

Digital Transformation of Villages with Local Wisdom: A Preventive Legal Instrument Against Maladministration Practices of Village Head Positions

Haizul Ma'arif¹, Suhadi²

^{1,2}Program Studi Doktor Ilmu Hukum, Fakultas Hukum, Universitas Negeri Semarang, Semarang, Indonesia

Article Info

Article history:

Received 2026-01-21

Revised 2026-02-11

Accepted 2026-02-17

Keywords:

Local Wisdom

Maladministration

Preventive Law

Village Digital Transformation

ABSTRACT

This research is based on the phenomenon of maladministration practices in the position of Village Head in Jepara Regency, including service delays and illegal levies, which hinder development and infringe on residents' constitutional rights. The urgency of this research lies in the need for digital transformation as a preventive legal instrument to mitigate the risk of abuse of authority through transparency and systemic accountability. The method used in this study is a quantitative approach using path analysis, complemented by the examination of regional regulations, such as the Jepara Regent Regulation on the Electronic-Based Government System (SPBE), and case studies in Rajekwesi Village. The results of the study show that the implementation of e-Government through the Village Information System (SID) and Siskeudes significantly improves the integrity of village leadership in preventing corruption. In addition to the technological aspect, the value of Jepara's local wisdom, especially the philosophy of Ratu Kalinyamat, has proven effective in moderating the relationship between the digital system and leaders' personal honesty. The conclusion of the study emphasizes that the synergy between strict regional regulations, the standardization of digital procedures, and the internalization of cultural ethics is a fundamental strategy for realizing clean, service-oriented village governance.

This is an open-access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Haizul Ma'arif

Faculty of Social Sciences and Humanities, School of Education, Universiti Teknologi Malaysia

Email: Universitas Negeri Semarang, Semarang, Indonesia

1. INTRODUCTION

Village governance in Indonesia is currently undergoing a phase of fundamental transformation driven by advances in information technology and demands for bureaucratic reform [1]. Jepara Regency, a regional government entity with a long history of leadership and governance, faces serious challenges related to the authority of public office at the village level. Maladministrative practices by unscrupulous village heads not only violate citizens' constitutional rights but also hinder the acceleration of development that should

benefit grassroots communities [2]. According to a report from the Central Java Representative Office of the Indonesian Ombudsman, complaints related to village services in Jepara are still dominated by long-standing, protracted issues, illegal requests for imbalances, and the manipulation of documents such as village Letter C data. This phenomenon demonstrates the unmeasured discretion and procedural irregularities exercised by unscrupulous village leaders, who often prioritize services only to their political supporters. Digital transformation plays a crucial role as a preventive legal instrument in reducing maladministration by village heads through increased transparency, accountability, and more systematic governance processes [3]. Numerous pieces of evidence point to the existence of various effective preventive mechanisms; for example, research by [4] emphasizes that smart governance, as a technology-based management approach, can significantly increase efficiency and public participation. Furthermore, [5] specifically notes that regulatory transformation can address weaknesses in the oversight system and the power licensing currently prevalent at the village level.

Key preventive strategies within this digital ecosystem include real-time data integration, transparent digital documentation, systematic administrative processes, and expanded public access to information [1]. However, despite its promise, implementation still faces significant challenges, such as limited digital infrastructure and low digital literacy in rural areas, as noted by [6]. Therefore, the most effective approach requires a collaborative effort among the central government, local authorities, and community stakeholders to build a comprehensive, sustainable digital governance framework.

Digital transformation in village governance is not simply infrastructure modernization, but rather a strategic preventative legal instrument to mitigate the risk of maladministration by village heads. Research [7] indicates that implementing digital technology can close the gap in excessive discretion that often underlies the exercise of power through an automated, transparent monitoring system. Similarly, research [8] on smart villages in Indonesia emphasizes that digitalization fosters an accountable administrative ecosystem, where every policy and village budget allocation can be directly monitored by the community, thereby limiting maladministration. Furthermore, [9] asserts that strengthening digital-based regulatory frameworks serves as an effective internal control mechanism to address power imbalances at the local level. By integrating village information systems into robust legal frameworks, digital transformation systematically shifts leadership patterns from centralized, subjective approaches to more procedural, objective ones, ultimately minimizing the potential for administrative violations in rural areas. Village digital transformation has emerged as a strategic preventive legal instrument to mitigate notification risks through transparency, accountability, and standardization of electronic system-based procedures [1]. This transformation integrates the strength of national regulations with regional policies in Jepara Regency, moderated by local wisdom values such as "Trus Karya Tataning Bumi" (Trus Karya Tataning Bumi) and the exemplary behavior of Queen Kalinyamat, to build a clean and serving village government ecosystem. The digitalization of village bureaucracy is present to formalize each service stage into a system workflow. In a digital system, every citizen request has an indelible digital footprint, so that deliberate actions or deletion of physical files can be detected early by supervisory

authorities at the district level. Against this background, the main problem raised in this study is the effectiveness of digital transformation in mitigating maladministration practices in the Village Head position in Jepara Regency.

The study of public administration has evolved from a conventional approach to modern, dynamic governance, in which, etymologically, administration means serving or fulfilling human needs through a series of cooperative activities. At the village level, government administration is the primary instrument for Village Heads to manage resources and solve public problems. However, without an adequate control system, the flexibility of this position often becomes trapped in inefficiency and maladministration. The principle of Good Government is a key pillar in reforming village bureaucracy, characterized by solid, democratic development management and the ability to prevent practices of collusion, corruption, and nepotism (KKN) [11], [12]. Digital Transformation is defined as the use of information technologies, such as Wide Area Networks and the internet, to transform the relationships among government agencies, citizens, and business actors [13]. Efforts to prevent maladministration in the village head position have now shifted to strengthening preventive legal instruments based on digital oversight and public participation. According to research [14], the role of supervisory institutions, such as the Ombudsman, is vital in ensuring that village appointment procedures comply with regulations. This is supported by the Smart Village concept outlined in [15], where the integration of information technology serves as a "digital fence" that limits the subjective discretion of village heads, enabling real-time, transparent accountability for every administrative action.

Theoretically, the effectiveness of digital transformation in preventing maladministration is supported by the Principal-Agent theory, in which the community acts as the principal (trust provider) and village officials as the agent (executor of the trust) [16], [17]. Maladministration often arises from asymmetric information, in which agents have broader access to information than principals, creating opportunities for moral hazard. With the Village Information System (SID) and financial management applications such as Siskeudes, this information asymmetry can be significantly reduced because communities can independently access budget data, service status, and village regulations. This enables social control functions to operate automatically through digital platforms while simultaneously upholding the General Principles of Good Governance (AAUPB) in all aspects of public services at the village level.

Previous research on village digitalization has generally focused on the managerial and technical efficiencies of software implementation without specifically linking it to the legal aspects of maladministration. Several studies have highlighted how the use of Siskeudes (Village Financial System) can improve the orderliness of village financial reporting, but few have examined how digital records serve as evidence of violations of the Village Head's authority. Furthermore, previous studies often ignore the sociological-juridical dimension of integrating local wisdom into digital oversight systems. In Jepara Regency, existing literature is still limited to general evaluations of public service performance, without addressing specific administrative dispute resolution, such as cases of land document manipulation or systemic delays in population document services.

The uniqueness of this research lies in the synthesis of digital transformation as a preventative legal instrument with the values of Jepara's local wisdom in addressing maladministration practices specific to the Village Head position. A gap analysis shows that, despite the availability of digital systems, there is a lack of research on how system workflows can address the gap in absolute discretion that has been the root of maladministration in rural areas. This paper addresses this gap by analyzing digital transformation not merely as a technical tool but also as a form of restructuring power for greater legal accountability. The purpose of this study is to analyze the urgency and effectiveness of digital transformation in villages in Jepara Regency for preventing maladministration and to formulate an information system integration model that ensures legal certainty for villagers.

2. METHOD

This study uses a quantitative approach with path analysis because it has an intermediate variable [18]. This study was conducted to analyze the influence of Digital Transformation on the integrity of village heads in mitigating maladministration in Jepara, analyze the influence of local wisdom on the integrity of village heads in mitigating maladministration in Jepara Regency, and analyze the influence of local wisdom whether it can be a moderating variable between Digital Transformation on the integrity of village heads in mitigating maladministration in Jepara Regency. This study was designed to analyze the influence of Digital Transformation (Variable X) on the integrity of Village Heads in mitigating maladministration in Jepara Regency (Variable Y), by placing local wisdom (Variable Z) as a moderating variable. The study was conducted in Jepara Regency to examine the extent to which local culture strengthens the relationship between the digital government system and the integrity of village officials. The research locus was determined in Jepara Regency, given the dynamics of bureaucratic transformation that clash with challenges to job integrity, as reflected in the case of administrative disputes in Rajekwesi Village. The research approach includes an analysis of various regional regulations, including Jepara Regent Regulation No. 62 of 2021 concerning SPBE and Jepara Regent Regulation No. 37 of 2023 concerning Non-Cash Transactions, to determine the extent to which these regulations can close the gap left by the personal discretion of corrupt Village Heads. The following is the research population data from villages throughout Jepara Regency:

Table 1. Population Size

No.	Subdistrict	Number of Villages
1	Kedung	18
2	Mayong	18
3	Tahunan	15
4	Welahan	15
5	Nalumsari	15
6	Pecangaan	12
7	Kalinyamatan	12
8	Bangsri	12
9	Keling	12
10	Batealit	11
11	Kembang	11
12	Mlonggo	8
13	Pakis Aji	8
14	Donorojo	8
15	Jepara	5
16	Karimunjava	4
	TOTAL	184

Based on a population of 184 (the number of Villages/Headmen in Jepara Regency) and using the Slovin Formula with a margin of error (e) of 10% (0.1), because the number of samples must be an integer (it is impossible to take a sample of half the people), the results are rounded up. The number of samples taken is 65 Village Headmen/Headmen. Analysis and Verification Methods: Data analysis was carried out using SPSS software across several stages, including descriptive analysis, classical assumption tests (normality, multicollinearity, and heteroscedasticity), and Moderated Regression Analysis (MRA) tests to assess the moderating effect.

3. RESULTS AND DISCUSSION

3.1. Results

Based on the research results, it was found that Digital Transformation has a positive and significant influence on the integrity of village leaders in preventing corruption. Digital Transformation (X) has a t-value of 6.476 with a significance level of 0.000, indicating a very significant increase in transparency in financial allocation. Local Wisdom (Z) has a t-value of 4.923 with a significance level of 0.000, indicating it can strengthen leaders' honesty in implementing the system. Moderation of X by Z yields an F-value of 41.322 with a significance level of 0.000, indicating that the synergy of technology and culture effectively mitigates maladministration and closes the corruption gap.

Table 2. Research Results

Influencing Variables	T-count value	Significance	Impact on Maladministration Prevention
Digital Transformation (X)	6,476	0,000	Significantly increases the transparency of financial allocation.
Local Wisdom (Z)	4,923	0,000	Strengthening the value of honesty of leaders in running the system.
Moderation X through Z	F-count: 41,322	0,000	The synergy of technology and culture effectively closes the gaps of corruption.

The data above shows that a one-unit increase in digital transformation will increase integrity in preventing malfeasance by 0.413. This finding provides the legal basis for the Jepara Regency Government to mandate digitalization in all villages. Digital transformation is not simply a technological trend, but rather a legal strategy to restructure bureaucratic behavior through a system that limits corrupt personal discretion.

The Jepara Regency Government has developed a comprehensive legal framework to support village digital transformation. This regulation serves as operational guidelines to ensure that Village Heads have no legal loopholes to commit maladministration. One key regulation is Jepara Regent Regulation Number 62 of 2021 concerning the Electronic-Based Government System (SPBE), which governs the governance of communication technology from the regency level down to the smallest village unit.

In the area of financial management, the sector most vulnerable to maladministration, the issuance of Jepara Regent Regulation Number 37 of 2023 concerning Non-Cash Transactions in Villages represents a crucial turning point. This regulation requires all Village Budget (APBDesa) expenditure transactions to be conducted through banking mechanisms connected to the Village Financial System (Siskeudes). This is a powerful preventive legal instrument because the transaction process involves an operator (the Head of Finance), a checker (the Village Secretary), and an executor (the Village Head), ensuring there are no unilateral disbursements. Every flow of funds leaves a digital footprint in the banking system that can be audited in real time by the District Inspectorate. With cashless transactions, the opportunity for unscrupulous Village Heads to deduct social assistance funds or request commissions from goods providers in cash at the village office is eliminated. Furthermore, Regent Regulation No. 28 of 2024 concerning Technical Guidelines for Village Fund Allocation (ADD) emphasizes that reports on fund use must be submitted through the Siskeudes application as a prerequisite for subsequent fund disbursement. This mechanism ensures that orderly digital administration is the only pathway for villages to receive fiscal support from the region.

The Village Information System (SID) is a set of tools and processes for using data to support resource management at the village level. In Jepara Regency, this transformation is being realized through the adoption of various platforms such as SIMDESA, Digides, and Sidedi. These platforms have features specifically designed to address potential maladministration. The Application Status Tracking feature in the SIMDESA application,

for example, provides legal certainty for residents. In manual systems, residents often do not know when their documents will be signed; in digital systems, every second of delay is recorded. This forces village officials to work within the time standards set out in the Public Service Standard Operating Procedures (SOPs). The practice of "hiding files" or "prioritizing services for cronies" becomes difficult because the system automatically notifies leaders or supervisors if any files remain pending for too long.

The use of Electronic Signatures (ETS) also eliminates the traditional cause of maladministration, in which the Village Head is often absent when residents need to verify documents. With E-signatures, decision documents or certificates can be digitally signed on mobile devices as long as the Village Head has internet access, ensuring the principle of fast, continuous service is met without the physical constraints of space and time.

The integration of population data in the SID, which is connected to the national Population Administration Information System (SIAP), is also a crucial tool. This prevents "dual residence" or identity fraud, which is often used by village heads to absorb aid funds or commit administrative fraud. The Village Financial System (Siskeudes) application is an initiative of the Financial and Development Supervisory Agency (BPKP) and the Ministry of Home Affairs, designed to oversee village financial management and ensure compliance with laws and regulations. In Jepara Regency, Siskeudes is not merely an accounting application but a legal instrument that limits the Village Head's discretion in managing village funds, which amount to billions of rupiah. The Siskeudes operational process begins with the input of General Regional Government Data and the Village Vision and Mission, which are then translated into the Village Medium-Term Development Plan (RPJMDes) and the Village Government Work Plan (RKPDes). Every budget expenditure must be based on valid activities within the system. If the Village Head attempts to disburse funds for activities outside the planned budget, the system will automatically reject the disbursement due to the lack of an appropriate account code or activity reference. This prevents the practice of "ghost" disbursement of funds or deposits from certain parties that are not based on the village's real needs.

Jepara Regency also implements strict administrative sanctions through Siskeudes. The Jepara Regent has the authority to delay the disbursement of Village Funds (ADD) if the village is found to have an unreasonable Budget Surplus (SILPA) exceeding 30% of the total funds received.¹⁷ This mechanism forces Village Heads to be not only honest but also competent in managing the budget to ensure timely and targeted utilization for infrastructure development and community social services.

The case of alleged maladministration in Rajekwesi Village provides a valuable lesson on the vulnerability of a village bureaucratic system that remains manual and closed. In this case, representatives of the heirs reported repeated denials in requests for administrative documents, such as death certificates and missing marriage certificates. The village head and secretary insisted on requiring power of attorney from all heirs, a requirement residents deemed lacking any clear regulatory basis or standard operating procedures in the village.

The use of Electronic Signatures (ETS) also eliminates the traditional cause of maladministration, in which the Village Head is often absent when residents need to verify

documents. With E-signatures, decision documents or certificates can be digitally signed on mobile devices as long as the Village Head has internet access, ensuring the principle of fast, continuous service is met without the physical constraints of space and time.

The integration of population data in the SID, which is connected to the national Population Administration Information System (SIAK), is also a crucial tool. This prevents "dual residence" or identity fraud, which is often used by village heads to absorb aid funds or commit administrative fraud. The Village Financial System (Siskeudes) application is an initiative of the Financial and Development Supervisory Agency (BPKP) and the Ministry of Home Affairs, designed to oversee village financial management and ensure compliance with laws and regulations. In Jepara Regency, Siskeudes is not merely an accounting application but a legal instrument that limits the Village Head's discretion in managing village funds, which amount to billions of rupiah. The Siskeudes operational process begins with the input of General Regional Government Data and the Village Vision and Mission, which are then translated into the Village Medium-Term Development Plan (RPJMDes) and the Village Government Work Plan (RKPDDes). Every budget expenditure must be based on valid activities within the system. If the Village Head attempts to disburse funds for activities outside the planned budget, the system will automatically reject the disbursement due to the lack of an appropriate account code or activity reference. This prevents the practice of "ghost" disbursement of funds or deposits from certain parties that are not based on the village's real needs.

Jepara Regency also implements strict administrative sanctions through Siskeudes. The Jepara Regent has the authority to delay the disbursement of Village Funds (ADD) if the village is found to have an unreasonable Budget Surplus (SILPA) exceeding 30% of the total funds received.¹⁷ This mechanism forces Village Heads to be not only honest but also competent in managing the budget to ensure timely and targeted utilization for infrastructure development and community social services.

The case of alleged maladministration in Rajekwesi Village provides a valuable lesson on the vulnerability of a village bureaucratic system that remains manual and closed. In this case, representatives of the heirs reported repeated denials in requests for administrative documents, such as death certificates and missing marriage certificates. The village head and secretary insisted on requiring power of attorney from all heirs, a requirement residents deemed lacking any clear regulatory basis or standard operating procedures in the village.

This procedural inconsistency is a hallmark of maladministration. Residents compared this to the previous process, which could easily be done via WhatsApp. This phenomenon demonstrates that without standardized digital standards, public services in villages are highly dependent on the "mood" or "political interests" of village leaders. Using a standardized SID (Standardized Information System), each service type should have a list of requirements locked into the system. If residents have uploaded the requirements according to the SOP (for example, ID cards and family cards), the system will require village officials to process them without the ability to add additional requirements unilaterally outside the system.

The intervention of the Indonesian Ombudsman and the Jepara Police in this case serves as a reminder that public office is not a place to abuse citizens' rights. Digital transformation will provide dual protection: protecting citizens from arbitrariness and protecting village officials from slander, as every decision is based on transparent data and processes.

Information technology is merely a tool; its effectiveness depends heavily on the integrity of the people who operate it. In Jepara Regency, efforts to improve the integrity of village heads can be achieved by integrating local wisdom values deeply rooted in the community's identity. Jepara Regency boasts a central figure, Queen Kalinyamat, a national hero known for her courage, honesty, and leadership vision that transcended her time. The value of "Topo Wudo Sinjang Rambut," which literally means "naked asceticism," is philosophically interpreted as a symbol of a leader's absolute honesty before God and his people. This philosophy teaches that a village leader must be "naked" of personal interests and renounce all forms of deception in managing public affairs.

The Jepara Regency slogan, "Trus Karya Tataning Bumi," which originated from the moon calendar (Chandra Sengkala) in 1549, embodies the concept of continuously working to build and maintain order in the region. In the context of digitalization, "Tataning Bumi" can be interpreted as a commitment to creating orderly village administration through accurate digital data. If a village head truly internalizes these values, village digitalization will not be viewed as an administrative burden, but rather as a path of dedication to upholding the dignity of Jepara's leadership.

Table 3. Integration of Local Wisdom and Digital Transformation

Dimension of Integrity	Relevance to Jepara's Local Wisdom	Applications in Digital Transformation
Honesty	The Philosophy of Topo Wudo Ratu Kalinyamat.	Full transparency in Siskeudes data input without manipulation.
Consistency	Keep Working Spirit (Keep Working).	Discipline in regularly updating the SID data for residents.
Courage	The courage of Queen Kalinyamat against the invaders.	The courage to reject external intervention that wants to damage the village's digital system.
Equity	Kartini's values in emancipation and justice.	Providing equal access to digital services for all levels of society.

The integration of "Digital Integrity" (systemic) and "Cultural Integrity" (personal-ethical) will create a very strong defense against maladministration practices. Village heads with integrity will use digital technology to expedite public services, not to find new loopholes for misconduct.

Achieving digital transformation in villages free from maladministration in Jepara Regency is not as easy as flipping a switch. Structural and cultural barriers must be overcome. Research shows that the main challenges in implementing Village Information

System (SID) in Indonesia include incomplete administrative data, a lack of competent human resources, and low public awareness of village development information. In Jepara Regency, the disparity in digital infrastructure persists, especially in villages far from the city center or those with difficult terrain. Unstable internet connections are often used as a justification for village officials to revert to manual systems that lack supervision.

Furthermore, human resource development is crucial. Many village officials in Jepara remain technologically illiterate, resulting in underutilization of the advanced features of the Village Financial Management System (Siskeudes) or Village Information System (SID). Leadership challenges are also crucial. A paradigm shift from an "elitist bureaucracy" that seeks to be served to a "populist bureaucracy" that serves requires a real commitment from the Village Head. Internal resistance often arises because digitalization is perceived as limiting the freedom of movement and personal power of village leaders. Therefore, strong support from the Regency Government is needed through ongoing development, digital literacy training for village officials, and awards for villages that successfully demonstrate achievements as "Anti-Corruption Villages."

Based on the results and discussion, the following research gaps were identified:

Table 4. Research Gap

Comparative Dimensions	Previous Research Trends	Current Research Focus (Novelty)	Gap Type
Main Focus	Generally, it focuses either on the technical aspects of implementing the Village Information System (SID) or on its managerial effectiveness. [19], [20], [21]	Focusing on Digital Transformation as a Legal Instrument and maladministration/corruption mitigation strategy.	Theoretical Gap
Moderating Variables	Using standard moderating variables such as HR competency or general organizational commitment. [22], [23], [24]	Integrating Local Wisdom, such as the philosophy of Queen Kalinyamat, as a moderating variable of integrity.	Conceptual Gap
Regulatory Approach	Discussing national regulations (Village Law) at a macro level without looking at derivative instruments at the regional level.[25], [26], [27]	Specifically analyzing the legal force of Jepara Regent Regulation (No. 37/2023 & No. 28/2024) as a check and balances mechanism.	Regulatory Gap
System Output	Viewing technology as an administrative tool (correspondence).[19], [28]	Viewing technology as a discretionary elimination system (TTE, Auto-reject Siskeudes, and real-time audit).	Practical Gap
Case Analysis	Often theoretical in nature or general satisfaction surveys.[29], [30]	Using the case of Rajekwesi Village as empirical evidence of the failure of manual systems vs. digital solutions.	Contextual Gap

Previous research on village governance often falls into a dichotomy between technology (as an administrative tool) and culture (as social capital) separately. There is a research gap in the literature on how specific regional cultural values can enhance the effectiveness of digital systems in preventing corruption.

This research fills this gap by statistically proving ($F=41.322$) that Digital Transformation cannot stand alone. The uniqueness of this research lies in the combination of "Digital Integrity" (systemic) with "Cultural Integrity" (ethical). While previous research

may have suggested improving internet infrastructure to address the failure of SID, this study offers a more holistic solution, drawing on local philosophies such as Topo Wudo to overcome internal resistance and bureaucratic egos, major obstacles to digitalization in rural areas.

The main novelty of your research is the discovery that Local Wisdom (Z) is not merely a complement to tradition but rather a determining variable that significantly strengthens the influence of technology on corruption prevention at the village level. This redefines digital transformation from mere "data migration" to "integrity migration." Furthermore, this relationship underscores that preventing corruption at the village level cannot rely solely on "data migration" into digital systems, which is often met with internal resistance. The novelty of this research lies in the concept of "integrity migration," in which local wisdom serves as a catalyst that compels technology to operate optimally in accordance with the General Principles of Good Governance (AAUPB). By integrating mechanical digital integrity with philosophical-cultural integrity, this research makes a real contribution to state administrative law by creating a village bureaucratic system that is not only technically modern but also substantively clean through social control mechanisms inherent in the local community's identity.

4. CONCLUSION

The digital transformation of villages in Jepara Regency has proven highly effective as a preventive legal instrument to mitigate maladministration and corruption in the Village Head position. By implementing systems such as the Village Information System (SID), the Village Finance System (Siskeudes), and cashless transaction mechanisms, the personal discretion of village leaders, often at the root of abuse of authority, can be limited through standardized procedures and transparent digital records. This research also confirms that the success of these technologies is highly dependent on local wisdom, particularly the philosophy of Ratu Kalinyamat, which serves as a moderating force for the leader's personal integrity. The synergy between systemic "digital integrity" and ethical "cultural integrity" creates a clean, accountable model of village governance that guarantees the certainty of citizens' constitutional rights.

The Jepara Regency Government is advised to strengthen the legal framework by mandating digitalization in all villages to eliminate manual service practices that are vulnerable to manipulation. Collaborative efforts are needed to overcome internet infrastructure barriers and improve village officials' digital literacy through ongoing training to ensure optimal use of system features. Furthermore, internalization of local wisdom values, such as the Topo Wudo philosophy, must be integrated into village leadership patterns to overcome internal resistance to transparency. Finally, oversight institutions such as the Inspectorate and Ombudsman need to optimize the use of digital footprints within the system as a real-time audit tool for early detection of maladministration.

ACKNOWLEDGEMENTS

The author thanks Universitas Negeri Semarang.

REFERENCES

- [1] R. Hanifa, "Digital transformation of government administration: Analysis of efficiency, transparency, and challenges in Indonesia," *J. Public Adm. Gov.*, 2024.
- [2] P. S. Franciari and F. X. SUGIYANTO, "Analisis Hubungan IPM, Kapasitas Fiskal, dan Korupsi terhadap Kemiskinan di Indonesia (Studi Kasus 38 Kabupaten/Kota di Indonesia Tahun 2008 dan 2010)," 2012, *Fakultas Ekonomika dan Bisnis*.
- [3] I. Adam and M. Fazekas, "Are emerging technologies helping win the fight against corruption? A review of the state of evidence," *Inf. Econ. Policy*, vol. 57, p. 100932, 2021, doi: 10.1016/j.infoecopol.2021.100932.
- [4] T. Cahya, "Smart Governance: Pendekatan Manajemen Berbasis Teknologi dalam Meningkatkan Efisiensi dan Partisipasi Publik di Pemerintahan Desa," *J. Tata Kelola dan Akuntabilitas Publik*, 2024.
- [5] R. G. Oktavianti, "Transformasi Regulasi dan Penguatan Sistem Pengawasan untuk Mengatasi Ketimpangan Kekuasaan pada Pemerintahan Desa," *J. Huk. dan Kebijak. Publik*, 2025.
- [6] B. Irfan, "Tantangan Infrastruktur dan Literasi Digital dalam Implementasi E-Government di Wilayah Rural," *J. Digit. Nas.*, 2024.
- [7] P. de Camargo Fiorini and C. J. C. Jabbour, "Information systems and sustainable supply chain management towards a more sustainable society: Where we are and where we are going," *Int. J. Inf. Manage.*, vol. 37, no. 4, pp. 241–249, 2017, doi: 10.1016/j.ijinfomgt.2016.12.004.
- [8] A. Pratama, "Smart villages, rural development and community vulnerability in Indonesia: A bibliometric analysis," *Cogent Soc. Sci.*, vol. 9, no. 1, 2023, doi: 10.1080/23311886.2023.2219118.
- [9] A. Wicaksono, "Exploring the roots and solutions of maladministration, power abuse, or corruption in contemporary Indonesian villages," *Pertanika J. Soc. Sci. Humanit.*, 2024.
- [10] A. Wijayanti, J. Damanik, and C. Fandeli, "Analysis of supply and demand to enhance educational tourism experience in the smart park of Yogyakarta, Indonesia," *Economies*, vol. 5, no. 4, p. 42, 2017.
- [11] R. Njatrijani, "Kearifan lokal dalam perspektif budaya Kota Semarang," *Gema Keadilan*, vol. 5, no. 1, pp. 16–31, 2018.
- [12] A. D. Primayanti, I. Chalid, and R. Paula, "AUTHORITY OF VILLAGE ASSISTANTS IN THE FRAMEWORK OF IMPLEMENTING VILLAGE GOVERNMENT," *Tadulako Law Rev.*, vol. 7, no. 1, pp. 132–142.
- [13] X. Zhao and H. D. Xu, "E-government and corruption: A longitudinal analysis of countries," *Int. J. Public Adm.*, vol. 38, no. 6, pp. 410–421, 2015.
- [14] D. Puspitasari, "Peran Ombudsman Republik Indonesia dalam Pencegahan Maladministrasi Pada Pengangkatan dan Pemberhentian Perangkat Desa," *J. Adm. Pemerintah. Desa*, vol. 6, no. 1, 2025.
- [15] A. Wicaksono, "Exploring the Roots and Solutions of Maladministration, Power Abuse, or Corruption in Contemporary Indonesian Villages," *Pertanika J. Soc. Sci. Humanit.*, vol. 32, no. 3, 2024.
- [16] E. S. Holle, "Pelayanan Publik Melalui Electronic Government: Upaya Meminimalisir Praktek Maladministrasi Dalam Meningkatkan Public Service," *Sasi*, vol. 17, no. 3, p. 21, 2011, doi: 10.47268/sasi.v17i3.362.
- [17] N. M. Noviyanti, A. A. G. Raka, and A. A. A. D. Larantika, "Implementasi E-Government dalam Proses Pelaporan Surat Pemberitahuan Pajak Daerah di Kabupaten Badung," *Public Inspir. J. Adm. Publik*, vol. 6, no. 2, pp. 85–96, 2021.
- [18] G. D. Garson, *Path analysis*. Statistical Associates Publishing Asheboro, NC, 2013.
- [19] R. Hidayat, "Pengembangan Sistem Informasi Desa Berbasis Web Menggunakan Metode Waterfall," *J. Tek. Inform.*, 2020.
- [20] A. Prahono and P. T. Kurniawan, "Interoperabilitas Data dalam Sistem Informasi Desa: Tantangan Integrasi Horizontal dan Vertikal," in *Proceeding of National Conference on IT*, 2019.
- [21] A. S. Aribowo and S. Khomsah, "Implementasi Arsitektur Microservices pada Sistem Informasi Desa untuk Skalabilitas Data," *J. Teknol. Inf. dan Ilmu Komput.*, 2021.
- [22] T. Puspa and H. Jati, "The Influence of Information Technology Utilization and Human Resource Competence on the Quality of Village Government Financial Reports," *J. Akunt. dan Keuang.*, 2020.
- [23] N. Sari, "Human Resource Competency as a Moderating Variable in the Implementation of Village Information Systems (SID)," *J. Gov. Public Policy*, 2021.
- [24] S. Wahyuni, "Moderating Human Resource Competency on the Relationship between System Quality and User Satisfaction," *Int. J. Appl. Bus. Int. Manag.*, 2019.
- [25] H. Antlov, L. Dharmawan, and A. Wetterberg, "Village Government, Service Delivery, and the Village Law," *Bull. Indones. Econ. Stud.*, 2016.
- [26] R. Y. Zakaria, "Menghidupkan Kembali Desa: Menuju Kedaulatan Desa atas Nama Undang-Undang Desa," *J. Pemikir. Sociol.*, 2016.

-
- [27] A. J. Bebbington, "The Politics of Village Resources: The Village Law and the Future of Rural Indonesia," *Land use policy*, 2016.
- [28] E. Ellizar, H. Hardeli, S. Beltris, and R. Suharni, "Development of scientific approach based on discovery learning module," in *IOP Conference Series: Materials Science and Engineering*, IOP Publishing, 2018, p. 12101.
- [29] R. A. Wandira, "Evaluasi Persepsi Pengguna (Masyarakat) terhadap Efektivitas Website Desa Menggunakan Metode End-User Computing Satisfaction (EUCS)," *J. Sist. Inf.*, 2021.
- [30] A. Prasetyo and D. Kurniadi, "Survei Kepuasan Masyarakat terhadap Layanan Administrasi Desa Berbasis Elektronik," *J. Manaj. Inform.*, 2019.
-