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Implementing Digital Technology in Public Financial Information Presentation

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ARTICLE INFO

Keywords:
Digital
Technology;
Financial
Transparency;
Accountability;
Information
Systems.

Article History:

Received: 11 July 2025 Revised: 27 August 2025 Accepted: 26 September 2025

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ABSTRACT

The implementation of digital technology has become an essential initiative in improving transparency, efficiency, and accountability in the management and dissemination of public financial information. This study aims to examine the benefits, challenges, and strategic considerations associated with the adoption of digital technology in presenting public sector financial data. Using a qualitative approach based on a comprehensive literature review, the study highlights how digitalization enables real time access to financial information, minimizes the risk of human error, and enhances public trust in financial governance processes. Despite these advantages, the research also identifies persistent challenges, such as inadequate infrastructure, limited technical capacity, and uneven digital readiness across government institutions. To address these issues, the study proposes several practical recommendations, including the development of supportive regulatory frameworks, increased investment in digital infrastructure, and the implementation of targeted training programs for public sector personnel. Overall, this research contributes both theoretical understanding and practical insights to advance the digital transformation of public financial management.

INTRODUCTION

The rapid advancement of digital technology has brought significant transformation across various sectors, including the management of public financial information. In the modern era, information technology plays a pivotal role in supporting transparency, accountability, and efficiency in financial governance within public institutions. Digitalization has enabled governments and other public entities to present financial information more quickly, accurately, and in a manner that is easily accessible to the public.

As digital technologies evolve, the demand for accurate and transparent public financial reporting has become increasingly critical. Public sector organizations are now expected to deliver real time, standards compliant financial reports to meet the growing needs of stakeholders (Pontoh et al., 2024). Technologies such as cloud-based systems, big data analytics, and artificial intelligence applications present significant opportunities to enhance the effectiveness and efficiency of public financial management (Rizka Khoirotun Nisaa et al., 2024). However, the implementation of these technologies is not without challenges. As Kristiyani Hamidah (2020) point out, the misuse of digital tools by certain actors can hinder efforts to achieve transparency.

p-ISSN: 2528-6145, e-ISSN: 2541-3198 Accredited Third Grade by Ministry of Research, Technology and Higher Education of The Republic of Indonesia, Decree No: 148/E/KPT/2020

In Indonesia, the government has adopted various digital financial management systems, including e-budgeting and e-audit platforms. According to Yosefin (2021), these transformations have contributed to minimizing manual errors in the public sector, though they also require substantial adjustments in human resource competencies. Nopriyanto (2025) further emphasizes the importance of regulatory support and inter agency collaboration as key factors in successful technology implementation. With the right approach, digital transformation can help the public sector not only meet public expectations but also increase trust in state financial management.

The application of digital technology holds great potential for improving transparency and accountability (A. Amilin & A. Susanto, 2014). Nevertheless, as highlighted by Yosefin (2021), challenges such as digital skills gaps and data security risks remain prominent concerns. Hence, the adoption of digital tools necessitates strong support from all stakeholders, including auditors and public managers, to maximize benefits while mitigating risks.

One of the main driving factors behind digital technology adoption in public financial disclosure is the growing societal demand for transparency. Citizens expect greater access to financial data to ensure that public funds are being managed responsibly. Digital solutions such as cloud-based information systems and web based financial applications offer viable means to meet this demand. These systems not only provide real time access to financial data but also help reduce the likelihood of human error during the reporting process.

Despite its enormous potential, the implementation of digital technologies in the presentation of public financial information continues to face various obstacles. Many public institutions, especially at the regional level, still struggle with limited infrastructure and a shortage of skilled personnel capable of operating digital systems (Harimurti et al., 2022; OECD, 2023). Furthermore, resistance to technological change within some organizational levels often impedes the digitalization process. These challenges underscore the urgent need for intensive training, adequate technological investment, and the development of supportive policy frameworks to ensure the successful implementation of digital technologies in the public sector.

As an illustration of the growing importance of digital adoption, recent statistics indicate a significant increase in the use of digital-based financial reporting systems across ASEAN countries. The following data provides further detail.

Country	Year 2020	Year 2021	Year 2022
Indonesia	35%	46%	57%
Malaysia	42%	55%	68%
Thailand	25%	35%	45%
Filipina	18%	28%	39%
Vietnam	33%	42%	51%

Table 1. Adoption Rate of Digital Financial Systems in ASEAN

Source: World Bank (2023)

A similar trend can be observed in other ASEAN countries, such as Malaysia and Vietnam, which recorded adoption rate increases of 26% and 18%, respectively, over the same period (World Bank, 2023). This data underscores the urgency of digital transformation as a key component in the modernization of public financial management.

This study aims to analyze the implementation of digital technology in the presentation of public financial information. Previous studies have shown that digitalization can improve financial transparency, efficiency, and accountability in both private and public sectors (Pontoh et al., 2024; Rachmawati & Lestari, 2021; Rizka Khoirotun Nisaa et al., 2024). Other scholars emphasize that systems such as SIPD and SAKTI have been effective in standardizing financial reporting and reducing manual errors in Indonesia (Harimurti et al., 2022; Yosefin, 2021). However, despite these findings, research on digital transformation in public finance is still fragmented, with most studies focusing either on technical system implementation or limited case studies in specific institutions. There is still a lack of comprehensive analysis that integrates benefits, challenges, and strategic approaches within a holistic framework. Therefore, the research gap lies in the need for a broader and systematic exploration that not only evaluates the effectiveness of existing digital tools but also examines institutional readiness, policy frameworks, and human resource capacity in supporting successful implementation across different levels of government. Based on this gap, the main objectives of this study are to identify the key benefits of digitalization, explore the challenges encountered during the implementation process, and formulate strategic approaches to optimize the use of technology in public financial

governance. Using a qualitative approach based on a comprehensive literature review, this article seeks to contribute both theoretically and practically to the ongoing efforts to enhance the quality of public financial management in the digital era.

Furthermore, it is important to emphasize that digitalization in the public sector is not merely about technological adoption it also represents a paradigm shift in how government institutions carry out their functions and responsibilities. Digitalization creates opportunities to enhance public participation in financial oversight, improve operational efficiency, and strengthen public trust in government institutions. Therefore, this research is not only academically relevant but also carries significant practical implications for policymakers, public sector organizations, and society at large.

Grand Theory

To examine the implementation of digital technology in the presentation of public financial information, this study adopts Systems Theory as its conceptual foundation (Bertalanffy, 1968). Systems Theory by Ludwig von Bertalanffy emphasizes that an organization or system is composed of interconnected components working together toward a common goal. In this context, digital technology functions as a subsystem that plays a critical role in enhancing the efficiency, accuracy, and transparency of public financial reporting systems.

According to Padriyansyah & Sartika Pratiwi (2024), information technology plays a pivotal role in providing financial data that is accurate, relevant, and accessible to stakeholders. The digitalization of financial reporting not only enhances transparency but also enables faster and more precise data driven decision making processes. Sulistyowati Andita et al., (2024) further note that despite its considerable benefits, challenges such as the shortage of skilled human resources and inadequate technological infrastructure, especially in remote regions, continue to impede effective implementation.

The influence of digitalization on public financial accountability has also been extensively discussed in the literature. Information technology facilitates more transparent monitoring of public expenditures by citizens, ultimately fostering greater public trust in financial governance. For instance, the use of information systems in village fund management has been shown to improve accountability through more open and real time financial reporting (Nurita & Sisdianto, 2025).

Numerous studies highlight the significant advantages of digital technology in improving the quality of public financial reports. Pontoh et al., (2024), for example, found that the "AkuntansiKu" application helps MSMEs prepare standardized financial statements, offering valuable insights for similar applications in the public sector. Additionally, Rizka Khoirotun Nisaa et al., (2024) report that digital transformation in internal auditing such as the integration of artificial intelligence enhances auditors' ability to detect financial risks more accurately. However, as Kristiyani Hamidah (2020) caution, technology can also be misused for fraudulent purposes if not accompanied by adequate oversight mechanisms.

Digital Technology and Public Financial Transparency

As outlined by (Padriyansyah & Sartika Pratiwi, 2024) information technology plays a vital role in producing accurate, relevant, and accessible financial data for stakeholders. The digitalization of financial reporting enhances transparency and supports faster, evidence-based decision making processes.

Barriers to Implementation

Sulistyowati Andita et al., (2024) identify several key obstacles to digital technology implementation, including limited availability of trained human resources and inadequate technological infrastructure in certain regions. These challenges highlight the need for ongoing investment in capacity building and technological development to support sustainable implementation.

Impact on Financial Accountability

Digital financial reporting has been shown to significantly improve accountability. For example, the use of digital tools in managing village funds has allowed communities to monitor expenditures more transparently, thereby strengthening public trust in financial administrators (Nurita & Sisdianto, 2025).

MATERIALS AND METHODS

This study employs a qualitative approach using literature review methods to explore the implementation of digital technology in the presentation of public financial information. The qualitative design was chosen because it allows for the in depth examination of complex phenomena, especially in fields where empirical data are still developing and contextual interpretation is essential. As Creswell

(2014) points out, qualitative approaches are particularly suitable for analyzing processes, relationships, and meanings that cannot be captured by purely quantitative data.

A literature review method was selected to synthesize insights from previous studies, academic journal articles, policy papers, and official documents related to digital transformation in the public financial sector. This method facilitates critical analysis by drawing connections between themes emerging from diverse sources. The purpose of the review was to identify patterns, contradictions, and gaps in existing research, and to draw meaningful conclusions relevant to financial digitalization in public governance.

The review process consisted of several stages. First, relevant sources were systematically identified through keyword searches in academic databases such as Scopus, ScienceDirect, Google Scholar, and national repositories. Keywords used included "digital public finance," "financial transparency," "e-government," "ERP in government," "SAKTI system," and "SIPD implementation." Articles were screened based on relevance, credibility, and recency, with a preference for publications from 2018 onward to reflect the most current developments in digital governance.

In total, over 40 scholarly sources were consulted, including empirical case studies, theoretical discussions, and comparative analyses from both national and international contexts. The inclusion criteria prioritized peer reviewed publications, governmental reports, and white papers from multilateral institutions such as the World Bank, OECD, and UNDESA.

The second stage involved thematic coding and analysis. The collected literature was read and annotated to identify recurring concepts and arguments. Themes were then grouped into major categories: (1) benefits of digitalization in financial reporting, (2) implementation challenges, (3) institutional readiness, (4) human resource capacity, (5) audit and risk management, (6) public participation, and (7) sustainability and governance outcomes. This form of analysis is aligned with the thematic review model used by (Pontoh et al., 2024) in their study of digitalization in MSMEs, which allowed the researchers to derive analytical depth from a wide range of textual sources.

Throughout the analysis, a reflexive approach was employed to ensure transparency in interpretation and to minimize researcher bias. Thematic patterns were cross validated by comparing evidence from multiple regions and contexts, allowing for more generalizable insights.

The theoretical foundation for this study is provided by Systems Theory, as developed by Ludwig von Bertalanffy. This theory emphasizes the interconnectedness of components within a system and highlights the importance of holistic integration for achieving system efficiency and functionality. In the context of public financial reporting, digital technologies such as SAKTI, SIPD, and ERP systems are conceptualized as subsystems that interact with organizational structures, human actors, and regulatory frameworks to enhance overall system performance.

This perspective enables a deeper understanding of how digital technologies function not merely as tools but as integral components that influence and are influenced by institutional dynamics. The systemic view is particularly relevant given that public financial management is inherently multidimensional, involving technical, procedural, and political elements.

RESULTS AND DISCUSSION

The digitalization of financial reporting offers numerous significant benefits, including enhanced efficiency, accuracy, and transparency. Digital technology enables real time processing of financial data, minimizes manual errors, and improves data accessibility for stakeholders. The following graph illustrates the increase in financial reporting efficiency before and after the implementation of digital systems, based on data from (McKinsey & Company, 2022). The data show that reporting efficiency improved by up to 40% following digital adoption.

In the public sector, the implementation of digital technology has yielded various advantages, particularly in audit processes. As Rizka Khoirotun Nisaa et al., (2024) explain, digital tools enable a more proactive and adaptive risk-based audit approach, allowing auditors to focus on the most critical areas. However, as highlighted by Yosefin (2021), one major challenge is the need for ongoing development of human resource competencies. Kristiyani Hamidah (2020)also caution that without strong regulatory frameworks and oversight policies, digital technology could be misused for fraudulent purposes. Empirical evidence of digital technology adoption in the public sector includes the following:

 A study by Harimurti et al., (2022) shows that the implementation of the Sistem Informasi Pemerintahan Daerah (SIPD) in various local governments across Indonesia has supported the preparation of standardized digital financial reports. However, the system's effectiveness is strongly influenced by the capacity of human resources and the availability of technological infrastructure in each region.

- 2. The Ministry of Finance of Indonesia has developed and implemented the Sistem Aplikasi Keuangan Tingkat Instansi (SAKTI), an integrated digital financial information system for all central government units. According to Rachmawati & Lestari (2021), SAKTI has improved the efficiency of budget and realization reporting while reducing manual data entry errors.
- 3. In the state owned enterprise (SOE) sector, a study by Wahyudi (2021) examined the use of Enterprise Resource Planning (ERP) by PT Telkom Indonesia. The system enables real time and integrated financial management and enhances data accuracy for auditing and public reporting purposes.

The digitalization of financial reporting within the public sector has introduced substantial improvements in the accuracy, timeliness, and transparency of financial information. Digital technologies such as Enterprise Resource Planning (ERP), cloud-based accounting systems, and government specific applications like SAKTI and SIPD enable real time data integration, automated calculations, and secure documentation, all of which contribute to improved public accountability and administrative efficiency.

Improved Reporting Efficiency

Digitalization contributes significantly to reducing the time lag between financial transaction execution and reporting. According to a report by McKinsey & Company (2022), digital financial systems can improve reporting efficiency by up to 40%, primarily by automating repetitive tasks and reducing reliance on paper-based workflows. This increase in efficiency enables more responsive decision making within public institutions and strengthens the government's ability to implement timely financial policies.

This result is consistent with the findings of Rachmawati & Lestari (2021), who studied the Sistem Aplikasi Keuangan Tingkat Instansi (SAKTI) at the Indonesian Ministry of Finance. Their research demonstrated a marked improvement in the accuracy and speed of financial report submissions, particularly regarding budget realization and reconciliation processes. Manual errors were reduced, and cross departmental coordination improved due to integrated platforms.

"SAKTI eliminates redundant inputs and automates accounting processes, leading to a more reliable and timely financial reporting mechanism." – (Rachmawati & Lestari, 2021)

Real Time Monitoring and Audit Readiness

Real time monitoring capability is a key feature of digital financial systems. As emphasized by Rizka Khoirotun Nisaa et al., (2024), advanced digital tools support risk-based auditing by allowing auditors to track transactions continuously and identify anomalies as they occur. This proactive approach strengthens internal controls and enhances institutional resilience to fraud.

ERP systems used by PT Telkom Indonesia, as studied by Wahyudi (2021), show similar benefits. These systems offer end to end visibility of financial flows, which assists both internal and external auditors in conducting faster, more accurate audits. Additionally, cloud-based systems provide backup, version control, and data traceability essential features for governance compliance.

However, Yosefin (2021) cautions that without robust regulatory oversight, the same digital platforms can be misused, especially if data access is not adequately controlled. Regulatory infrastructure must evolve in parallel with technological adoption.

Regional Implementation Challenges and Variations

At the regional level, the implementation of Sistem Informasi Pemerintahan Daerah (SIPD) presents both achievements and ongoing challenges. The system allows local governments in Indonesia to prepare standardized financial statements and submit them directly to the Ministry of Home Affairs. According to Harimurti et al., (2022), SIPD has improved consistency and reporting accuracy across multiple jurisdictions. Nevertheless, significant disparities remain.

"In less developed regions, the lack of qualified personnel and unreliable internet connectivity undermines the intended benefits of SIPD." – (Harimurti et al., 2022)

This disparity highlights the crucial role of capacity building and technological infrastructure. Digitalization cannot succeed in isolation it must be accompanied by targeted investments in training and connectivity, particularly in rural and underserved areas. This echoes the broader concern of Sulistyowati Andita et al., (2024), who argue that digital transformation must be inclusive to avoid deepening governance inequality between regions.

Human Resource and Capacity Constraints

The human factor remains central to successful digital transformation. Despite the increasing automation, competent personnel are still required to configure systems, interpret outputs, and make

informed decisions. According to Kristiyani Hamidah (2020), digital systems are only as effective as the people who operate them. They also stress that frequent updates and technological changes necessitate continuous learning within public agencies.

Training programs, therefore, must be institutionalized rather than treated as one off events. Moreover, a digital first culture must be nurtured across all levels of bureaucracy. As seen in countries like Estonia and South Korea, institutional culture and top-down commitment are critical to long term success in digital governance (OECD, 2020). According to Accenture (2023), successful digital financial transformation requires more than technology, it demands cultural change, leadership commitment, and an agile mindset among civil servants.

Integration with Accountability and Public Participation

One of the most compelling benefits of digital public financial management is its potential to promote accountability and civic participation. Open data portals, digital dashboards, and public access to budget utilization reports can empower citizens to monitor government spending. Choirun Nisa et al., (2021) emphasize that digital transparency tools improve citizen trust and foster participatory governance.

For example, Indonesia's "Kemenkeu Transparan" platform allows the public to track government revenues and expenditures in near real time. These initiatives align with international best practices such as Open Government Partnership (OGP) standards, which encourage participatory budgeting and fiscal openness.

Digitalization also supports Sustainable Development Goals (SDG) 16 particularly in fostering effective, accountable, and inclusive institutions. By bridging the information asymmetry between government and citizens, digital systems reinforce democratic oversight.

Comparative Evidence from Other Countries

Comparative evidence strengthens the claim that digital financial systems, if properly implemented, improve governance outcomes. For example:

- 1. In Estonia, the integration of blockchain-based accounting systems in government financial management has reduced fraud risks and ensured real time auditability (World Bank, 2021).
- 2. In Brazil, the adoption of the Siconv platform for monitoring public procurement significantly improved transparency and reduced corruption in fund allocation (Dener, C., Watkins, J., & Dorotinsky, 2018).
- In India, the Public Financial Management System (PFMS) has facilitated the real time tracking of budget flows, ensuring better alignment between policy objectives and fund utilization (Kaur & Gupta, 2022).

The OECD (2023) highlights the uneven levels of digital maturity across Indonesian public institutions, noting that decentralized implementation leads to variable outcomes, particularly in remote and underfunded regions.

The World Bank's GovTech Maturity Index on 2020 categorizes Indonesia as "emerging," indicating steady progress in adopting digital systems for public finance, though major gaps still exist in system interoperability and human capital readiness.

Systems Theory Perspective

From a systems theory perspective Bertalanffy (1968), digital technologies serve as a subsystem within a broader public financial ecosystem. Their purpose is not merely technical but systemic supporting data flows, decision making, feedback mechanisms, and inter agency coordination. The interconnectedness of subsystems such as human resources, regulatory frameworks, and IT infrastructure means that weakness in any one element may undermine the overall system's effectiveness.

"A system is more than the sum of its parts; its success lies in the harmony and feedback between components." – (Bertalanffy, 1968)

Therefore, reform strategies must address the ecosystem as a whole, not just isolated elements of digitalization.

Institutional Readiness and Governance Transformation

Institutional readiness plays a decisive role in the success of digital financial initiatives. Readiness encompasses several aspects: technological infrastructure, leadership commitment, regulatory adaptation, and change management capacity. Institutions that exhibit high levels of organizational maturity tend to manage the transition to digital systems more effectively (World Bank, 2020).

On regional financial management in Central Java, Indonesia, revealed that institutions with prior experience using legacy financial software adapted more smoothly to the SIPD transition. These institutions already had skilled personnel, proper IT facilities, and management that valued data transparency.

Moreover, that leadership with a forward looking governance mindset is a key enabler of digital finance adoption. Where leaders are open to change, digital systems are more likely to be adopted holistically, rather than in fragmented, siloed implementations. These findings suggest the importance of leadership development and digital governance literacy for senior officials.

Digital transformation also challenges traditional hierarchies and workflows. It demands more horizontal coordination across departments, faster decision making cycles, and accountability for digital outputs. Therefore, institutions must not only adopt technology but also reform their internal processes and performance management systems (OECD, 2023).

Sustainability and Long Term Impact

While short term efficiency gains from digitalization are well documented, questions remain regarding sustainability and long term governance transformation. Maintaining digital systems requires ongoing investments in maintenance, cybersecurity, data privacy, and human capital development. Neglecting these post adoption aspects often leads to stagnation or even regression.

Additionally, the environmental impact of digital public financial systems has begun to attract attention. Though digitalization reduces paper usage and physical storage needs, it also increases energy consumption through servers and data centers, Sustainable digital public finance, therefore, should integrate green IT practices and energy efficient infrastructure.

On the governance side, long term impacts can include improved fiscal discipline, better alignment between budgets and development outcomes, and enhanced trust in public institutions. These benefits require institutionalization of digital practices and regular evaluation using performance indicators. The use of Key Performance Indicators (KPIs) tied to transparency, timeliness, and user satisfaction is essential in maintaining momentum.

Ultimately, the sustainability of digital transformation hinges on political will, inter-agency collaboration, and continuous public engagement. It is not merely a technical change but a holistic shift in how governments plan, allocate, monitor, and communicate public finances.

Policy Challenges and Regulatory Adaptation

Despite promising results, regulatory readiness has often lagged behind technological implementation. Many digital financial systems are introduced without adequate updates to public finance regulations, audit standards, and inter-agency data governance protocols. As noted by (Kurniawan (2020), the lack of legal frameworks to regulate data sharing between institutions has created redundancies and delays in reporting.

In some regional governments, inconsistencies in budget classifications and terminologies also persist even after digital systems are deployed. This hinders data interoperability and complicates comparative fiscal analysis across provinces or districts. The Ministry of Home Affairs in Indonesia has acknowledged the need for harmonized regulations, especially regarding output-based budgeting and accrual accounting practices.

Moreover, bureaucratic inertia often slows the update of internal standard operating procedures (SOPs) to align with new digital workflows. Employees may still rely on outdated approval mechanisms or paper-based archiving, reducing the efficiency gains from digital adoption. To address this some people suggest a co design approach involving both IT developers and end users during system development to ensure usability and compliance.

Policy coherence is also vital at the national level. Institutions such as BPKP, Kementerian Keuangan, and Kementerian PAN-RB must coordinate to produce unified guidelines on digital public finance. Without this, local governments and SOEs may adopt incompatible systems, creating silos and inefficiencies.

Expanding Literacy and Public Engagement

Another crucial factor in digital transformation is digital literacy not only for civil servants but also for citizens. While open budget portals and dashboard tools provide transparency, their value is limited if the public lacks the capacity to interpret the information. A study by Anggraeni & Maria (2023) shows that even in urban areas, a large portion of citizens are unaware of how to access or analyze financial data shared by their local government.

To address this gap, initiatives such as participatory budgeting forums, public information campaigns, and digital education programs have been piloted in several Indonesian cities. In Surabaya,

for instance, the city government launched a program called "APBD untuk Rakyat" that combines social media outreach with infographics and community workshops.

Engaging civil society organizations (CSOs) also helps bridge the understanding gap. CSOs can act as intermediaries who translate complex budget information into actionable insights for communities. Inclusive digital financial systems are those that integrate feedback loops from users, including marginalized populations.

Furthermore, governments must ensure that digital platforms are accessible to persons with disabilities, the elderly, and those in rural areas. This requires adherence to web accessibility standards and the provision of alternative access formats (e.g., audio or offline versions).

Additional Case Studies in Indonesia

Beyond Telkom Indonesia, other state owned enterprises (SOEs) have implemented digital systems with notable results. For example.

- PT PLN (Persero) has adopted a centralized financial dashboard integrated with SAP ERP, allowing regional units to report revenue collection and operational costs in real time. This system supports better planning and improves cash flow management across its national grid operations.
- 2. PT Kereta Api Indonesia (KAI) uses a digital budget allocation system linked to its project management tools. According to internal evaluations, this integration has reduced cost overruns and improved procurement transparency, especially in infrastructure expansion projects.
- 3. The City of Bandung has implemented an e-budgeting system that directly links citizen proposals from Musrenbang (community consultations) into the budgeting platform. This ensures alignment between community needs and fiscal priorities, while also creating an auditable trail of decision making.

These cases illustrate that digital transformation is not one size fits all. Each institution must tailor its implementation strategy to its organizational structure, service delivery model, and stakeholder expectations. However, common success factors include strong leadership, system integration, and alignment between planning and execution functions.

Socioeconomic Benefits of Digital Public Finance

Beyond administrative efficiency, digital financial systems have broader socioeconomic benefits. They can reduce corruption, increase service delivery quality, and improve fiscal equity. For instance, when budget allocations are transparently published, it becomes more difficult for decision makers to divert funds for non priority or politically motivated projects.

Digital traceability also supports better targeted subsidies. In Indonesia, digital verification systems for social assistance (such as PKH and BLT) reduce duplicate or ineligible beneficiaries. This is an example of how public financial technology can enhance the effectiveness of welfare programs.

Moreover, digitalization facilitates better disaster response and recovery planning. Real time monitoring of fund disbursements enables governments to allocate emergency resources more efficiently, track relief expenditures, and minimize leakages during crises (e.g., during the COVID-19 pandemic).

Internationally, the IMF 2022 highlights how digital public finance systems improve tax collection efficiency, enhance fiscal forecasting accuracy, and enable performance-based budgeting. These features support not only economic stability but also better alignment with sustainable development goals.

Future Research Directions

This study highlights the need for future empirical research on the following areas.

- 1. Impact Assessment Models: There is a need for robust impact assessment frameworks that evaluate not just financial efficiency, but also the social and governance implications of digital transformation.
- 2. Cross Country Comparisons: Comparative studies across ASEAN countries or Global South economies can provide deeper insights into success factors and policy innovations.
- 3. Behavioral Aspects of Digital Finance Adoption: Understanding how public servants adapt to digital tools, and what motivates or resists change, can improve change management strategies.
- 4. Citizen Feedback Mechanisms: Research into how digital systems can systematically incorporate citizen feedback into fiscal governance remains underexplored.
- 5. Cybersecurity and Ethics: As data breaches become more prevalent, the ethical management of digital financial records is a crucial research frontier.

Addressing these areas would not only advance academic discourse but also guide policymakers in designing more effective, inclusive, and secure digital financial ecosystems.

CONCLUSIONS AND SUGGESTION

This study demonstrates that the implementation of digital technology in presenting public financial information provides significant benefits in terms of transparency, efficiency, and accountability, as it enables real-time data processing, minimizes manual errors, and strengthens public trust. The success of this implementation, however, depends heavily on institutional readiness, particularly infrastructure and human resources. In practice, several best practices have been observed in Indonesia: the Ministry of Finance's Institutional-Level Financial Application System (SAKTI) has improved budgeting efficiency and reduced errors (Rachmawati & Lestari, 2021); the Regional Government Information System (SIPD) has enabled systematic and real-time reporting, though still constrained by local capacity (Harimurti et al., 2022); and state-owned enterprises like PT Telkom Indonesia have adopted ERP systems that enhance transparency and audit processes (Wahyudi, 2021). These examples show that despite existing challenges, digitalization in public financial management has been concretely implemented and can serve as a model for broader adoption across institutions.

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