JOURNAL OF LAW AND ECONOMICS
E-ISSN: 2963-7937, P-ISSN: 2963-9204
Volume 5 Number 2, November 2026, pp 61-70.
DOI: https://doi.org/10.56347/jle.v5i2.416.

Digital Discretion and AI-Based Automated Decisions in Indonesian Administrative Law

Lely Mahartina Khoiru Ummah [1*], Abdalmonem Mohammed [2], Muhammad Wildan Sofi [3]
[1*,2,3] Universitas Islam Negeri Kiai Ageng Muhammad Besari Ponorogo, Ponorogo Regency, East Java Province, Indonesia.

ABSTRACT
The digital transformation of government has led to the adoption of artificial intelligence (AI) to support public services, including complaint chatbots, automated social assistance eligibility assessment systems, and algorithm-based licensing. However, under administrative law, public decisions must be issued by authorized officials in accordance with the principles of legality and accountability. When part of the decision-making process is conducted through an automated system, important legal questions arise: Can automated decisions be categorized as a form of administrative discretion, and who bears legal responsibility when such decisions harm citizens? This study aims to analyze the legal status of AI-based automated decisions in relation to the concept of administrative discretion and to formulate a legal framework that ensures accountability, transparency, and the protection of citizens' rights. This research employs a normative juridical method using statutory, conceptual, and comparative approaches. The analysis focuses on Articles 22–23 of Law No. 30 of 2014 concerning Government Administration, relevant regulations on electronic-based government systems, and practices of digital public services. The findings show that automated decisions cannot be regarded as administrative discretion without a clear legal basis authorizing their use, while legal responsibility remains with the authorized officials or public institutions operating the system. The novelty of this study lies in its conceptualization of "digital discretion" within Indonesian administrative law and its proposal of a risk-based supervision model incorporating a human-in-the-loop mechanism to ensure that the use of AI in public administration remains subject to the rule of law.

ARTICLE HISTORY
Received: 27 February 2026.
Revised: 9 March 2026.
Accepted: 1 November 2026.
Available Online: 13 August 2026.
Published: 1 November 2026.

KEYWORDS
Digital Discretion; Administrative Law; Ai-Based Public Services.

CONTACT Lely Mahartina Khoiru Ummah mahartinalely@gmail.com Universitas Islam Negeri Kiai Ageng Muhammad Besari Ponorogo, Ponorogo Regency, East Java Province, Indonesia.
© 2026 Information KAWANAD Institute

1. Introduction

The development of digital technology, particularly artificial intelligence (AI), has changed the way governments organize and deliver public services. Digital systems are increasingly used to support administrative processes, provide information to citizens, assess applications, and assist government officials in making decisions (Prasetyo & Hudaya, 2014). The development of a data-driven public sector has also encouraged governments to adopt automated systems supported by algorithms to improve the speed and efficiency of administrative processes (OECD, 2019). These developments have created new opportunities for public administration, but they have also raised legal questions concerning the authority, accountability, and responsibility of government officials when administrative processes involve automated systems.

The emergence of automated decision-making creates a particular challenge for administrative law because public decisions are traditionally associated with the exercise of authority by government officials. Administrative discretion provides officials with a degree of freedom to determine an appropriate course of action when existing regulations do not provide sufficiently detailed guidance. In Indonesian administrative law, discretion is therefore not simply unrestricted freedom of action. Its exercise remains subject to legal authority, statutory provisions, and the general principles of good governance. Hadjon (2002) explains discretion as an important instrument that allows administrative officials to act in circumstances where the existing legal framework does not fully regulate the matter. The use of algorithmic systems introduces a different situation because part of the assessment or decision-making process may be performed by a system rather than directly by an official.

This development raises an important legal question: can an automated decision be regarded as a form of administrative discretion? The question becomes more complicated when an AI-based system produces a recommendation or decision that affects the rights or obligations of citizens. If an automated system produces an incorrect or unlawful outcome, it is necessary to determine who bears legal responsibility for that outcome. The issue cannot be addressed only from the perspective of technological capability because administrative decisions remain subject to the principles of legality and accountability. The increasing use of AI in public services therefore requires attention to the relationship between technological systems and the legal authority of public officials.

The issue is particularly relevant because AI is increasingly discussed as a means of supporting public-sector services and administrative processes. AI-based systems may assist government institutions in processing information, responding to complaints, assessing applications, and supporting administrative decision-making. Erison (2024) describes AI as an important technological development for public services and administrative transformation. At the same time, the use of automated systems may create risks related to inaccurate data, algorithmic bias, lack of transparency, and difficulties in identifying responsibility when an automated outcome causes harm. These risks make it necessary to establish clear limits on the use of automated systems in government administration.

The legal position of AI-based decision-making becomes more important when examined in relation to the concept of administrative discretion under Indonesian law. Articles 22 and 23 of Law No. 30 of 2014 concerning Government Administration provide the legal basis for the exercise of discretion by government officials. The provisions establish that discretion is exercised by government officials under certain circumstances and for the benefit of government administration and the public interest. This legal framework raises a further question concerning the extent to which an automated system can participate in a process that traditionally depends on the judgment and authority of an authorized official. If an AI system merely provides recommendations, the official may remain the final decision-maker. However, if a system operates with limited or no human intervention, its relationship with administrative authority becomes more difficult to determine.

The development of electronic-based government systems also adds another dimension to this issue. The implementation of digital government allows administrative services to be conducted through electronic systems, including systems that process information and support government decisions. However, technological automation does not necessarily transfer legal authority from government officials to the system. A legal framework is therefore needed to determine the boundaries between automated assistance, administrative discretion, and legally binding administrative decisions. This distinction is

important to ensure that the adoption of AI does not weaken the principles of legality, accountability, transparency, and protection of citizens' rights.

The transformation of public administration also occurs within regional government. Regional autonomy has provided local governments with greater responsibility for managing public services according to the needs of their communities. Decentralization allows government institutions at the regional level to respond to local administrative needs and public interests. In this setting, the use of digital systems in local public services may create additional questions concerning the allocation of authority and responsibility when automated systems are used in administrative processes. Therefore, the development of AI-based public services should also be considered in relation to the responsibilities of government institutions at different administrative levels.

Although the use of AI in public administration has received increasing attention, the legal status of automated decision-making in relation to administrative discretion requires further examination within the Indonesian legal system. In particular, the relationship between automated systems, the authority of government officials, and legal responsibility needs to be clarified. The concept of “digital discretion” can be used to examine this relationship, but it should not be assumed that the concept already constitutes an expressly recognized category under Indonesian administrative law. Rather, it requires legal analysis based on existing provisions concerning discretion, administrative authority, and accountability.

Based on these considerations, this study aims to analyze the legal status of AI-based automated decisions in relation to administrative discretion under Indonesian administrative law. It also examines the legal responsibility of officials or public institutions when automated systems are used in administrative decision-making and identifies legal limitations that may be applied to ensure accountability and protection of citizens' rights. The study further proposes the concept of digital discretion as a way of understanding the relationship between human administrative authority and AI-based decision-support systems within the framework of the rule of law.

2. Methodology

This study employs a normative juridical method, which examines legal norms, principles, and doctrines governing administrative actions by government authorities. This method is used to examine the validity, limitations, and legal responsibilities of administrative officials in the use of artificial intelligence (AI)-based automated systems as instruments in public decision-making. The analysis applies three approaches: the statutory approach, the conceptual approach, and the comparative approach. The statutory approach examines the relevant provisions of Law No. 30 of 2014 concerning Government Administration, Presidential Regulation No. 95 of 2018 concerning Electronic-Based Government Systems (SPBE), and other relevant legal provisions concerning legality, administrative authority, accountability, and digital government. These legal provisions are examined to determine the legal basis and limitations governing the use of automated systems in administrative decision-making.

The conceptual approach examines relevant doctrines and concepts in administrative law, particularly administrative discretion, the General Principles of Good Governance (AUPB), accountability, and the human-in-the-loop principle in AI governance. This approach is used to clarify the legal relationship between administrative authority and AI-based systems and to examine the proposed concept of digital discretion.

The comparative approach compares the development and legal position of digital discretion in Indonesia and Sudan. The comparison focuses on the legal basis, form of administrative discretion, accountability, transparency and supervision, and legal risks associated with the use of digital systems in public administration. This approach is used to identify differences in the legal and administrative conditions of the two countries and to examine possible approaches to the supervision of AI-based administrative decision-making.

The legal materials used in this study consist of primary, secondary, and tertiary legal materials. Primary legal materials include national legislation and relevant international legal documents concerning AI governance and electronic-based government systems. Secondary legal materials consist of academic books, journal articles, institutional reports, supervisory reports, and previous studies relevant to administrative discretion, AI governance, and digital public services. Tertiary legal materials include legal

dictionaries and encyclopedias used to clarify relevant legal terms and concepts. The legal materials are examined and interpreted systematically to identify the legal basis, limitations, and accountability mechanisms applicable to AI-based administrative decision-making. The analysis uses descriptive qualitative analysis to develop legal arguments concerning the position of AI-based automated systems in administrative decision-making and the protection of citizens' rights. The analysis is directed toward determining whether automated decisions can be categorized as administrative discretion, identifying the party legally responsible for such decisions, and formulating appropriate legal and supervisory principles for the use of AI in digital public services.

3. Results

3.1 The Concept of Discretion in State Administrative Law

The analysis of Law No. 30 of 2014 concerning Government Administration shows that discretion constitutes a legally bounded authority exercised by government officials. Articles 22 and 23 provide a legal basis for government officials to exercise discretion under certain circumstances, particularly when necessary to overcome governmental stagnation and serve the public interest. The exercise of discretion remains subject to statutory provisions and the General Principles of Good Governance (AUPB). The analysis also indicates a distinction between conventional administrative discretion and AI-assisted decision-making. Conventional discretion is exercised directly by officials who possess legal authority and who assess circumstances that are not fully regulated by existing provisions. By contrast, an AI-based system can process data and generate recommendations, but the system itself does not possess the legal authority of a government official. Therefore, an AI-generated output cannot automatically be regarded as an administrative decision merely because it is produced through an automated process (Alon-Barkat & Busuioc, 2023; Enarsson *et al*., 2022).

3.2 Transformation of Administrative Discretion in the Digital Age

The analysis demonstrates that the use of AI changes the technical process through which administrative decisions are prepared. AI systems can process large volumes of information and generate recommendations that may assist government officials in making decisions. Two forms of decision-making can be distinguished: AI-assisted decision-making and fully automated decision-making. In AI-assisted decision-making, the system provides recommendations while an authorized official remains responsible for reviewing and validating the result. In fully automated decision-making, the system produces an outcome without meaningful human intervention. The results indicate that this distinction is legally significant because administrative authority remains attached to authorized government officials or institutions. AI therefore functions primarily as a decision-support instrument rather than as an independent holder of administrative authority.

3.3 Delegation, Validation, and Objection Access

The analysis identifies three important elements in the governance of AI-assisted administrative decisions: the scope of automation, human validation, and access to objection mechanisms. Routine administrative processes based on objective and relatively low-risk criteria may be more suitable for automated processing. However, decisions that have substantial consequences for citizens, such as permit revocation, social assistance eligibility, or administrative sanctions, require stronger human supervision. A risk-based approach can therefore be used to determine the appropriate level of human involvement (OECD, 2023). The results further show that a human-in-the-loop mechanism provides an important accountability safeguard. Authorized officials should review AI-generated outputs, assess their conformity with applicable legal requirements, and validate the final decision. Electronic records, electronic signatures, and audit trails can support the traceability of the decision-making process (Enarsson *et al*., 2022; Bignami, 2022). The analysis also identifies the importance of administrative objection mechanisms. Citizens affected by automated or AI-assisted decisions should have access to mechanisms for challenging decisions and obtaining sufficient information about the reasons underlying those decisions.

3.4 Legal Liability in Automated Decisions

The results indicate that automation does not eliminate administrative accountability. Where AI is used as a decision-support instrument, responsibility remains connected to the authorized government official or institution that makes or validates the final administrative decision. The analysis of the SyRI case in the Netherlands demonstrates that government use of algorithmic systems may raise significant legal concerns, particularly regarding privacy, proportionality, transparency, and legal safeguards. The case illustrates the importance of establishing an adequate legal framework when government authorities use systems that process personal data for administrative purposes.The materials concerning Indonesia also indicate that problems with the accuracy and management of social welfare data have affected the distribution of social assistance. However, the available material does not establish that these problems were necessarily caused by AI-based decision-making. Therefore, the finding is more appropriately stated as a problem of administrative data accuracy and management rather than as evidence of AI-related maladministration.

3.5 Legal Restrictions and Supervision of AI Use

The results identify several requirements for the responsible use of AI in public administration. These include the existence of a clear legal basis for the use of automated systems, proportionate human supervision particularly for decisions affecting citizens' rights and obligations, algorithmic transparency concerning the relevant criteria and decision-making processes, access to reasons and objection mechanisms for affected citizens, and periodic evaluation and auditing of automated systems. The analysis indicates that existing regulations concerning government administration and electronic-based government provide a general legal foundation for the use of digital systems in public administration. However, these regulations do not expressly establish "digital discretion" as an independent legal category. Therefore, the use of AI in administrative decision-making remains subject to existing principles of legality, accountability, transparency, and protection of citizens' rights.

Table 1. Comparison of Manual Discretion and Digital Discretion (AI) in Indonesian Administrative Law

Aspect	Manual Discretion	Digital Discretion / AI-Assisted Decision-Making
Definition	Freedom of action exercised by authorized administrative officials within the limits established by law and AUPB.	Use of algorithmic or AI-based systems to support or partially automate administrative decision-making.
Legal basis	Regulated through the provisions governing discretion under Law No. 30 of 2014.	No specific legal category of "digital discretion" is expressly established; its use remains subject to the existing legal framework.
Responsible party	Authorized government officials and relevant institutions.	Authorized officials and institutions remain responsible for decisions they make or validate.
Validity	Must satisfy the legal requirements governing discretion.	AI output alone does not establish administrative authority; validity depends on the applicable legal basis and authorized decision-maker.
Advantages	Allows contextual consideration of circumstances that are not fully regulated.	Supports efficiency, consistency, and speed in administrative processing.
Risks	Abuse of authority, excessive subjectivity, and maladministration.	Algorithmic bias, inaccurate data, lack of transparency, privacy risks, and difficulties in assigning responsibility.
Position in Indonesian law	Recognized and regulated as an administrative law instrument.	A proposed conceptual category rather than an expressly recognized independent legal category.

3.6 Comparison of Discretion in Indonesia and Sudan

The comparative analysis indicates differences in the legal and institutional frameworks of Indonesia and Sudan.In Indonesia, Law No. 30 of 2014 provides a legal framework for administrative discretion, while Presidential Regulation No. 95 of 2018 provides a framework for electronic-based government systems. However, these regulations do not expressly establish "digital discretion" as an independent category of administrative authority. For Sudan, the materials examined in this study identify the Digital Transformation Strategy 2025 as part of the country's digital transformation policy. However, the available materials do not sufficiently establish the existence or absence of AI-based decision-making throughout Sudanese public administration. Therefore, the finding is limited to the absence of a clearly identified specific legal framework governing AI-based administrative discretion in the sources examined.

Table 2. Comparative Analysis of Administrative Discretion in Indonesia and Sudan

Aspect	Indonesia	Sudan
Legal basis	Law No. 30 of 2014 and Presidential Regulation No. 95 of 2018 concerning SPBE.	The cited materials identify the *Digital Transformation Strategy 2025*, but no specific regulation concerning AI-based administrative discretion is identified.
Form of discretion	Administrative discretion remains exercised by authorized officials; AI may support decision-making.	The cited materials primarily describe conventional administrative discretion.
Accountability	Responsibility remains with authorized officials and institutions.	The cited materials do not establish a specific AI accountability mechanism.
Transparency and supervision	Requires attention to transparency, human review, risk-based supervision, and audit mechanisms.	Digital supervision mechanisms require further development based on the materials reviewed.
Legal risks	Algorithmic bias, data errors, privacy concerns, and disputes concerning automated decisions.	Administrative inefficiency and regulatory limitations associated with digital transformation.

4. Discussion

4.1 The Transformation of Administrative Discretion into Digital Decision-Making

The results demonstrate that the development of AI does not necessarily create a new source of administrative authority. Rather, it changes the manner in which existing administrative authority is exercised and supported. Traditional administrative discretion depends on the judgment of an authorized official. AI-assisted decision-making introduces an additional technological layer into this process by allowing algorithms to process information and generate recommendations. Nevertheless, the legal authority to make an administrative decision remains with the authorized official or institution. This finding supports the view that "digital discretion" should be treated cautiously. It is more appropriate to understand digital discretion as a conceptual framework for analysing AI-assisted administrative decision-making rather than as an independent legal category already recognized in Indonesian administrative law.

4.2 Human-in-the-Loop as a Legal Accountability Mechanism

The findings indicate that human-in-the-loop mechanisms are particularly important when AI systems are used in administrative decision-making. Human involvement should not be understood merely as a technical verification procedure. It also maintains the connection between the technological process and legally recognized administrative authority. An authorized official should therefore be able to review the relevant output, consider the applicable legal provisions, identify potential errors, and provide reasons for the final

decision. This approach is consistent with the principle that administrative authority and responsibility cannot simply be transferred to an algorithm. The greater the potential impact of a decision on citizens' rights and obligations, the stronger the justification for meaningful human review. This supports the application of a risk-based approach to AI governance.

4.3 Transparency, Explanation, and Legal Protection

The findings further demonstrate that transparency is essential when automated systems influence administrative decisions. Citizens should receive sufficient information to understand the basis of a decision affecting their rights or interests. However, the concept of a general and absolute “right to explanation” should be applied carefully. The GDPR provides a useful comparative reference, particularly regarding safeguards for solely automated decision-making, but Article 22 should be interpreted together with the broader transparency and information provisions of the GDPR. For Indonesian administrative law, the relevant principle is that citizens should have meaningful access to reasons, administrative remedies, and judicial review where their rights or interests are affected. This would strengthen procedural fairness without requiring every technical component of an AI system to be disclosed.

4.4 Accountability and Legal Liability

The results demonstrate that AI cannot be used to obscure responsibility for administrative decisions. If an official validates an AI-generated recommendation and adopts it as an administrative decision, the relevant official or institution remains legally accountable within the applicable administrative framework. The SyRI case provides a useful comparative illustration. The case demonstrates that algorithmic government systems must remain subject to legal requirements concerning privacy, proportionality, transparency, and adequate safeguards. This finding has important implications for Indonesia. AI governance in public administration should not focus solely on technological efficiency. It should also establish mechanisms for identifying responsibility when automated systems produce erroneous, discriminatory, or otherwise unlawful outcomes.

4.5 Legal Restrictions and Supervision

The findings suggest that Indonesian administrative law needs to accommodate technological developments without weakening the existing principles of legality and accountability. The current legal framework concerning government administration and the Electronic-Based Government System (SPBE) can provide a foundation for digital government; however, the use of AI-based administrative decision-making requires greater legal clarity. Future regulations should address the types of administrative processes that may be automated, the level of human intervention required according to the risks associated with each decision, responsibility for AI-assisted decisions, requirements concerning data quality and algorithmic transparency, audit and monitoring mechanisms, as well as administrative and judicial remedies available to affected citizens. Such regulation would help ensure that technological innovation in public administration remains consistent with the rule of law while maintaining accountability and protecting citizens' rights.

4.6 Indonesia–Sudan Comparative Perspective

The comparison between Indonesia and Sudan demonstrates that legal readiness is an important factor in determining how AI may eventually be integrated into public administration. Indonesia already has legal instruments governing administrative discretion and electronic government. Nevertheless, a specific legal category of digital discretion has not yet been expressly established. Indonesia therefore faces the challenge of adapting existing administrative law to emerging AI-based decision-making practices.Sudan presents a different situation based on the sources examined. The Digital Transformation Strategy 2025 indicates an orientation toward digital transformation, but the materials do not establish a specific regulatory framework for AI-based administrative discretion. Therefore, Sudan's principal challenge is not simply the adoption of AI technology but the development of legal and institutional mechanisms capable of governing its use. The comparison should not be interpreted as demonstrating that Indonesia has fully implemented digital discretion while Sudan has no digital decision-making. Rather, it demonstrates differences in the legal frameworks and institutional readiness identified in the sources reviewed.

4.7 Digital Discretion as a Model of Legal Adaptation

The concept of shared discretion can be used to explain a potential model of cooperation between human officials and AI systems. Under this model, AI performs computational and analytical functions, while authorized officials retain legal authority and responsibility. This model offers a possible balance between administrative efficiency and legal accountability. AI can assist officials in processing complex information, identifying patterns, and preparing recommendations, while officials retain the responsibility to determine whether the recommendation is legally and substantively appropriate. Accordingly, AI should strengthen administrative decision-making rather than replace the legal authority of government officials.

4.8 Legal and Ethical Implications

The findings reveal a common tension between technological efficiency and protection of citizens' rights. AI can improve the speed and consistency of administrative processes, but algorithmic systems may also reproduce errors, biases, or limitations contained in their data and design. Consequently, the legitimacy of AI-assisted administrative decision-making depends not only on whether the technology functions accurately but also on whether its use satisfies legal principles such as legality, accountability, transparency, proportionality, and protection of citizens' rights. For Indonesia, the principal challenge is to integrate AI into existing administrative law without allowing technological automation to weaken legal accountability. For Sudan, the challenge is to develop an appropriate regulatory and institutional foundation before large-scale adoption of AI in public administration. The discussion supports the proposition that digital discretion should not replace conventional administrative discretion. Instead, it should be understood as a proposed conceptual framework for analysing the interaction between administrative authority and AI-based decision-support systems. The final legal responsibility should remain connected to authorized government officials and institutions, while the intensity of human supervision should correspond to the legal and social risks associated with each administrative decision.

5. Conclusion

This study concludes that Indonesia has a relatively more developed legal foundation for adapting administrative discretion to the digital era through the use of electronic government systems and AI-assisted decision-making. However, the concept of digital discretion should be understood as a proposed conceptual framework rather than an independent legal category expressly recognized in Indonesian administrative law. The use of AI can support administrative decision-making, but legal authority and final responsibility must remain with authorized government officials or institutions. In this context, a hybrid discretion model that combines AI-assisted processes with meaningful human oversight can help maintain the principles of legality, accountability, transparency, and protection of citizens' rights.

Meanwhile, based on the sources examined in this study, Sudan is still developing its digital transformation framework, and no specific legal framework governing AI-based administrative discretion has been clearly identified. Therefore, Sudan faces the challenge of developing appropriate legal and institutional mechanisms before AI can be integrated more extensively into public administration. The comparison between Indonesia and Sudan demonstrates that digital transformation should not be assessed solely in terms of technological development but also in terms of legal preparedness, institutional capacity, accountability, and protection of citizens' rights.

As a recommendation, Indonesia should continue developing clearer regulations concerning AI-assisted administrative decision-making, including the scope of automation, human supervision, algorithmic transparency, accountability, auditing, and mechanisms for administrative and judicial remedies. Sudan may consider developing a similar regulatory framework according to its own legal and institutional context. In both countries, human oversight, transparency, accountability, and legality should remain fundamental principles in the development and implementation of digital discretion.

References

Alon-Barkat, S., & Busuioc, M. (2023). Human–AI interactions in public sector decision making: "Automation bias" and "selective adherence" to algorithmic advice. *Journal of Public Administration Research and Theory, 33*(1), 153–169. https://doi.org/10.1093/jopart/muac007

Asshiddiqie, J. (2019). *Hukum administrasi pemerintahan*. RajaGrafindo Persada.

Asshiddiqie, J. (2021). *Negara hukum, konstitusi, dan demokrasi digital*. Constitution Press.

Bignami, F. (2022). Artificial intelligence accountability of public administration. *The American Journal of Comparative Law, 70*(Supplement_1), i312–i346. https://doi.org/10.1093/ajcl/avac012

Covilla, J. C. (2024). Artificial intelligence and administrative discretion: Exploring adaptations and boundaries. *European Journal of Risk Regulation*. Advance online publication. https://doi.org/10.1017/err.2024.76

Enarsson, T., Enqvist, L., & Naarttijärvi, M. (2022). Approaching the human in the loop: Legal perspectives on hybrid human/algorithmic decision-making in three contexts. *Information & Communications Technology Law, 31*(1), 123–153. https://doi.org/10.1080/13600834.2021.1958860

Erison, Y. (2024). *Transforming public services with artificial intelligence (AI): Latest theory and concept innovation for the future*. Unisda Press.

Hildebrandt, M. (2018). Algorithmic regulation and the rule of law. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 376*(2128), Article 20170355. https://doi.org/10.1098/rsta.2017.0355

Ministry of Investment/BKPM. (2022). *OSS-RBA implementation evaluation report*.

Ministry of Communication and Informatics of the Republic of Indonesia. (2020). *National strategy for Indonesian artificial intelligence 2020–2045*.

OECD. (2019a). *The path to becoming a data-driven public sector*. OECD Publishing.

OECD. (2019b). *Recommendation of the Council on Artificial Intelligence*. OECD Publishing.

OECD. (2023). *Advancing accountability in AI: Governing and managing risks throughout the lifecycle for trustworthy AI* (OECD Digital Economy Papers No. 349). OECD Publishing. https://doi.org/10.1787/2448f04b-en

Ombudsman of the Republic of Indonesia. (2021a). *Report on the results of the maladministrative examination of the distribution of COVID-19 social assistance*.

Ombudsman of the Republic of Indonesia. (2021b). *Results of maladministration checks in public services based on digital systems*.

Plantinga, P. (2024). Digital discretion and public administration in Africa: Implications for the use of artificial intelligence. *Information Development, 40*(2), 332–352. https://doi.org/10.1177/02666669221117526

President of the Republic of Indonesia. (2018). *Presidential Regulation of the Republic of Indonesia Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE)*.

Prasetyo, T., & Hudaya, A. A. (2014). *Filsafat hukum: Perspektif teori, praktik, dan reformasi hukum Indonesia*. RajaGrafindo Persada.

Ridwan, H. R. (2020). *Hukum administrasi negara*. RajaGrafindo Persada.

Santoso, A. P. A. (2025). *Hukum administrasi negara*. Pustaka Baru Press.

Sudan, Ministry of Communications. (2022). *Digital transformation strategy 2025*.

Syahuri, T. (2022). *Hukum pemerintahan elektronik (e-government law)*. Prenadamedia Group.