TRANSPUBLIKA
Precise. Resilience. Felicitous.

Journal of Management, Accounting, General Finance and International Economic Issues
https://ojs.transpublika.com/index.php/MARGINAL
Online ISSN 2809-8013 | Print ISSN 2809-9222

https://doi.org/10.55047/marginal.v5i2.2002

Original Article

Evaluation of the Effectiveness of the Internal Control System in the Implementation of the Centralized Payment Digitalization Program at UIP3B PLN Sulawesi

Aini Indrijawati[1*], Mediaty Mediaty[2], Mursandi Mursandi[3], Nurazizah Nurazizah[4], Nurul Azizah Tamang[5], Tahlis Farida Novianti[6]

[1-6]Department of Accounting, Faculty of Economics and Business, Universitas Hasanuddin, Makassar, Indonesia
Email: [1)] ainindri@fe.unhas.ac.id, [2)] mediaty@unhas.ac.id, [3)] ndy.moer@gmail.com, [4)] immawatinurazizah@gmail.com, [5)] azzhtamang@gmail.com, [6)] tahlisfaridanovianti@gmail.com

Received : 22 October - 2025
Accepted : 20 December - 2025
Published online : 25 December - 2025

Abstract

Digital transformation in the financial sector requires organizations to enhance their digital maturity to effectively manage systems efficiently and transparently. This study aims to evaluate the level of organizational digital maturity through the implementation of the Digitalization of Centralized Payment program at PT PLN (Persero) UIP3B Sulawesi, and to analyze the effect of payment digitalization on the effectiveness of internal control systems with human resource (HR) competence as a mediating variable. This study employs a quantitative approach with an explanatory research design. Primary data were collected through online questionnaires distributed to 78 employees in the finance and budgeting departments who were directly involved in the centralized payment digitalization program. Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 4.0 software. The research findings indicate that payment digitalization has a positive and significant effect on HR competence and the effectiveness of internal control systems. Furthermore, HR competence was proven to function as a partial mediator in the relationship between payment digitalization and internal control effectiveness, with t-statistic values > 1.96 and p-values < 0.05. All variable indicators have loading factors > 0.7 and Composite Reliability > 0.8, indicating valid and reliable research instruments. Thus, it can be concluded that enhancing HR competence is a key factor in strengthening the effectiveness of internal control systems through the successful implementation of centralized payment digitalization. These results emphasize the importance of developing human capabilities as an integral part of digital transformation within the UIP3B PLN Sulawesi environment.

Keywords: HR Competence, Internal Control System, Payment Digitalization, SEM-PLS.

1. Introduction

Digital transformation in public services in Indonesia continues to receive attention, especially following the launch of the Indonesian Payment System Blueprint (BSPI, 2019), which emphasizes the importance of digitalization in government payment systems and integration across digital payment channels (Bank Indonesia, 2024). The increased use of digital channels has driven most local governments to adopt digital payment systems and improve their Regional Government Transaction Electronification (ETPD) category. By the first semester of 2024, there were 480 regional governments classified in the digital category, compared to 449 regional governments in the previous semester, reaching approximately 87.9% of the total 546 regional governments in Indonesia. This indicates that payment system

Copyright: © 2025 by the authors.
This is an open access article distributed under the terms and conditions of the CC BY 4.0.

digitalization is not merely a trend, but rather a regulatory requirement and operational necessity (Bank Indonesia, 2024).

In the same year, PLN also reported various developments in internal digitalization related to operational reliability and customer service. For instance, in PLN's press release in December 2024, service digitalization successfully reduced average electricity disruption time from approximately 20 minutes to 4 minutes, an indicator that digital systems can enhance operational effectiveness and public response (Harianto, 2024). Additionally, PLN strengthened its administrative transformation through archive and document digitalization, including the launch of the New E-Archive application and the Archive Order Movement (GEMAR), which supports modern archive management and minimizes the risk of data loss or misuse due to manual archiving processes (Primadya, 2024).

Despite the rapid growth of digital payment systems and internal digitalization initiatives, digitalization itself does not automatically ensure the effectiveness of internal control systems (Tamang & Haliah, 2025). The implementation of technology may introduce new risks, including system errors, data security vulnerabilities, and increased dependence on user competence. These risks become more significant in organizations that implement centralized and cross-unit payment systems, where weaknesses in internal control can affect accountability, transparency, and financial governance.

However, recent literature still shows that digitalization itself does not always directly strengthen internal control systems. Several national studies demonstrate that human resource (HR) competence and the formal existence of internal control systems have varying influences, depending on the institutional context and technology implementation. For example, research by Damayanti et al. (2024) in the Regional Government Organizations of Kebumen Regency found that the utilization of accounting information technology and internal control systems significantly affected the quality of regional financial reports, while HR competence also contributed positively (Setyaningrum & Haryanto, 2024). Other research by Junaidi & Marviana (2025) on micro, small, and medium enterprises (MSMEs) also found that IT utilization and internal control systems affected the quality of financial reports, although in some contexts, HR competence did not always play a significant reinforcing role.

Although various previous studies have discussed the implementation of digitalization and internal control systems in organizations, to date there has been no study that thoroughly examines the implementation of the Centralized Payment Digitalization Program in the PLN UIP3B Sulawesi environment. This program is part of PLN's digital transformation strategy that integrates electronic payment systems across all work units. The complexity of this system requires effective internal control so that every financial transaction is accountable, transparent, and efficient. Unlike previous research that generally focused on regional government institutions, religious courts, or the MSME sector, the context of state-owned enterprise (BUMN) organizations such as PLN has its own challenges due to its wide operational scale and highly integrated work system (Zhao et al., 2023).

Most previous research has also discussed digitalization in general, such as accounting information systems or technology-based financial management, not centralized payment systems that involve cross-unit digital coordination and real-time financial data synchronization (Maharsi, 2024). In this context, human resource (HR) competence becomes a key factor because the success of digital transformation depends not only on technology but also on employees' ability to adapt and understand the new system (Yahya et al., 2023).

Research by Ohoiway et al. (2023) found that accounting information systems significantly influence fraud prevention, both directly and through internal control. The research shows that internal control serves as a mediation mechanism that strengthens the

relationship between financial system digitalization and organizational governance effectiveness. This finding indicates that a strong information system supported by competent HR can minimize the risk of errors and fraud while enhancing transparency in financial reporting.

Various previous studies have examined the relationship between digitalization, human resource competence, and internal control systems in different organizational contexts. However, to maintain the focus of this introduction on the research problem and gap, a more detailed discussion of theoretical perspectives and empirical findings from prior studies is presented in the Literature Review section.

Furthermore, several other studies also show that HR competence affects the effectiveness of internal control systems and the success of technology implementation. However, most of these studies are still descriptive or qualitative in nature (Astuty et al., 2021). Studies examining the quantitative relationship between digitalization, HR competence, and internal control system effectiveness in large organizations remain limited. Yet, with the increasing implementation of digitalization post-pandemic, strengthening technology-based internal control systems has become increasingly important to maintain business process reliability and prevent potential fraud (Hair et al., 2022).

This research focuses on evaluating the relationship between the implementation of centralized payment digitalization and internal control system effectiveness, considering the role of HR competence in strengthening this relationship. Through a quantitative approach and positivistic paradigm, this research empirically measures the contribution of digitalization to improving internal control effectiveness in the PLN UIP3B Sulawesi environment. The research results are expected to provide a more comprehensive understanding of how digitalization and HR competence can support technology-based governance and serve as practical input for PLN in strengthening internal control systems in the digital transformation era.

Based on the above research gap, this study aims to analyze the effect of centralized payment digitalization on the effectiveness of internal control systems in the PLN UIP3B Sulawesi environment. In addition, this research seeks to examine the role of human resource competence in strengthening the relationship between centralized payment digitalization and internal control system effectiveness. The findings of this study are expected to contribute empirical evidence to the development of technology-based governance in state-owned enterprises undergoing digital transformation.

2. Literature Review

2.1. Digitalization and Payment System Transformation

Digital transformation is a process of integrating information technology into all organizational activities to improve efficiency, accuracy, and transparency (Trimulyana, 2024). In large company environments such as PLN, digitalization plays a strategic role in strengthening financial governance and minimizing transaction error risks. Centralized payment systems are one form of digitalization implementation aimed at integrating all payment activities through a single electronic platform, making financial processes more coordinated and efficient (Aisyah et al., 2024).

Research by Karimallah & Drissi (2024) shows that centralized payment systems can improve administrative efficiency and financial reporting accuracy while strengthening oversight mechanisms for cross-transactions. However, the effectiveness of this system is highly dependent on organizational readiness and users' ability to operate new technology

(Ardiyanti & Susilowati, 2024). Therefore, digitalization is not only viewed as technical innovation but also as a change in work culture and internal control patterns within the organization.

2.2. Internal Control System (ICS)

Internal control systems are an important component of organizational governance aimed at ensuring the reliability of financial reporting, operational effectiveness, and regulatory compliance (COSO, 2013). A good ICS includes five main elements including control environment, risk assessment, control activities, information and communication, and monitoring.

In the digital era, internal control systems must adapt to technological changes and new business models. The integration of information technology in accounting systems, including centralized payment systems, can increase speed, transparency, and accuracy, but also creates new risks such as cyber threats, system errors, or data manipulation (Yahya et al., 2023). Therefore, ICS effectiveness in the digitalization era needs to be evaluated not only from policy and procedural aspects but also from the technical skills and competence of employees who implement them.

2.3. Human Resource Competence

HR competence refers to the combination of knowledge, skills, and attitudes needed to perform work effectively (Spencer & Spencer, 2008). In the context of digitalization, HR competence plays an important role in ensuring the successful implementation of new systems. Research shows that the success of digital transformation is greatly influenced by the level of digital literacy, analytical capability, and employees' understanding of technology-based control systems (Ardiyanti & Susilowati, 2024).

Aisyah et al. (2024) emphasize that organizations with high digital competence levels tend to have better internal control system effectiveness because employees can adapt to technology and understand data-based oversight mechanisms. Thus, HR competence not only functions as a supporting factor but can also serve as a mediating variable that strengthens the relationship between digitalization and ICS effectiveness.

2.4. Theoretical Framework and Hypotheses Development

Digital transformation in organisations is increasingly understood not merely as the adoption of technology, but as an indicator of organisational digital maturity that reflects the level of system integration, process standardisation, and the organisation's ability to utilise technology to improve governance. Recent research shows that integrated digitalisation, including in payment systems, can improve organisational transparency and accountability. However, these positive impacts are not automatic and are highly dependent on the internal readiness of the organisation. Recent conceptual studies confirm that many digital initiatives fail to deliver added value due to limitations in the organisation's capabilities to manage change, particularly in terms of human resources, resulting in suboptimal levels of digital maturity (Esther & Domingo, 2024).

In the context of internal control systems, recent empirical evidence suggests that digital transformation has the potential to improve control effectiveness through process automation, real-time monitoring, and reduced information asymmetry. Wang et al. (2023) proves that digital transformation has a positive and significant effect on the effectiveness of internal control in companies when technology is used to support managerial oversight and control functions. However, other studies emphasise that this effect is conditional. Without adequate

internal capacity support, digitalisation can actually create new risks, such as weak human-based controls and increased complexity of control systems (Zhao et al., 2023).

This condition emphasises the importance of human resource competence as a determining factor in the success of digitalisation in strengthening internal control systems. Human resource competence, which includes digital literacy, understanding of procedures, and analytical skills, enables digital systems to be run effectively and in line with the organisation's control objectives. Research by Sinosi et al. (2025) in the public sector shows that human resource competence has a direct impact on the effectiveness of internal control and the quality of organisational governance. In line with this, Zervas and Triantari (2025) emphasises that human resource competency development is a key prerequisite for achieving organisational digital maturity and maximising the benefits of digital transformation.

Based on a critical evaluation of previous research, there are still limitations in studies that specifically examine centralised payment digitalisation as a representation of organisational digital maturity and its impact on the effectiveness of internal control systems with human resource competencies as a mediating mechanism, particularly in the context of state-owned enterprises in Indonesia. Therefore, this study positions the Digitalisation of Centralised Payment as a concrete indicator of organisational digital maturity at PT PLN (Persero) UIP3B Sulawesi. The implementation of this system is expected to not only directly improve the effectiveness of internal control systems but also indirectly through the enhancement of human resource competencies (Suryanto & Dai, 2025).

Thus, the conceptual framework of this study is built on a causal relationship that places the Digitalisation of Centralised Payment as the independent variable, human resource competence as the mediating variable, and the effectiveness of the internal control system as the dependent variable. This framework provides a theoretical contribution by strengthening the understanding of the role of human resource competency in bridging the relationship between digital maturity and internal control, as well as an empirical contribution through model testing in the context of strategic public sector organisations in Indonesia.

3. Methods

3.1. Research Design

This study employs a quantitative approach with a descriptive-analytical research design to examine the effect of payment digitalization on internal control system (ICS) effectiveness, with HR competence as a mediating variable. The research focuses on employees of PLN UIP3B Sulawesi who are directly involved in the implementation of centralized payment digitalization. The analysis is conducted using a variance-based Structural Equation Modeling (PLS-SEM) approach, which is suitable for predictive analysis and relatively small sample sizes (Hair et al., 2022).

3.2. Population and Sample

The research population consists of all employees involved in the Centralized Payment Digitalization Program at PLN UIP3B Sulawesi, particularly within the Budget and Finance Division. The sampling technique applied is purposive sampling, with inclusion criteria as follows:

1) Employees with work experience ≥ 1 year.
2) Actively involved in using digital payment systems.

Referring to the guidelines of Hair et al. (2019), , the minimum sample size for PLS-SEM is five times the number of indicators, with a recommended minimum of 50 respondents. In

this study, 78 valid responses were successfully collected, indicating that the sample size is adequate for structural model analysis.

3.3. Research Instrument

Data were collected using a closed-ended questionnaire measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The research instrument measures three latent variables: Payment Digitalization (X), HR Competence (M), and Internal Control System Effectiveness (Y). All constructs are modeled as reflective measurement models and adapted from established theories and prior studies, as summarized in Table 1.

Table 1. Research Variable Operationalization

Variable	Main Indicators/Dimensions	Source/Original Researcher	Measurement Scale
Payment Digitalization (X)	System integration, ease of access, transaction security, time efficiency.	Susanto & Meiryani (2019)	Likert 1–5
HR Competence (M)	Digital knowledge, technical capabilities, adaptability, training and work experience	Spencer & Spencer (2008)	Likert 1–5
ICS Effectiveness (Y)	Financial report reliability, risk control, procedural compliance, and operational efficiency.	COSO Framework (2013); Sutaryo (2020)	Likert 1–5

Table 1 displays the details of research variables comprising three main constructs: Payment Digitalization (X), HR Competence (M), and ICS Effectiveness (Y). Each variable is measured based on theoretical indicators from reliable sources such as Susanto & Meiryani (2019), Spencer & Spencer (1993), and the COSO Framework (2013).

3.4. Data Collection Procedure

Primary data were obtained through online questionnaire distribution using Google Forms, accompanied by direct verification with relevant work units to ensure response accuracy. Secondary data were collected from internal PLN documents, digitalization reports, and supporting academic literature. All responses were screened to ensure completeness and consistency prior to analysis.

3.5. Data Analysis Technique

Data analysis was conducted in two main stages using SmartPLS 4.0. First, the measurement model (outer model) was evaluated to assess validity and reliability. Convergent validity was examined using Average Variance Extracted (AVE ≥ 0.50), while discriminant validity was assessed using the Fornell–Larcker criterion. Construct reliability was evaluated through Cronbach's Alpha and Composite Reliability (CR ≥ 0.70).

Second, the structural model (inner model) was analyzed to test the hypothesized relationships among variables. The evaluation included R-square values, path coefficients, and t-statistics, obtained through the bootstrapping procedure with a significance level of 0.05. Mediation analysis was performed to examine the role of HR competence as an intervening variable. Descriptive statistics were processed using Microsoft Excel.

3.6. Research Ethics

This study adheres to established research ethics principles, including voluntary participation, informed consent, and confidentiality. Prior to completing the questionnaire,

respondents were informed about the research objectives and provided consent electronically. All data were anonymized and used solely for academic purposes. Access to raw data was restricted to the researchers to ensure data security, in accordance with social research ethics guidelines (Resnik, 2020).

4. Results and Discussion

4.1. Research Results

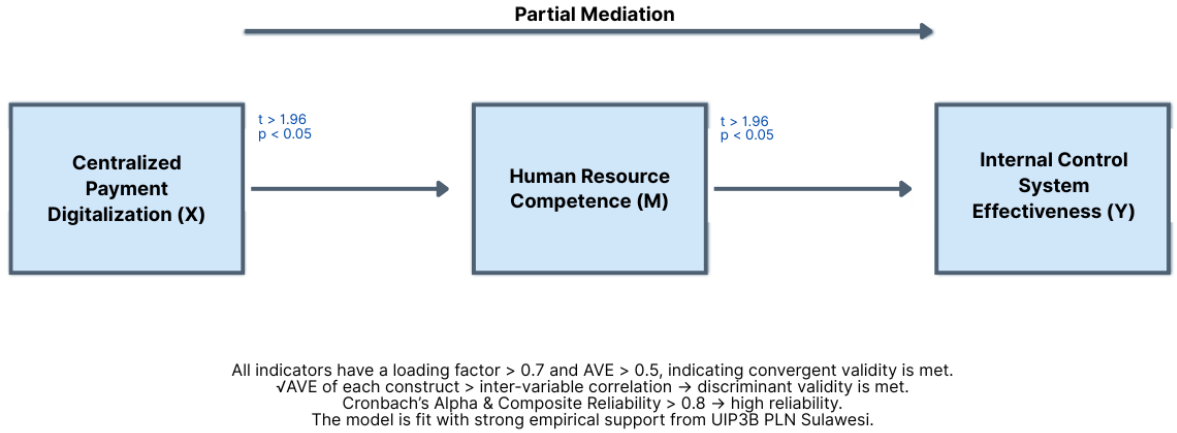

Figure 1. Research Model

Figure 1 shows the research model with relationships among three main variables: Centralized Payment Digitalization (X), HR Competence (M), and Internal Control System Effectiveness (Y). Based on the diagram, HR Competence serves as a partial mediating variable between payment digitalization and internal control system effectiveness. The values of $t > 1.96$ and $p < 0.05$ on each path indicate that the relationships between variables are statistically significant.

This model has also met the criteria for good validity and reliability. All indicators have loading factors > 0.7 and AVE > 0.5, meaning convergent validity is met. Additionally, the √AVE value of each construct is greater than the inter-construct correlation, so discriminant validity is also met. Cronbach's Alpha and Composite Reliability values > 0.8 indicate high instrument reliability.

Overall, these results show that centralized payment digitalization significantly affects internal control system effectiveness, both directly and indirectly through improved HR competence. This model has a strong fit and is empirically supported at PLN UIP3B Sulawesi, so it can be concluded that proper digitalization implementation can improve internal control effectiveness when supported by adequate human resource competence.

4.2. Discussion

Research results show that centralized payment digitalization significantly improves HR competence, which then contributes to internal control system effectiveness. This finding is consistent with literature emphasizing that digital transformation is not only about technology adoption but also drives the need for human competence development. Seipalla et al. (2024) confirm that digitalization in HR management improves the efficiency of recruitment, selection, orientation, training and development processes, and that technology facilitates collaboration and interaction that ultimately enhances employee productivity.

The realization that HR competence affects internal control effectiveness aligns with research showing that HR competence particularly professional knowledge, experience, and

understanding of control procedures plays an important role in reporting quality and internal control. Sinosi et al. (2025) found that HR competence significantly improves the accuracy of local government financial reporting through the integration of strong internal control systems. Thus, HR is not a passive variable but rather an agent that implements, assesses, and adjusts existing control mechanisms.

The partial mediation finding obtained shows that HR competence is not just a direct influence but serves as an indirect path that strengthens the relationship between digitalization and control effectiveness. This aligns with digital transformation literature showing that technology alone is not sufficient; its implementation success is influenced by human and organizational factors. Zervas & Triantari (2025) note that HR practices positively influence employee digital competence, but their effectiveness depends on organizational culture. Mahmoud et al. (2025) emphasize that centralized payment digitalization provides a technological "platform," but HR competence becomes a prerequisite for internal control through that platform to function optimally.

From a practical implications perspective, these results indicate that institutions such as PLN UIP3B Sulawesi need to view centralized payment digitalization not merely as a technology project but as a program integrated with HR development. Institutions must ensure that HR has adequate digital and control competence through training, certification, and continuous development. This is supported by findings from Rustam et al. (2024) who conclude that HR development strategies in the digital era must include continuous learning, digital literacy, and rapid skill adaptation.

The implementation of payment digitalization plays a strategic role in strengthening the effectiveness of organizational financial governance through more transparent and efficient internal control systems (Alya et al., 2024). Digitalization enables transactions to occur in real-time, reduces the potential for manual errors, and enhances financial data tracking and auditing capabilities. This aligns with findings by Wang et al. (2023) that digital transformation significantly affects the improvement of internal control system effectiveness through automation and information technology-based oversight. The implementation of integrated digital payment systems also provides a basis for improving financial reporting accuracy and administrative process efficiency in public and private organizations.

In this context, human resource (HR) competence becomes a determining factor for digitalization success. HR with digital literacy, technical capabilities, and procedural understanding can operate and oversee centralized payment systems optimally. High HR competence ensures that digital systems can function according to design and can adapt to technological and organizational policy changes. Research by Sinosi et al. (2025) shows that HR competence significantly affects internal control effectiveness because competent individuals can identify risks, assess system reliability, and ensure compliance with financial accountability standards. Additionally, employees' technological mastery has been proven to strengthen the relationship between digital system implementation and the effectiveness of control function implementation in public sector organizations (Suhardi, 2025).

Internal control systems function as mechanisms that ensure organizational activities proceed according to operational, financial, and compliance objectives. In the digital era, internal control not only focuses on administrative procedures but also on information technology risk mitigation, data integrity, and digital transaction security (Haryanto & Setiawan, 2022). Study by Wang et al. (2023) shows that the implementation of internal control integrated with digital systems strengthens the effectiveness of organizational financial reporting and risk management. The integration of payment digitalization, HR

competence, and internal control systems produces an adaptive and transparent governance mechanism.

Conceptually, the relationship among these three variables is mutually complementary. Payment digitalization provides the infrastructure and systems that enable transaction efficiency and accuracy; HR competence is the main driver for the system to be implemented and controlled properly; while internal control systems function to ensure all digital activities proceed according to accountability principles and data integrity. The synergy of the three creates an efficient, controlled, and governance quality improvement-oriented organizational environment. The empirical results of this research align with public sector digital transformation policy directions that emphasize the importance of integration among technology, human competence, and control systems to realize effective and sustainable financial governance (Suhardi, 2025).

Research results strengthen the premise that digitalization and HR synergistically form the foundation of internal control system effectiveness. Agencies seeking to improve internal control effectiveness through digitalization must invest not only in technology but also in HR competence and supporting organizational culture. Thus, the combination of technology, HR, and internal control becomes an important framework in organizational transformation toward more efficient, accountable, and adaptive governance.

5. Conclusion

This study was conducted to examine the effect of centralized payment digitalization on the effectiveness of the internal control system, both directly and indirectly through human resource (HR) competence. The results demonstrate that centralized payment digitalization has a positive and significant effect on internal control system effectiveness, with HR competence acting as a partial mediating variable. These findings confirm that the success of digital transformation in financial management is not solely determined by technological implementation but is also strongly influenced by employees' capabilities, adaptability, and digital literacy.

From a theoretical perspective, this study contributes to the digital transformation and internal control literature by providing empirical evidence that HR competence plays a strategic mediating role in strengthening the impact of payment digitalization on internal control effectiveness. From a managerial perspective, the results imply that PT PLN (Persero) UIP3B Sulawesi needs to continuously strengthen HR development programs related to financial digitalization, expand inter-unit payment system integration, and conduct periodic evaluations of internal control systems to ensure transparency, accountability, and operational efficiency. In terms of policy implications, these findings can serve as a reference for organizational policies within state-owned enterprises in designing digital transformation strategies that balance technological advancement with human resource readiness.

This study has limitations, as the sample is restricted to finance and budget department employees within the UIP3B Sulawesi environment, which limits the generalizability of the findings. Therefore, future research is encouraged to involve a broader population across different organizational units, incorporate additional contextual variables such as organizational culture or managerial support, and apply mixed-method approaches to obtain a deeper understanding of digital transformation success factors in the public utilities sector. This research was conducted in accordance with ethical research principles, ensuring respondent confidentiality and responsible use of organizational data.

6. References

Aisyah, E. N. A., Nabila, D. S., & Sabrina, M. A. (2024). Penerapan Platform LAPOR Sebagai Sistem Pengaduan Masyarakat Berbasis Digital Di Kota Malang. *Transparansi : Jurnal Ilmiah Ilmu Administrasi*, *7*(1), 92–100. https://doi.org/10.31334/transparansi.v7i1.3892

Alya, B. Z., Hanum, F., Nasirwan, N., Hasan, S., & Wahyuni, D. U. (2024). Peran Digitalisasi Dalam Meningkatkan Efisiensi Pengelolaan Keuangan Daerah (Studi Kasus Pada Kota Medan). *Jurnal Ilmu Ekonomi Dan Bisnis*, *2*(1), 7–15.

Ardiyanti, A., & Susilowati, E. (2024). Perceived Usefulness and Technology Readiness Mediate Perceived Ease of Use and Digital Competence on Technology Adoption of Artificial Intelligence. *Proceedings of International Conference on Economics Business and Government Challenges*. https://doi.org/10.33005/icebgc.v7i1.113

Astuty, W., Zufrizal, Z., Pasaribu, F., & Rahayu, S. (2021). The effects of customer relationship management, human resource competence and internal control systems on the effectiveness of supply chain management in the Indonesian public sector. *Uncertain Supply Chain Management*, *9*(3), 595–602. https://doi.org/10.5267/j.uscm.2021.6.001

Damayanti, A. Y., Iswanaji, C., & Arifah, S. (2024). Pengaruh Pemanfaatan Teknologi Informasi Akuntansi, Kompetensi SDM, dan Pengendalian Internal Terhadap Kualitas Laporan Keuangan Pemerintah Daerah Pada OPD Kabupaten Kebumen. *Journal of Creative Student Research*, *2*(3), 211–224. https://doi.org/10.55606/jcsr-politama.v2i3.3887

Esther, C.-M., & Domingo, R.-S. (2024). The role of digitalization in business and management a systematic literature review. *Review of Managerial Science*, *18*, 449–491.

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on Partial Least Aquares Structural Equation Modeling (PLS-SEM)*. Sage Publication.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24.

Harianto, M. (2024). *PLN: Digitalisasi layanan tekan waktu gangguan listrik jadi 4 menit*. Antara News. https://www.antaranews.com/berita/4507449/pln-digitalisasi-layanan-tekan-waktu-gangguan-listrik-jadi-4-menit

Haryanto, H., & Setiawan, A. (2022). Pengaruh Pengendalian Intern dan Self-Efficacy terhadap Kinerja pada Masa Bekerja secara Online. *Jurnal Riset Akuntansi Dan Keuangan*, *10*(1), 151–164. https://doi.org/10.17509/jrak.v10i1.34184

Junaidi, L. D., & Marviana, R. D. (2025). Analysis Of Factors Determining Factors Of Financial Performance In Tourism Industry Companies In Indonesia. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, *13*(1). https://doi.org/10.37676/ekombis.v13i1.7437

Karimallah, K., & Drissi, H. (2024). Assessing the Impact of Digitalization on Internal Auditing Function. *International Journal of Advanced Computer Science and Applications*, *15*(6). https://doi.org/10.14569/IJACSA.2024.0150687

Maharsi, H. C. (2024). The Growth of Digital Payments in Indonesia: Harnessing Its Influence for SMEs and Indonesia's Competitiveness. *Global South Review*, *6*(2), 54. https://doi.org/10.22146/globalsouth.95934

Mahmoud, M. H., Ali, A. A., Alrifae, A. A., Eitah, R. A., & AlZubi, M. M. (2025). The impact of digital HRM system and digital transformation on HR efficiency with organizational agility as a moderator. *Discover Sustainability*, *6*(1), 1038. https://doi.org/10.1007/s43621-025-01713-9

Ohoiway, A., Mediaty, M., & Pontoh, G. T. (2023). Pengaruh Pengendalian Internal dalam Memediasi Sistem Informasi Akuntansi dan Peran Auditor Internal terhadap Pencegahan Fraud pada Pemerintahan Provinsi Papua Barat. *Innovative: Journal Of Social Science Research*, *3*(3), 10444–10456.

Primadya, R. (2024). *Transformasi Administrasi Aset, PLN Integrasikan Tata Kelola Arsip*

dan Dokumen Berbasis Digital. PT PLN. https://web.pln.co.id/cms/media/siaran-pers/2024/11/transformasi-administrasi-aset-pln-integrasikan-tata-kelola-arsip-dan-dokumen-berbasis-digital/

Resnik, D. B. (2020). *What Is Ethics in Research & Why Is It Important?* National Institute of Environmental Health Sciences.

Rustam, A., Astuti, I. Y., & Safitri, U. R. (2024). Strategies for improving employee competencies in the digitalization era through training and human resource development. *The Journal of Academic Science*, *1*(7), 849–857. https://doi.org/10.59613/bewkpf69

Seipalla, F., Liem, N., Siregar, D. S., Martdana, A., & Paramarta, V. (2024). The Impact of Digitalization on Human Resource Management Practices. *FIRM Journal of Management Studies*, *9*(2), 136–143. https://doi.org/10.33021/firm.v9i2.5553

Setyaningrum, L. I., & Haryanto, H. (2024). Pengaruh Pemanfaatan Teknologi Informasi, Sistem Pengendalian Intern, Kapasitas Sumber Daya Manusia terhadap Kualitas Laporan Keuangan Pemerintah Daerah dengan Komitmen Organisasi sebagai Variabel Moderating (Studi Kasus OPD Kota Palu). *Diponegoro Journal of Accounting*, *13*(4), 1–15.

Sinosi, S. M., Prayitno, A., Nirwana, N., & Darmawati, D. (2025). Human Resource Competence and Internal Control Systems in Regional Government Financial Reporting: A Systematic Review. *INVOICE: JURNAL ILMU AKUNTANSI*, *7*(1), 1–8.

Spencer, L. M., & Spencer, P. S. M. (2008). *Competence at Work models for superior performance*. John Wiley & Sons.

Suhardi. (2025). The Effect of Information Technology, HR Competence, Internal Control, and Organizational Culture on the Quality of Financial Reports. *Jurnal Ilmiah Akuntansi Kesatuan*, *13*(2), 317–326. https://doi.org/10.37641/jiakes.v13i2.3262

Suryanto, S., & Dai, R. R. M. (2025). Digitalisasi Pembayaran Dalam Pengelolaan Keuangan Publik: Strategi Efisiensi Dan Transparansi. *Jurnal Agregasi: Aksi Reformasi Government Dalam Demokrasi*, *13*(1), 96–110. https://doi.org/10.34010/hnta2869

Susanto, A., & Meiryani. (2019). The impact of environmental accounting information system alignment on firm performance and environmental performance: a case of small and medium enterprises s of Indonesia. *International Journal of Energy Economics and Policy*, *9*(2), 229–236. https://doi.org/10.32479/ijeep.7511

Tamang, N. A., & Haliah, H. (2025). The Role of Human Resource Competence and Internal Control on Financial Reporting Quality. *JOURNAL OF MANAGEMENT, ACCOUNTING, GENERAL FINANCE AND INTERNATIONAL ECONOMIC ISSUES*, *4*(4), 942–956. https://doi.org/10.55047/marginal.v4i4.1766

Trimulyana, R. A. (2024). Transformasi Digital dalam Perbankan Syariah dan Dampaknya pada Masyarakat Muslim. *Persya: Jurnal Perbankan Syariah*, *2*(1), 8–12. https://doi.org/10.62070/persya.v2i1.52

Wang, C., Wang, D., Deng, X., & Wang, S. (2023). Research on the impact of enterprise digital transformation on internal control. *Sustainability*, *15*(10), 8392. https://doi.org/10.3390/su15108392

Yahya, A., Hidayat, T., Nurjanah, R., & Nando Dada Pratama. (2023). The Dynamic Impact of Intellectual Capital and Good Corporate Governance on Firm Value: Evidence from Indonesia. *Asian Journal of Management, Entrepreneurship and Social Science*, *3*(3), 742–756. https://doi.org/10.63922/ajmesc.v3i03.460

Zervas, I., & Triantari, S. (2025). Digital HRM Practices and Perceived Digital Competence: An Analysis of Organizational Culture's Role. *Digital*, *5*(3), 34. https://doi.org/10.3390/digital5030034

Zhao, T., Yan, N., & Ji, L. (2023). Digital transformation, life cycle and internal control effectiveness: Evidence from China. *Finance Research Letters*, *58*, 104223.