxes and fees as well as regional spending. Its main goal is to promote efficiency, effectiveness, and transparency in government financial management by using a reliable and secure infrastructure.

According to Bank Indonesia (Artha, 2021), the components in the ecosystem of electronic financial transactions for local governments are divided into two groups: the use of electronic financial transaction service systems, which includes local governments and the public, and the provision of financial transaction services, which includes RKUD Managing Banks, Partner Banks, Bank Agents, Payment Points, and Fintech.

The regulation of electronic transactions for local governments started with GNNT, which was initiated by Bank Indonesia together with the government in 2014 to create a cashless society. Alongside GNNT, Presidential Instruction Number 10 of 2016 was issued, which includes directives to accelerate the implementation of cashless transactions across all Ministries/Agencies and local governments. In 2019, Government Regulation Number 12 of 2019 on Regional Financial Management was issued. Then, Minister of Home Affairs Regulation Number 64 of 2020 set out general steps to accelerate and expand local government electronic transactions (ETPD). In 2021, Presidential Decree Number 3 of 2021 was issued to establish the Task Force for the Acceleration and Expansion of Regional Digitalization (Satgas P2DD) and the Team for the Acceleration and Expansion of Regional Digitalization (TP2DD).

Quick Response Code Indonesian Standard (QRIS)

According to Bank Indonesia, QRIS (Quick Response Code Indonesian Standard) is the integration of various types of QR codes from different Payment System Providers (PJP) using QR Codes. QRIS was developed by the payment system industry together with Bank Indonesia to make transactions with QR Codes easier, faster, and safer. QRIS is a standard QR code for digital payments through server-based e-money applications, electronic wallets, or mobile banking. QRIS is regulated by Bank Indonesia in PADG No. 21/18/2019 regarding the implementation of the International QRIS Standard for payments. Implementasi QRIS mengusung tema UNGGUL, yaitu Universal, Gampang, Profitable and Instant. Universal means QRIS users are very widespread across all layers of society and can be used for payment transactions. Easy means people can transact easily and safely using a smartphone. Profitable means transactions with QRIS benefit both buyers and sellers because the transactions are efficient

through a single QR code that can be used for all payment apps on a smartphone. Instant means transactions with QRIS happen immediately because the process is fast and instant.

Regional Levy

Retribution is a fee or charge imposed on the public for using facilities provided by the state or government. It is related to payment or giving a reward for using a service directly. The characteristics of retribution are that there is no coercion in paying it, the payment depends on the willingness or usage of the payer, and it is only charged to those who use or enjoy the service.

According to Article 1 number 64 of Law Number 28 of 2009, regional levies are local charges paid for services or specific permits provided by the local government for the benefit of individuals or entities. Regional levies are divided into three categories: general service levies, business service levies, and specific permit levies.

Public Service Efficiency

Efficiency can be defined as an effort to maximize the ratio between the desired outcome and the effort given. An action can be called efficient if it achieves the maximum result with a certain effort or reaches a certain level of result with the smallest effort possible (Syahrizal, 2024). Efficiency is one of the main principles in providing public services. In public administration, efficiency is used to assess how well an organization can deliver optimal service using the available resources accurately and economically.

According to Mahmudi (2015), efficiency is the relationship between input and output that shows an organization's ability to produce a certain output with minimal use of input. Mardiasmo (2023) states that efficiency is achieving the maximum output with a certain input or using the least input to reach a certain level of output. In the public sector, efficiency means that the government should use public funds economically and responsibly to provide quality services to the community.

Public service efficiency is defined as the delivery of services carried out in a simple, fast, accurate, straightforward, easy-to-understand manner that does not create waste in terms of cost, time, and effort for service users (Ratminto and Atik Septi Winarsih, 2016). Sedarmayanti (2017) explains that efficiency is the best comparison between the results achieved and the resources used. An efficient organization is one that can make optimal use of all resources without any waste in carrying out its service tasks and functions.

In this study, efficiency is linked to the implementation of the Local Government Transaction Electronification (ETPD) based on QRIS for paying Rusunawa fees for workers in Pangkajene and Islands Regency. The use of QRIS is expected to speed up the payment process, reduce administrative costs, simplify payment procedures, improve transaction recording accuracy, and create transparency in managing local fee revenues. The efficiency of Rusunawa fee payment services can be identified through service speed, service convenience, cost savings, simplified procedures, data accuracy, and service transparency.

State Finance and Regional Finance

State finances are one of the important instruments in running the government and national development. According to Article 1 number 1 of Law Number 17 of 2003 concerning State Finance, state finances are all state rights and obligations that can be measured in money, as well as everything, whether in the form of money or goods, that can become state property related to the implementation of those rights and obligations. State finances have a strategic function as a means to achieve state goals through providing public services, carrying out development, distributing public welfare, and stabilizing the national economy. According to Mardiasmo (2018), managing state finances must be done in an orderly, efficient, effective, transparent, and accountable manner according to the principles of good governance.

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Regional financial resources consist of Regional Original Revenue (PAD), transfer income from the central government, and other legitimate regional revenues. One important component of Regional Original Revenue is regional taxes and levies, which are the main sources of funding for carrying out development and public services in the region.

Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments

The implementation of regional autonomy requires a clear financial relationship between the central government and the regional governments. This relationship is regulated through Law Number 1 of 2022 on Financial Relations Between the Central Government and Regional Governments (HKPD). This law serves as the legal foundation for carrying out fiscal decentralization, aiming to create harmonious, effective, transparent, and fair management of national and regional finances.

One important aspect of the HKPD Law is the regulation regarding local taxes and levies as sources of Regional Original Revenue (PAD). This law reforms the system of collecting local taxes and levies by simplifying the types of charges, improving administrative efficiency, and strengthening the regional revenue base. Local levies are grouped into public service levies, business service levies, and certain licensing levies. In the context of this study, the payment for renting worker dormitories is included in the category of local levies, which is one of the sources of regional revenue. Rusunawa fees are charges imposed on the community for using the apartment facilities provided by the local government. In the context of Pangkajene and Islands Regency, the rules regarding the use

and rental of apartments are regulated in the Pangkajene and Islands Regency Regional Regulation Number 10 of 2021 on Apartments. In addition, the legal basis for collecting fees for utilizing regional assets, including rental apartments, refers to Law Number 1 of 2022 on Financial Relations between the Central Government and Regional Governments. The implementation of these provisions is further detailed through Government Regulation Number 35 of 2023 on General Provisions of Regional Taxes and Regional Levies and Pangkajene and Islands Regency Regional Regulation Number 1 of 2024 on Regional Taxes and Regional Levies.

The transition of Rusunawa rent payments to a digital system based on QRIS within the framework of Local Government Transaction Electronification (ETPD) reflects the modernization of public services at the local level. This innovation not only shifts transactions from cash to cashless, but also lays the foundation for efficient, transparent, and accountable local financial governance.

Framework of Thinking

According to Edwards III's theory, the success of implementing ETPD policies based on QRIS is influenced by four main variables: communication, resources, disposition, and bureaucratic structure. These four variables are analyzed to see how much the policy implementation can improve the efficiency of payment services for Rusunawa workers in Pangkajene and Islands Regency. The problem in the research is the suboptimal efficiency of Rusunawa payment services. The solution used is the implementation of QRIS-based ETPD using Edward III's theory. The expected impact includes improved service efficiency, reduced transaction costs, and contribution to Regional Original Revenue (PAD).

METHODOLOGY

Research Approaches and Types

This study uses a qualitative approach with a descriptive qualitative research type. The qualitative approach was chosen because this research aims to gain an in-depth understanding of the implementation process of the Regional Government Electronic Transaction (ETPD) policy based on QRIS in improving the efficiency of payment services for Rusunawa fees in Pangkajene and Islands Regency. This approach emphasizes understanding social phenomena in a holistic and contextual way (Moleong, 2017).

The qualitative approach lets researchers explore the actual realities happening in the field in a comprehensive, natural, and contextual way. This study doesn't focus on testing hypotheses or statistical measurements, but rather on understanding the policy process, the interactions between implementing actors, and the perceptions and experiences of local government officials and service users regarding the implementation of the QRIS-based payment system (Creswell, 2016).

A qualitative descriptive study is used to systematically and deeply describe how the ETPD policy based on QRIS is implemented in the payment services for Rusunawa fees, from the planning stage, to implementation, and up to evaluation at the operational level. Through this approach, the researcher identifies supporting and inhibiting factors in the policy's implementation and analyzes its impact on public service efficiency, particularly in terms of speed, convenience, accuracy, and transparency of Rusunawa payments.

The Role of a Researcher

In qualitative research, researchers act as the main instruments who are directly involved in the entire research process, from planning, data collection, data analysis, to drawing conclusions. Researchers play roles as planners, implementers, data collectors, data analysts, and interpreters of research results related to the implementation of Local Government Transaction Electronification (ETPD) based on QRIS in improving the efficiency of payment services for Rusunawa fees in Pangkajene and Islands Regency.

The researcher is directly involved in the data collection process through in-depth interviews, field observations, and documentation studies with relevant informants and research subjects. To maintain the objectivity and validity of the data, the researcher stays neutral, open, and impartial throughout the research process. The researcher also builds good relationships with informants to obtain honest and in-depth data without influencing or steering their answers for any particular interest.

Research Location

This research was conducted in Pangkajene and Islands Regency (Pangkep), South Sulawesi. The study focused on local government agencies and the units directly involved in implementing the QRIS-based Local Government Transaction Electronification (ETPD) policy, especially in the payment services for worker Rusunawa fees, as well as the service users, namely the residents of the worker Rusunawa.

Research Data Sources and Informants

The data for this study comes from people who are directly involved and affected by the implementation of the Local Government Transaction Electronification (ETPD) policy based on QRIS in Pangkajene and Islands Regency. Informants were selected based on criteria of understanding the policy implementation, having access to the data, and being willing to provide relevant information so that the research focus can be answered comprehensively.

Informants were determined using a purposive sampling technique, which is a method of deliberately selecting informants based on certain considerations relevant to the research objectives. The research informants consisted of key informants, main informants, and additional informants. The key informant was the Secretary of Bapenda, totaling 1 person. The main informants consisted of the Head of the Billing and Objection Subdivision and Billing Staff, totaling 4 people. Additional informants consisted of the Rusunawa Manager and Rusunawa Residents (Mandatory Payers), totaling 10 people.

Data Collection Techniques

The data collection techniques used in this study include in-depth interviews and document reviews.

1. In-Depth Interview

The interview technique used was a semi-structured interview, meaning the researcher had prepared a list of questions to ask the informants, but the order of the questions was flexible depending on the flow of the conversation. This technique was used to gather information about the implementation process of the QRIS-based ETPD policy, the mechanism for paying Rusunawa fees, perceptions of service efficiency, as well as the challenges and efforts made in applying the QRIS-based payment system.

2. Document Review

Document review is a data collection technique carried out by gathering, reading, examining, and analyzing written documents related to the implementation of QRIS-based ETPD policies to improve the efficiency of rental payment services for Rusunawa workers. This technique is used to obtain supporting data and strengthen the results of interviews.

Data Analysis Techniques

Data analysis in this study was carried out qualitatively using the interactive analysis model proposed by Miles and Huberman. Data analysis was carried out continuously from the data collection stage to the final drawing of conclusions. The stages of data analysis include data reduction, data presentation, as well as drawing conclusions and verification.

1. Data Reduction

Data reduction is the process of selecting, focusing, simplifying, and transforming raw data obtained from interviews and document reviews regarding the implementation of ETPD policies based on QRIS and the efficiency of rental payment services for Rusunawa workers. Irrelevant data is set aside, while important data is grouped according to certain themes, such as the policy implementation process, payment service mechanisms, perceptions of service efficiency, as well as supporting and inhibiting factors.

2. Data Presentation

The reduced data is presented in the form of descriptive narratives, matrices, tables, or service flow charts. The purpose of presenting the data is to make it easier for researchers to understand patterns, relationships between variables, and the dynamics of implementing the QRIS-based ETPD policy. Through systematic data presentation, researchers can see the connection between policy implementation and the efficiency of Rusunawa fee payment services more clearly and in an organized way.

3. Drawing Conclusions and Verification

Drawing conclusions and verification are the final stages in data analysis. Researchers make preliminary conclusions based on the data presented, and then repeatedly verify them by comparing data from various sources and data collection techniques. The final conclusion is reached once the analyzed data is deemed consistent, saturated, and able to answer the research questions.

Checking the Validity of Findings and Conclusions

The validity check of findings and conclusions is done to make sure that the conclusions drawn are based on accurate and reliable empirical data. The validity of findings and conclusions is examined through data triangulation and member checks.

Source triangulation was done by comparing information from BAPENDA officers, the Rusunawa managers, and the Rusunawa residents who are workers. Technique triangulation was done by comparing data from interviews and document reviews.

Next, member checking is done by confirming the interview results and initial interpretations with relevant informants. The informants are asked to give feedback on the researcher's interpretations to make sure the findings match their experiences and views. This process is carried out to avoid misinterpretations and improve the accuracy of the research conclusions.

RESULT

Implementation of Worker Rusunawa Retribution Payments Before the QRIS-Based ETPD Implementation

Before the implementation of the Local Government Transaction Electronification (ETPD) based on Quick Response Code Indonesian Standard (QRIS), payments for Rusunawa Workers' fees in Pangkajene and Islands Regency were still made in cash. Residents would make payments by going to the management office or waiting for a collector to come to their units. This situation was a problem for residents, most of whom have high work mobility and work in shifts.

Cash payment systems make residents have to adjust their payment time to the service's operating hours. This can cause late payments when residents are at work or when the collector doesn't show up at the expected time. One resident mentioned that before QRIS was available, payment of fees had to wait for the staff to come and collect cash, so payments could be delayed when residents were at work.

The issue of manual payments is also related to administrative record-keeping and monitoring of receipts. Research shows that before the implementation of QRIS-based ETPD, there were situations where cash payments had been made but were not accurately recorded in the manager's database or by Bapenda. This led to discrepancies between the payments made by residents and the payment administration status.

Besides issues with payment and record-keeping mechanisms, implementing cashless payments faces challenges with digital literacy. Some residents, especially those not used to digital technology, still feel anxious about making transactions via QRIS. Informants explained that some people don't understand how to use online payment systems yet and still feel scared of scanning QRIS because they worry about making a wrong transaction.

Implementation of Rusunawa Fee Payments After the QRIS-Based ETPD Implementation

The implementation of QRIS-based ETPD is carried out by providing QRIS codes for Rusunawa payment services, integrated with the Bank Sulselbar system and the local government treasury of Pangkajene and Islands Regency. Management staff provide payment validation services, digital payment receipts, and education about cashless transactions to residents.

Through this system, residents can make payments using mobile banking apps, digital wallets, or other payment apps that support QRIS. Once the transaction is completed, the payment data is recorded electronically, making it easier to verify, report, and manage local revenue. This system provides flexibility because payments can be made without having to go directly to the service counter.

The implementation of QRIS is also accompanied by socialization and education for residents about the benefits of cashless transactions, how to use QRIS, and the obligation to pay retribution on time. Socialization is carried out through direct information delivery, putting up information media, distributing payment guides, and providing assistance for people who have difficulty using the digital payment system.

The research results show that the implementation of QRIS makes it easier for Rusunawa residents, especially workers with high mobility. Payments can be made without having to wait for a collector or go to the service location. This way, the time constraints that used to be an obstacle in paying fees can be reduced. Implementasi Kebijakan Berdasarkan Teori George C. Edward III. The implementation of the QRIS-based ETPD policy in this study is analyzed based on four policy implementation variables by George C. Edward III, namely communication, resources, disposition, and bureaucratic structure. These four variables are used to look at the policy implementation process and the factors that affect its success.

Communication in the implementation of ETPD is done through socialization and education for the Rusunawa residents. Information is provided about the benefits of cashless payments, how to use QRIS, and the obligation to pay fees. Assistance is also given to residents who have difficulty using the digital system.

Resources The implementation of policies is supported by human resources who have skills in financial administration and public services, information technology infrastructure, internet networks, cooperation with banking institutions, and information systems for recording transactions. The availability of these resources is an important part of carrying out QRIS-based retribution payments.

However, technology resources are still facing obstacles such as network limitations and system disruptions. These conditions can cause transactions that have been made to not be immediately recorded in the management system, so additional confirmation and recording processes are needed.

The disposition of the implementers can be seen from the support of the staff for the implementation of ETPD based on QRIS. Local governments and managing officers provide support for the use of cashless payments and assist the community. This support shows the implementers' commitment to carrying out the policy of digitalizing regional transactions.

On the user side, the approach isn't completely uniform yet. Some residents still stick to paying in cash and feel safer using cash. One informant expressed concerns about using mobile payments because they're afraid the transaction won't reach the manager.

Bureaucratic structure. The bureaucratic structure in carrying out ETPD involves the regional revenue agency, Rusunawa managers, and banking parties. The digital payment mechanism is designed to make the transaction verification and recording process easier. However, the data between servers is not fully synchronized yet, and the handling of technical issues means managers still have to keep duplicate records as a backup procedure.

Supporting and Inhibiting Factors

Factors supporting the implementation of QRIS-based ETPD include regulatory support, support from executing officers, availability of technology infrastructure, cooperation with Bank Sulselbar, and the public's need for a more flexible payment system. Policy implementation is also supported by a system that allows transactions to be recorded electronically, making the verification and administrative management process easier.

The main obstacles are mostly related to low digital literacy among some residents, technophobia, the habit of using cash payments, network issues, and system synchronization problems. Some residents aren't used to doing digital transactions yet, so they still need support from the staff.

Technical obstacles are also seen when a QRIS transaction has been completed but hasn't immediately been recorded in the management system. In such cases, residents have to confirm again with the management or Bapenda. The management also still keeps manual records as a backup procedure in case of maintenance or server issues.

DISCUSSION

The implementation of QRIS-based ETPD for payment of Rusunawa Worker fees in Pangkajene and Islands Regency shows a shift from cash payment methods to a cashless system. This change is not just about using payment technology, but also transforms the service process, record-keeping, and management of regional fee revenues.

Before QRIS was implemented, cash payments required residents to come to the service location or wait for a collector. This wasn't really suitable for residents, most of whom are highly mobile and work in shifts. With QRIS, payments became more flexible because transactions can be made without having to be physically present at the counter.

In terms of service efficiency, implementing QRIS makes the payment process easier, reduces reliance on cash transactions, and helps speed up verification and record-keeping. The digital system also allows transactions to be

recorded electronically, supporting transparency and accountability in managing regional revenue.

Research findings also show that the implementation of QRIS is linked to improved accessibility of services. Residents can make payments from different locations without having to coordinate payments with staff presence. This situation is especially beneficial for residents who are working, in industrial areas, at the market, or returning to their home islands.

From George C. Edward III's policy implementation perspective, the success of implementing QRIS-based ETPD is not only determined by the presence of technology. Communication between local governments, Rusunawa managers, and the community is an important part because the community needs to understand the benefits and how to use QRIS. The socialization and assistance provided by the officers are part of the community's process of adapting to the digital payment system. In terms of resources, the policy implementation has received support in human resources, technology infrastructure, internet networks, and banking partnerships. However, technical obstacles show that resource support has not completely solved the problems in execution. Network disruptions and data synchronization issues can slow down transaction recording and force staff to do extra administrative work.

In terms of disposition, the implementing officials show support for the implementation of digital payments. On the other hand, some members of the public still show resistance to the shift from cash payments to digital payments. Concerns about transaction security and the habit of using cash are factors that affect public acceptance of the policy.

In terms of bureaucratic structure, the implementation of ETPD involves several parties, namely the local government, Rusunawa managers, Bapenda, and Bank Sulselbar. Involving various parties allows the digital payment process to run in an integrated way, but at the same time requires system synchronization and good coordination. When there's a system disruption, the managers still use manual recording as a backup procedure, so the efficiency goal hasn't been fully achieved.

Thus, the implementation of QRIS-based ETPD for Rusunawa Worker fee payments has improved service efficiency through easier payments, flexible access, electronic transaction recording, and reduced reliance on cash transactions. However, the implementation is not yet fully optimal due to obstacles such as digital literacy, technophobia, cash payment habits, network disruptions, and suboptimal data synchronization between systems.

The findings show that the success of digitalizing levy payments doesn't just depend on providing QRIS, but also on the readiness of the community, support from officials, availability of resources, and the integration of bureaucratic structures and information systems. Therefore, the sustainability of QRIS-based ETPD implementation is closely linked to the local government's ability to ensure that the payment system can be used easily, safely, and is accessible to all residents of Rusunawa.

CONCLUSIONS

Based on research on the implementation of the Local Government Transaction Electrification (ETPD) policy using QRIS to improve the efficiency of payment for Rusunawa Worker fees in Pangkajene and Islands Regency, it can be concluded that the implementation of QRIS-based ETPD has increased accessibility and effectiveness of Rusunawa Worker fee payment services. The use of QRIS improves the efficiency of fee management through transparent, accountable, and real-time non-cash transaction recording. The success of the implementation is supported by regular communication and socialization, the availability of physical resources and technological support, a positive disposition and commitment of Rusunawa UPT staff, and a bureaucratic structure that provides clarity in the service workflow.

Factors supporting the implementation of the ETPD policy based on QRIS include local regulatory support, the commitment and positive disposition of Rusunawa UPT staff, the involvement of informal leaders like housing block heads and labor unions, as well as technical partnerships with Bank Sulselbar. Meanwhile, the main obstacles come from limited digital literacy and technophobia among some residents, especially middle-aged tenants and migrant workers from the islands. These challenges are made worse by weak mobile internet signals inside the Rusunawa building, which can lead to transaction failures.

The local government's strategy to optimize the implementation of QRIS-based ETPD is carried out through integrating real-time databases with a single window system that connects UPT Rusunawa, Bapenda Pangkep, and Bank Sulselbar; setting up an integrated digital helpdesk door-to-door; preparing concise SOPs to handle system issues; dividing work teams proportionally; and adjusting billing and assistance schedules to match shift work. This strategy improves service certainty, reduces digital literacy gaps, and supports inclusive, responsive, and adaptive services.

RECOMMENDATIONS

The Regional Government of Pangkajene and Islands Regency, especially Bapenda and the Rusunawa UPT, need to strengthen service infrastructure and management by providing signal boosters (repeaters) or free internet at communal spots to address blank spot areas in the Rusunawa building. Handling technical issues should be supported with a single-window system SOP integrated in real-time with Bank Sulselbar. In addition, the operating hours of the digital helpdesk should be adjusted to match labor shift schedules, and the duty roster of staff should be arranged proportionally.

The Regional Government of Pangkajene and Islands Regency, especially Bapenda and the Rusunawa UPT, need to beef up service infrastructure and management by providing signal boosters or free internet at common areas to tackle the dead zones in the Rusunawa building. Dealing with technical problems should be backed by a one-stop system SOP that's integrated in real-time with Bank Sulselbar. Also, the digital helpdesk hours should match the work shift schedules, and the staff duty roster should be arranged fairly.

For future researchers, studies can be directed towards the development of public policy and technology reviews, especially through cost-benefit analysis, cybersecurity reliability in local levy systems, comparisons of digitizing public housing levies in other regions, and the development of measurement tools for the ETPD Maturity Index in the public housing sector.

FURTHER STUDY

This research still has limitations, so further studies are needed on the topic. For future researchers, studies can focus on the development of public policy and technology reviews, especially through cost-benefit analysis, the reliability of cybersecurity in local levy systems, comparisons of digitalizing public housing levies in other regions, and the development of measurement tools for the ETPD Maturity Index in the public housing sector to improve this research and provide more insights for both authors and readers.

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