



# Governance of Digital Public Services and Personal Data Protection in Indonesia

Nova Kharisma<sup>1</sup>

<sup>1</sup> Politeknik Negeri Sriwijaya, Palembang, Indonesia

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## Abstract

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The rapid expansion of digital public services in Indonesia has increased the importance of personal data protection in public sector governance. This study aims to analyze the effectiveness of personal data protection regulation and examine the urgency of strengthening such regulation in the context of digital transformation. Using a normative juridical method with systematic and sociological approaches, this research evaluates relevant legal frameworks and their implementation in public service systems. The findings indicate that although Undang-Undang Nomor 27 Tahun 2022 tentang Perlindungan Data Pribadi provides a comprehensive legal foundation, its effectiveness remains limited due to weak enforcement, fragmented policy integration, and insufficient institutional capacity. Furthermore, the rapid growth of data-driven governance has increased risks related to data misuse and privacy violations, highlighting the urgency of regulatory strengthening. This study concludes that improving enforcement mechanisms, institutional readiness, and policy integration is essential to ensure accountable and trustworthy digital public service governance.



## **1. Introduction**

The rapid development of digital public services in Indonesia has transformed the way government institutions deliver services to citizens, emphasizing efficiency, accessibility, and transparency. The implementation of electronic-based governance systems has expanded significantly in recent years, particularly following national initiatives to modernize public administration. Aminah and Saksono (2021) highlight that digital transformation in government has become a central strategy for improving service delivery and administrative performance. Similarly, Fitriyanti (2024) notes that digital governance plays a crucial role in enhancing institutional effectiveness and public sector innovation. However, the expansion of digital services also introduces new governance challenges, particularly related to the management and protection of personal data. These developments indicate that digital transformation must be accompanied by robust regulatory frameworks to ensure accountability and public trust.

In response to these challenges, the Indonesian government has enacted Undang-Undang Nomor 27 Tahun 2022 tentang Perlindungan Data Pribadi as a comprehensive legal framework for safeguarding personal data. This regulation is intended to provide legal certainty, protect individual rights, and strengthen governance in the digital era. Manurung and Thalib (2022) argue that the establishment of personal data protection law represents a significant milestone in Indonesia's legal system. Christine and Kansil (2022), however, emphasize that the existence of regulation alone does not guarantee effective implementation. In practice, various institutional and technical challenges continue to hinder the

application of data protection principles. These conditions suggest that evaluating the effectiveness of the regulation is essential to understand its actual impact on public service governance.

The issue of personal data protection becomes increasingly critical when viewed in the context of public service delivery, which involves extensive data collection, processing, and storage. Public institutions are required to manage large volumes of citizen data, creating potential risks related to data breaches, misuse, and unauthorized access. Rahman (2025) highlights that vulnerabilities in public sector data management can undermine public trust and weaken governance legitimacy. In addition, Sutarli and Kurniawan (2023) identify that digital threats such as phishing and cyber exploitation are growing alongside the expansion of online services. These risks are further exacerbated by uneven institutional readiness and limited capacity in managing digital systems. Consequently, the governance of personal data in public services has become a pressing issue that requires critical examination. Addressing these challenges is essential to ensure that digital transformation does not compromise citizen rights.

Despite the existence of regulatory frameworks, the implementation of personal data protection in Indonesia faces significant challenges that affect its effectiveness. Rinjani and Firmansyah (2025) identify several obstacles, including weak enforcement mechanisms, lack of coordination among institutions, and limited awareness among public officials. Marwenny et al. (2024) further note that inconsistencies in implementation across sectors contribute to gaps in data protection practices. These challenges are also reflected in broader issues of digital

governance, where integration between policies and operational systems remains limited. Murdhani (2025) emphasizes that digital governance in Indonesia still encounters structural and institutional barriers that hinder its effectiveness. These findings indicate that the effectiveness of personal data protection regulation cannot be assessed solely based on its legal provisions. Instead, it must be evaluated in relation to its implementation within public service systems.

Based on these considerations, this study aims to analyze the effectiveness of personal data protection regulation in supporting digital public service governance in Indonesia and to examine the urgency of strengthening such regulation in the context of ongoing digital transformation. The study adopts a normative legal approach to assess the alignment between regulatory frameworks and implementation practices. By focusing on both effectiveness and urgency, this research addresses two key dimensions of governance that are critical for improving public service delivery. The analysis contributes to a deeper understanding of the challenges and opportunities associated with personal data protection in the public sector. Furthermore, it provides insights into how regulatory frameworks can be improved to support more effective and accountable governance. Through this approach, the study seeks to contribute to the development of participatory, transparent, and service-oriented governance practices.

## **2. Literature Review**

The development of digital governance has significantly transformed public administration by integrating information technology into public service delivery

systems. Digital transformation enables governments to improve efficiency, accessibility, and transparency while reshaping interactions between the state and citizens. Aminah and Saksono (2021) argue that digital governance represents a fundamental shift in administrative practices, requiring institutional adaptation and regulatory support. Similarly, Fitriyanti (2024) highlights that digital transformation enhances governance performance but also introduces new challenges related to accountability and data management. In the context of public services, digitalization increases reliance on data-driven processes, making information governance a central concern. These developments indicate that digital governance must be supported by legal and institutional frameworks that ensure responsible data management. Without such frameworks, the benefits of digital transformation may be undermined by governance risks.

Public service governance in Indonesia is closely linked to principles of good governance, which emphasize accountability, transparency, and responsiveness in service delivery. Bazarah et al. (2021) explain that effective public service systems require alignment between legal norms and administrative practices to ensure equitable and efficient service provision. In addition, Dharmika and Subanda (2023) emphasize that the effectiveness of public services is a key indicator of governance quality. However, the integration of digital technologies into public services introduces new complexities that challenge traditional governance models. These challenges include the management of large-scale data, coordination between institutions, and the need for technological capacity. As public services become increasingly digital, governance frameworks must evolve to address these new

demands. This highlights the importance of examining how regulatory systems adapt to digital transformation.

The issue of personal data protection has emerged as a critical component of digital governance, particularly in the public sector where large volumes of citizen data are processed. Micheli et al. (2020) argue that data governance frameworks are essential for ensuring accountability and responsible data use in the era of digitalization. Similarly, Pemmasani (2022) emphasizes that effective data governance requires risk management strategies and institutional capacity to protect sensitive information. In Indonesia, the enactment of personal data protection regulation reflects an effort to address these challenges within the legal system. However, existing studies indicate that the implementation of data protection frameworks often faces obstacles related to institutional readiness and regulatory enforcement. Rahman (2025) highlights that vulnerabilities in public sector data management remain a significant concern despite regulatory developments. These findings suggest that the effectiveness of data protection regulation depends not only on legal provisions but also on governance capacity.

Despite the growing body of literature on digital governance and data protection, gaps remain in understanding how regulatory frameworks operate in practice within public service systems. Existing studies tend to focus on legal provisions or technological aspects separately, without fully integrating governance and implementation perspectives. Rinjani and Firmansyah (2025) identify that the implementation of personal data protection law in Indonesia is hindered by structural and institutional challenges. In addition, Marwenny et al. (2024) note that

inconsistencies in regulatory application across sectors contribute to uneven data protection practices. These findings indicate that there is a need for a more comprehensive analysis that examines both the effectiveness and urgency of regulation in the context of digital public services. This study addresses this gap by evaluating how personal data protection regulation functions within public service governance and why strengthening such regulation is necessary. Through this approach, the literature is extended by linking legal norms with governance realities

### **3. Methods**

This study employs a normative juridical research method with a systematic and sociological approach to analyze the effectiveness of personal data protection regulation in digital public service governance in Indonesia and to examine the urgency of strengthening such regulation. The normative approach is used to analyze legal norms, principles, and regulatory frameworks governing personal data protection and public services. The systematic approach is applied to interpret legal provisions in a structured manner by examining the relationship between different regulations within the governance framework. In addition, a sociological approach is used to understand the implementation of these regulations in practice, particularly in relation to institutional capacity, governance challenges, and public service delivery. This combination of approaches enables a comprehensive evaluation of both the legal structure and its practical application.

The sources of legal materials in this study consist of primary legal materials, including national legislation and regulatory instruments, and secondary legal

materials such as scholarly articles and academic commentaries related to digital governance and data protection. All materials are selected based on their relevance and academic credibility. The analysis is conducted using qualitative legal interpretation through systematic interpretation and normative reasoning to assess the effectiveness of existing regulations and identify areas requiring improvement. This method allows the study to generate normative conclusions regarding both the implementation and urgency of personal data protection regulation in supporting digital public service governance.

## **4. Results**

### **4.1. Effectiveness of Personal Data Protection Regulation in Digital Public Service Governance**

The findings indicate that the effectiveness of personal data protection regulation in Indonesia remains limited despite the existence of a comprehensive legal framework. The enactment of Undang-Undang Nomor 27 Tahun 2022 tentang Perlindungan Data Pribadi provides a normative basis for protecting personal data in public services. However, the transition from legal provisions to practical implementation has not been fully realized across government institutions. Rinjani and Firmansyah (2025) identify that weak enforcement mechanisms and lack of institutional coordination significantly hinder regulatory effectiveness. In addition, Marwenny et al. (2024) highlight inconsistencies in the application of data protection principles across different sectors of public services. These findings suggest that the existence of regulation alone is insufficient to ensure effective governance.

Institutional capacity plays a crucial role in determining the effectiveness of personal data protection regulation within digital public services. The implementation of electronic-based governance systems requires adequate technical infrastructure, human resources, and administrative coordination. Murdhani (2025) emphasizes that digital governance in Indonesia continues to face structural challenges, including limited institutional readiness and uneven digital capacity across regions. Similarly, Ramadhani et al. (2025) demonstrate that variations in digital service performance can influence public trust in government institutions. These conditions indicate that regulatory effectiveness is closely linked to the ability of institutions to operationalize legal provisions. Without sufficient capacity, compliance with data protection requirements becomes difficult to achieve. This highlights the importance of strengthening institutional readiness alongside regulatory development.

Another critical factor affecting regulatory effectiveness is the lack of integration between data protection policies and digital public service systems. Although digital governance initiatives have been promoted through various regulatory frameworks, coordination between different policies remains limited. Sutarli and Kurniawan (2023) identify that cyber threats such as phishing and data exploitation continue to increase, indicating gaps in the implementation of protective measures. These challenges are further exacerbated by fragmented governance structures and overlapping institutional responsibilities. As a result, the protection of personal data is often treated as a separate issue rather than an integral component of public service governance. This fragmentation reduces the overall effectiveness

of regulation in addressing real-world risks. Therefore, improving policy integration is essential to enhance regulatory effectiveness.

#### **4.2. Urgency of Strengthening Personal Data Protection Regulation**

The urgency of strengthening personal data protection regulation in Indonesia is driven by the rapid expansion of digital public services and increasing reliance on data-driven governance systems. The growth of digital transformation has significantly increased the volume and sensitivity of personal data managed by public institutions. Rahman (2025) highlights that the expansion of digital governance exposes citizens to greater risks of data misuse and privacy violations. In addition, Fitriyanti (2024) emphasizes that digital transformation without adequate safeguards can undermine governance quality and public trust. These developments indicate that strengthening regulatory frameworks is necessary to ensure that digital transformation is accompanied by effective protection mechanisms. Without such improvements, the risks associated with data governance will continue to increase.

Another factor contributing to the urgency of strengthening regulation is the growing complexity of data governance in modern public administration. Micheli et al. (2020) argue that data governance frameworks must adapt to increasingly complex systems characterized by large-scale data processing and interconnectivity. Pemmasani (2022) further emphasizes the importance of risk management strategies in addressing data-related vulnerabilities within public institutions. In Indonesia, the integration of digital systems across government agencies creates new challenges in ensuring data security and accountability. These challenges require regulatory

frameworks that are not only comprehensive but also adaptable to evolving technological conditions. The absence of such adaptability may lead to regulatory gaps and ineffective governance. Therefore, strengthening regulation is essential to address the dynamic nature of digital governance.

Finally, the urgency of regulatory strengthening is closely linked to the need to maintain public trust and ensure accountability in public service delivery. Public trust is a critical component of governance, particularly in digital environments where citizens rely on government systems to manage sensitive information. Prayitno (2023) highlights that technological innovation in public administration must be accompanied by accountability mechanisms to ensure responsible governance. In addition, weaknesses in data protection can lead to reputational risks and reduced citizen confidence in government institutions. These risks are particularly significant in developing countries, where institutional capacity may still be evolving. Strengthening personal data protection regulation is therefore necessary to reinforce trust, improve accountability, and support sustainable digital governance. This underscores the importance of prioritizing regulatory reform in the context of ongoing digital transformation.

## **5. Discussion**

The findings of this study reinforce the argument that the effectiveness of personal data protection regulation in digital public service governance cannot be assessed solely based on the existence of formal legal provisions. Consistent with governance literature, regulatory effectiveness depends on the alignment between

legal norms, institutional capacity, and implementation practices. Overman and Schillemans (2022) emphasize that accountability in public administration is not only a legal obligation but also a perceived condition shaped by institutional performance and governance practices. The results indicate that Indonesia's regulatory framework, while normatively adequate, faces challenges in operationalization due to fragmented implementation and limited institutional readiness. This aligns with broader discussions in digital governance that highlight the gap between regulatory design and practical enforcement. Therefore, the effectiveness of personal data protection regulation should be understood as a function of both legal structure and administrative capability. This perspective suggests that strengthening governance capacity is as important as improving regulatory frameworks.

The urgency of strengthening personal data protection regulation further reflects the evolving nature of digital governance and the increasing complexity of public sector data management. The expansion of digital services has transformed data into a critical asset in governance, requiring robust legal and institutional safeguards. Micheli et al. (2020) argue that data governance in the digital age requires adaptive frameworks capable of responding to technological change and systemic risks. The findings of this study support this view by demonstrating that current regulatory approaches in Indonesia have not fully adapted to the demands of digital transformation. In addition, the need to maintain public trust highlights the importance of integrating accountability and transparency into data governance systems. Weak data protection not only exposes citizens to risks but also undermines the legitimacy of public institutions. These considerations indicate that regulatory

strengthening is not merely a legal necessity but a governance imperative. Consequently, future policy development should focus on creating integrated and adaptive frameworks that align legal norms with institutional practices.

## **6. Conclusion**

This study concludes that the implementation of personal data protection regulation in digital public service governance in Indonesia has not yet achieved optimal effectiveness. Although the regulatory framework, particularly Undang-Undang Nomor 27 Tahun 2022 tentang Perlindungan Data Pribadi, provides a comprehensive legal foundation, its practical application remains constrained by institutional, structural, and governance-related challenges. The findings demonstrate that weak enforcement mechanisms, fragmented policy integration, and limited institutional capacity hinder the realization of effective data protection in public services. As a result, the regulation has not fully succeeded in ensuring accountability, transparency, and protection of citizen data within digital governance systems. These conditions indicate that regulatory effectiveness depends not only on the existence of legal provisions but also on their implementation within administrative practices. Therefore, improving institutional readiness and policy coordination is essential to enhance the effectiveness of personal data protection regulation.

Furthermore, the study highlights that strengthening personal data protection regulation is an urgent priority in the context of ongoing digital transformation in Indonesia. The increasing reliance on data-driven governance systems has amplified

risks related to data misuse, privacy violations, and declining public trust. These developments underscore the need for regulatory frameworks that are adaptive, integrated, and responsive to evolving technological conditions. Strengthening regulation should involve improving enforcement mechanisms, enhancing institutional capacity, and integrating data protection principles into digital public service systems. In addition, policymakers must ensure that governance frameworks prioritize accountability and transparency to maintain public confidence. This study recommends the development of a more comprehensive and coordinated regulatory approach that aligns legal norms with practical implementation. Such efforts are essential to support sustainable, trustworthy, and service-oriented digital governance in Indonesia.

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