The Impact of Digital Payment Use on State Cash Accountability: Case Study at the Type A1 State Treasury Service Office Cirebon

Dian Kusuma Wardhani*
Vocational Colleges, Diponegoro University, Semarang, Indonesia
(dkw@lecturer.undip.ac.id)

Remelda Putri Nurdianty
Vocational Colleges, Diponegoro University, Semarang, Indonesia

Tri Wahyu Hidayati
Vocational Colleges, Diponegoro University, Semarang, Indonesia

Syarifa Ulya Fidyana
Vocational Colleges, Diponegoro University, Semarang, Indonesia

Eiffeliena Nuraini Fisikaningputri
Vocational Colleges, Diponegoro University, Semarang, Indonesia

Rifki Adhi Prasetyo
Vocational Colleges, Diponegoro University, Semarang, Indonesia

ABSTRACT

Introduction/Main Objectives: This study examines the implementation of Digital Payment (Digipay) in improving state treasury accountability at the Cirebon Type A1 State Treasury Service Office. Digipay was developed as part of Indonesia's digital transformation in public financial management to support transparency, efficiency, and real-time reporting in government procurement transactions.
Background Problems: Despite its integrated and automated system, irregularities such as fictitious procurement and weak adoption by work units and providers still occur. These issues indicate that the implementation of Digipay has not fully achieved its accountability objectives.
Novelty: This research provides practical insights into the effectiveness of Digipay implementation in strengthening accountability, supervision, and transaction security in public sector financial management.
Research Methods: This study uses a descriptive qualitative approach. Data were collected through semi-structured interviews, observations, and analysis of official documents related to Digipay implementation.

Findings/Results: The results show that Digipay has a limited impact on improving state cash accountability. Although the system contributes to transaction efficiency, supervision, and security, several weaknesses in implementation and adoption remain obstacles.
Conclusion: Digipay has not yet fully optimized accountability in government financial management. Further system development and improvement are needed to strengthen supervision, increase adoption, and reduce procurement irregularities.
Implementation Potential: The findings may serve as a reference for improving digital payment systems in government institutions to enhance transparency, efficiency, and accountability.

Keywords: Digital Payment System; Accountability; Qualitative; Optimally; Government.
JEL Classification: G18, O33, R50, Z18

1. INTRODUCTION

The Industrial Revolution 4.0 has driven the implementation of digital payment systems not only for private businesses but also for the government in managing state finances (Rooj & Mehta, 2025). The Indonesian government introduced a digital payment app called Digital Payment (Digipay), which was socialized through the Directorate General of Treasury Regulation Number PER-20/PB/2019 regarding the trial use of reserved funds through the Marketplace and Digital Payment (Digipay) system in government work units. The Digipay app is a state cash management platform with numerous benefits. It allows users to purchase government goods and services with reserve funds, make digital payments, calculate and pay taxes on transactions, and report within a single ecosystem (Hutabarat, 2021). The Digipay app aims to enhance accountability in state financial management by integrating transactions in real time with automatic documentation.

On a global level, the implementation of Digipay offers Indonesia a strategic chance to strengthen its role in the world digital economy. An efficient, secure, and standardized payment system not only enhances public service quality but also attracts investment and fosters cross-border cooperation. This supports Indonesia's vision to become the top digital economy hub in Southeast Asia, driven by rapid digitalization across various sectors, including the financial system (Nuranindita, 2023). As a form of payment digitization, Digipay allows for quick and secure cashless transactions, reducing errors and improving the accuracy of government cash

management. Therefore, Digipay is more than just an administrative tool; it acts as a catalyst for creating a more transparent, integrated, and technology-driven public financial system.

Unfortunately, even though all transactions are automatically documented, Digipay's is not free from fraud, which can include fake procurement transactions. This is supported by the Indonesian Corruption Eradication Commission's findings in 2023 regarding fake procurement transactions by companies (CNN Indonesia, 2024). This fraud clearly impacts the government's accountability funds. It can occur if transaction automation in Digipay lacks proper oversight and regulation. Additionally, since it is a new application, the number of Digipay users remains relatively low, so it is not yet operating at full capacity. Potential loopholes for fraud have also not been fully identified or detected.

Figure 1 shows Digipay usage among work units and providers across Indonesia, showing a fluctuating trend over the years. In 2021, the highest number of users was recorded by the work unit at 4,981, while the highest number of provider users was 2,607 in 2022. However, in 2023, both user groups experienced a sharp decline. This indicates that Digipay is starting to be abandoned by both work units and providers.

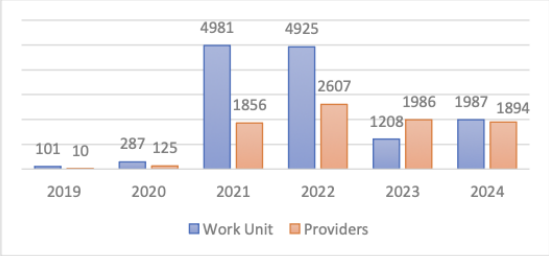

Figure 1. Digipay Usage Achievements by Work Units and Providers

Source: Type A1 State Treasury Service Office Cirebon, 2024

The decline resulted from various factors, including the lack of regulations requiring Digipay, the rise of similar applications, and low literacy and awareness about the system. As 2024 approached, signs of recovery appeared, with usage increasing at both work units (1,987) and providers (1,894). However, this increase was insufficient to bring Digipay's performance back to its peak levels 2021-2022. This indicates that challenges in implementation still exist, and system use is not yet fully established or optimized. However, the main goal of Digipay is not only to

facilitate transactions but also to improve accountability and transparency in government finances. Every transaction made through Digipay is automatically recorded, creating an essential digital record for audits and budgeting monitoring.

The relatively low Digipay usage shown in Figure 1 emphasizes the need for further research to better understand actual usage conditions. Users often encounter various issues, such as limited product and provider details, pending transactions, and product inconsistencies without clear resolution mechanisms. Concerns about weak trust guarantees arise when goods do not match orders or payments are delayed. This situation highlights the need to improve the quality of Digipay implementation, both technically and institutionally perspective.

This study assesses how Digipay implementation impacts security, oversight, transparency, and efficiency. These questions must be answered to assess how well Digipay can resolve challenges in enhancing financial accountability reporting. The study aims to gain a deeper understanding of Digipay's role in efforts to improve the accountability of state economic management at the Type A1 State Treasury Service Office, Cirebon. It contributes to the government as evaluation material for Digipay's implementation by emphasizing supervision, security, efficiency, and transparency in the state treasury's operations accountability.

2. LITERATURE REVIEW

Trust theory serves as a basis for assessing the success of Digipay implementation in the context of state cash management (Anderson & Weitz, 1989). According to Ebrahim (2020), accurate financial transparency is essential for building public trust. The Digipay system depends on confidence in data integrity, transaction security, and adherence to system procedures. Trust acts as a link between digital systems and institutional outcomes. Without trust, transparency alone cannot persuade users that the data is reliable. Transparency builds trust, which boosts accountability. In this context, all system features that improve reporting transparency, speed, and accuracy enhance user trust, ultimately strengthening state cash management.

Gultom et al (2023) showed that trust serves as a significant partial mediator between perceived digital value and the intention to continue using Digipay. This indicates that when users perceive high value in digital services—such as convenience, speed, and clear transactions—trust

in the system increases, which then boosts the active participation of work units and MSME partners in digital activities transactions. The higher the level of trust, the stronger their commitment to consistently using Digipay. This commitment is essential for creating an automatically documented digital transaction trail, thereby simplifying reporting, monitoring, and auditing processes. In other words, the ongoing use of Digipay, driven by user trust, directly contributes to establishing a transparent, traceable, and accountable state financial system. Therefore, trust functions as a binding mechanism between variables.

Since 2019, Type A1 State Treasury Service Office Cirebon has been implementing Digipay to comply with government policy. This action demonstrates that the Type A1 State Treasury Service Office Cirebon is proactive and complies with government policies while supporting the acceleration of digital transformation in state financial management. Additionally, this effort reflects a commitment to supporting the government's ambitious vision of developing a sustainable digital economic ecosystem.

Through Digipay, the Type A1 State Treasury Service Office Cirebon can integrate various functions such as purchasing government goods and services, digital payments, tax calculation and payment, and financial reporting within a single, integrated system. To ensure responsible management of state finances, Digipay's implementation must be paired with ongoing monitoring and evaluation. In the second quarter of 2024, work units within the Cirebon Type A1 KPPN conducted monitoring and evaluation of non-cash transactions using the Treasurer's VA CMS, Government Credit Card (KKP), and Digipay. The outcomes of this monitoring and evaluation of non-cash transactions are summarized in Table 1.

Table 1, which displays non-cash transactions using the CMS, KKP, and Digipay, shows that Digipay had the lowest usage at 9.4%, compared to the CMS and KKP systems. This issue poses a challenge to Indonesia's vision of becoming a nation with an advanced digitaleconomy. Transitioning from manual to digital systems requires work units to adapt to new technologies to enhance their operational efficiency and transparency. Efficiency and transparency are two key, interconnected aspects of public financial management (Kurniawan, 2023).

Table 1. CMS, KKP, and Digipay Noncash Transaction Users

Non-Cash Transaction	CMS	KKP	*Digipay*
Already transacted	45 (41.3%)	20 (31.7%)	10 (9.4%)
Not yet transacted	64 (58.7%)	43 (68.3%)	96 (90.6%)

Source: KPPN Type A1 Cirebon (2024)

Therefore, the research questions of this study are: 1) How is the digital transaction monitoring system implemented by Type A1 State Treasury Service Office Cirebon, and how effectively does it reduce the risk of budget irregularities? 2) What is the level of data security for the verification process of approval and authorization when users within the Type A1 State Treasury Service Office Cirebon use Digipay? 3) How transparent is the financial reporting produced by Digipay? 4) Has the system made it easier for the Type A1 State Treasury Service Office Cirebon to monitor the procurement of goods and services within its work unit?.

3. METHOD

This research employs a descriptive qualitative method with a case study approach at the Cirebon Type A1 State Treasury Service Office and its supported MSMEs. This method was selected because it offers an in-depth and contextual understanding. Using a specific case study, this research aims to explore how this digital system contributes to enhancing accountability in state cash management. This approach is considered relevant because digital financial systems like Digipay are not just technical tools but also part of a systemic strategy to prevent and eliminate corruption by establishing a transparent and auditable digital footprint.

Data collection was carried out through semi-structured interviews with two informants: 1) an employee of the Type A1 State Treasury Service Office Cirebon, MSKI (Work Unit Management and Internal Compliance), who plays a direct role in monitoring, and 2) the owner of Haura Cake and Bakery, a supported MSME that has adopted the Digipay system. Access to these informants was obtained through the Ministry of Finance Internship Program conducted by the research team from June to August 2024.

During the internship, the researcher actively conducted direct observations of the Digipay system implementation, especially regarding the duties and responsibilities of MSKI employees tasked with monitoring work unit compliance and partnerships MSMEs. In addition to interviews and observations, library research was conducted to support ideas in analyzing and evaluating interview results with informants (Sugiyono, 2010). The validity of the data in this study was ensured through data triangulation techniques, namely comparing data from various sources and different methods. Furthermore, member checking was conducted by verifying the interview results with informants to ensure data accuracy. Additionally, data was obtained through documentation of Digipay transaction reports and regulations governing its use.

In the data analysis process, this study used a grouping stage to organize the collected information, where each informant's answer was categorized based on the researched aspect, specifically public accountability. This includes transaction data security, reporting transparency, monitoring effectiveness, and operational efficiency. Interview results and documentation were thematically connected to a broader anti-corruption governance framework. In this context, the Digipay system functions not just as a technical tool but also as an active instrument for preventing fraud and strengthening fiscal integrity. Through digital transaction tracking, this system can reduce opportunities for budget manipulation, fictitious procurement, or spending mark-ups, and it provides stronger, more verifiable internal oversight. Therefore, the analysis is not only methodologically thorough but also solution-oriented and contributes fundamentally to state cash management reform.

4. RESULTS AND DISCUSSION

Data obtained from structured interviews with informants were used to map the research findings, which address the research questions presented in the previous section. The mapping of research findings was also supported by library research.

Supervisory context. Based on interviews with employees of the Type A1 State Treasury Service Office Cirebon, the Digipay system implemented for work units features a multi-level

approval mechanism supported by digital authorization through e-signatures and barcodes. This mechanism accelerates the approval process and is a key advantage of Digipay compared to previous systems that relied solely on written or digital approval at a single level. In a supervisory context, the verification of each level's approval reduces the risk of errors or abuse of authority.

The Digipay operating mechanism enables real-time tracking of each transaction's status. This ensures that every transaction is recorded in the system and cannot be modified without leaving a digital footprint. Therefore, this system creates a strong audit trail that is resistant to manipulation. In addition to preventing financial data manipulation, this mechanism also supports both internal and external audits. This advantage also boosts public trust in government financial management.

Supporting the previously mentioned oversight system, the MSKI (Type A1 State Treasury Service Office Cirebon) section plays a crucial role in ensuring proper implementation of Digipay. They have access to the Digipay backend panel to monitor all transactions conducted by the work unit. This system is designed to enable oversight of spending amounts, selected providers, and the accuracy of financial reports. It not only accelerates decision-making but also aids in spotting potential irregularities early. While oversight was once performed only after gathering physical reports on a monthly or quarterly basis, it now occurs in real time and can be verified directly within the system. Unfortunately, research by Wibawa et al (2024) involving several respondents shows that treasurers can change their payment methods during payment decisions without approval from procurement officials who negotiated the prices. Additionally, changes made by treasurers are not notified to the system. This can definitely undermine the trust of work units in using Digipay transactions.

In terms of security, Digipay is backed by the Directorate General of Treasury's (DJPb) digital security system, which allows MSMEs to open Digipay accounts only if they are registered partners of the Type A1 State Treasury Service Office Cirebon. This security offers MSMEs confidence in conducting buying and selling transactions, as all activities are digitally recorded and verified, leading to more organized business and financial management. This aligns with an interview with Haura Cake and Bakery, who said: "Yes, I believe you because, with proper organization of our business and financial management, the business will run smoothly well". The

risk of cash loss and manual transfer errors, which previously occurred with traditional systems, is now reduced through Digipay's cashless payment system. Ultimately, the use of Digipay has proven to support the trust theory, as a sense of security boosts public trust (Anderson & Weitz, 1989).

In terms of financial transparency, Digipay helps MSMEs keep accurate, real-time records with transaction receipts. It also offers automated reporting customized to the Directorate General of Treasury (DJPb) format and integrates with other systems that support fiscal accountability. An employee at the Type A1 State Treasury Service Office Cirebon confirmed this, saying, "One of the impacts of Digipay implementation is increased accountability in work unit financial reporting".

Financial reports prepared by MSMEs will later serve as the basis for calculating tax payable. Digipay can assist in tax compliance audits. MSMEs can submit evidence of transaction data recorded in Digipay to auditors. These results align with research by Shabrina et al (2024), which states that taxpayer compliance is assured because all transactions are automatically taxed if they are taxable. Treasurers can also determine the amount of tax payable, allowing the Directorate General of Taxes (DGT) to achieve tax targets without unnecessary effort. This system also simplifies the audit process and reduces the risk of misuse of Inventory Cash at work units. This statement was obtained from an interview with an employee of the Type A1 State Treasury Service Office Cirebon, who stated: "The Implementation of Digipay increases transparency in the use of Inventory Cash at work units, thereby reducing the risk of misuse". Furthermore, Digipay minimizes administrative work by accelerating transactions and reporting processes.

Figure 2 illustrates the order status feature available in Digipay. Users and related parties can access their transaction history in real time. This reduces the risk of misuse of transaction data for specific purposes, as each transaction is difficult to manipulate. Users can view the ID and details of each transaction through the order status. This enhances trust, as transactions conducted on the Digipay application are transparent and highly trustworthy (Anderson & Weitz, 1989).

Efficiency is a key part of implementing digital systems like Digipay. Transaction processes that used to require many administrative steps can now be completed faster, more efficiently, and with fewer manual errors. The time formerly spent re-entering data, matching

physical documents, and creating separate reports has been reduced through an integrated system. In other words, Digipay not only accelerates transactions but also conserves bureaucratic resources—both human resources and budget—that were once consumed by redundant task processes.

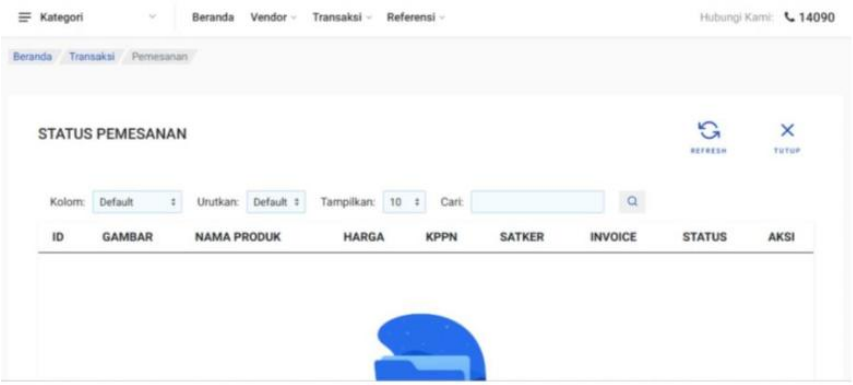

Figure 2. Order Status

Source: Haura Cake and Bakery (2024)

Unfortunately, Digipay's efficiency remains limited because it lacks a feature to compile items ordered from a single provider into one invoice for easier payment. Additionally, the existence of three different Digipay applications based on the bank account used can reduce purchasing efficiency if the intended provider is from a different bank. According to trust theory, these issues could undermine confidence in the Digipay system and lead to a decline in usage (Anderson & Weitz, 1989).

Therefore, through a case study at the Type A1 State Treasury Service Office Cirebon, this research aims not only to answer questions about digital accountability but also to examine how the Digipay system contributes to creating more efficient public financial governance. This also aligns with the statement from Haura Cake and Bakery: "I think it's more efficient because consumers can see the products in our market catalog along with their price offers". The detailed product information provided makes it easier for buyers to search for or order the desired products using the Product Data feature according to their needs, facilitating efficient transactions.

Figure 3. Illustration of product information available through Product Data. The Product Data feature includes details such as ID, Product Name, Store Name, Category, Price, Stock, Unit,

Product Type, Status, and Actions. This aligns with Haura Cake and Bakery's statement: "I think it's more efficient because consumers can see the products in our market catalog along with their price offers". With detailed product information, transactions become more efficient because buyers can easily search for and order the needed products by simply reading or searching in the Product Data feature.

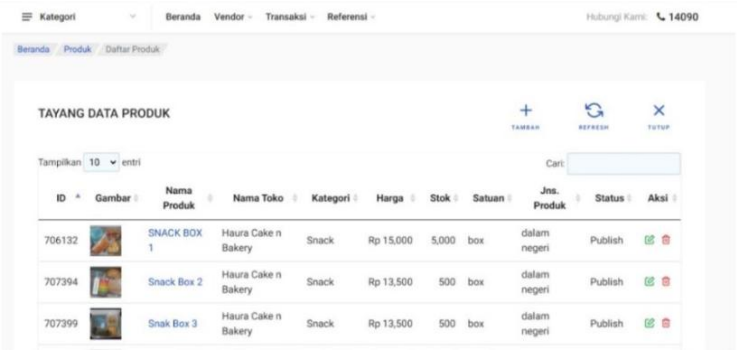

Figure 3. Product Data

Source: Haura Cake and Bakery (2024)

5. CONCLUSION

This study on the implementation of the Digipay system at the Type A1 State Treasury Service Office Cirebon reveals that, although the system enhances transaction transparency and security through e-signatures, barcodes, and integrated digital monitoring, its influence on state treasury accountability remains optimal. The loopholes in the Digipay system include platform duplication based on bank accounts and the lack of an invoice compilation feature. Regarding oversight, Digipay has a vulnerability where the treasurer's account can change the payment system during a transaction. This change can occur without the approval of procurement officials who negotiated the price or prior authorization notification.

Future optimization of Digipay requires a targeted strategy, including: enhancing digital literacy for MSMEs, creating more adaptable and integrated features, improving data security, broadening user access, and conducting regular monitoring and assessment evaluation. With these improvements, Digipay can become a strategic tool in strengthening more efficient, accountable, and inclusive state finance governance.

6. IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH

Limited communication access to MSME respondents meant that this study could only interview one MSME owner. A larger number of system users should be able to better capture the role of digitalization. Therefore, future research is expected to have better access, allowing the respondents used in the sample to generalize the findings more comprehensively.

REFERENCES

Anderson, E., & Weitz, B. (1989). Determinants of Continuity in Conventional Industrial Channel Dyads. *Marketing Science*, *8*(4), 310–323. https://doi.org/10.1287/mksc.8.4.310.

CNN Indonesia. (2024). *KPK Usut Dugaan Korupsi Proyek Fiktif di Telkom Grup CNN Indonesia*. Https://Www.Cnnindonesia.Com/Nasional/20240521234252-12-1100628/Kpk-Usut-Dugaan-Korupsi-Proyek-Fiktif-Di-Telkom-Grup.

Ebrahim, A. (2020). *Measuring Social Change*. Stanford University Press.https://doi.org/10.1515/9781503609211.

Gultom, J. R., Setyawan, I., & Laksono, R. (2023). Peran kepercayaan dalam memediasi efek persepsi kemudahan dan persepsi nilai digital pada niat penggunaan kontinu e-payment. *Mediastima*, *29*(1), 54–70.

Hutabarat, D. D. (2021). *Marketplace pemerintah: kerangka teori dan operasional pengembangan dan implementasi marketplace pemerintah di indonesia*. Direktorat Sistem Perbendaharaan, Direktorat Jenderal Perbendaharaan.

Kurniawan, A. , W. A. , P. R. F. (2023). *Lentera APBN Edisi XXII: Mewujudkan Transparansi dan Efisiensi Belanja Negara Melalui Pengelolaan Keuangan Publik Yang Baik*. Direktorat Jenderal Anggaran.

Nuranindita, M. (2023). Peran Dan Manfaat Marketplace Dan Digital Payment Dalam Meningkatkan Pemberdayaan Umkm Di Provinsi Bangka-Belitung. *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara Dan Kebijakan Publik*, *8*(1), 17–31.

Rooj, D., & Mehta, A. (2025). Digital payments and inflation expectations: evidence from survey data. *Macroeconomics and Finance in Emerging Market Economies*, 1–22. https://doi.org/10.1080/17520843.2025.2492476.

Shabrina, S., Rahmadhanti, F., & Nurdin, N. (2024). Analisis Implementasi DIGIPay Satu Dalam Pemberdayaan UMKM Indonesia. *Diversity: Jurnal Ilmiah Pascasarjana*, *4*(2), 157–172.

Sugiyono. (2010). *Metode penelitian kuantitatif, kualitatif, dan R&D (Edisi ke-1)*. Alfabeta.

Wibawa, D. A., Amrullah, M., Hakim, L., & Sukmono, R. (2024). Determinan Pembelian Melalui Digipay: Perspektif Pelaku Pengadaan Barang/Jasa pada Satuan Kerja. *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara Dan Kebijakan Publik*, *9*(3), 216–232.