OPTIMIZATION OF DIGITAL TECHNOLOGY TO IMPROVE THE EFFICIENCY AND TRANSPARENCY OF LOCAL GOVERNMENT SERVICES IN INDONESIA

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Abstract

Digital technology has become a key catalyst in improving the efficiency and quality of public services. Local governments, as the entities directly interacting with citizens, face major challenges in optimizing digital technology to meet the demands for efficiency and transparency in public services. This study aims to analyze the impact of digital technology implementation on enhancing the efficiency and transparency of public service delivery in Indonesia's local governments. Using a literature review method, this research examines recent studies related to the adoption of e-Government, public service information systems, and the implementation of the Electronic-Based Government System (SPBE). The analysis shows that digital technology accelerates administrative processes, reduces operational costs, and increases public accountability. However, disparities in infrastructure and digital literacy remain key challenges, particularly in underdeveloped regions. With strong policy support, equitable infrastructure, and improved human resource capacity, digital transformation has significant potential to strengthen effective and transparent local governance.

Keywords: digital technology, e-Government, public service efficiency, local government, SPBE.

INTRODUCTION

The development of digital technology has revolutionized the way the government serves the community. In the context of modern public administration, digitalization is an important instrument to improve the effectiveness, efficiency, and accountability of bureaucracy. Local governments, as the spearhead of public services, are faced with the need to transform the traditional service system towards digital technology-based services (*digital government*). This concept is in line with the *New Public Management (NPM) paradigm* which emphasizes efficiency, innovation, and results-oriented (Osborne & Gaebler, 1992), as well as the principles *of Good Governance* which demand transparency and public participation (Denhardt & Denhardt, 2015).

The Government of Indonesia has issued *Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE)* as the basis for the implementation of digital transformation in governance. However, infrastructure gaps, digital literacy of apparatus, and resistance to change are still major obstacles in realizing the efficiency and transparency of public services at the regional level.

This study aims to analyze the extent to which the optimization of digital technology contributes to improving the efficiency and transparency of local government services in Indonesia, as well as identifying the challenges and policy strategies needed to strengthen the implementation of digitalization of public services.

LITERATURE REVIEW

1. **The theory of Good Governance and NPMKonsep:** *Good Governance* emphasizes the importance of transparency, accountability, and community participation in the governance process (Dwiyanto, 2018). Meanwhile, *New Public Management* emphasizes the efficiency and performance of the bureaucracy through the application of private sector managerial principles (Osborne & Gaebler, 1992).

2. **Digital Government Maturity ModelLayne and Lee (2001) propose a four-stage model of e-Government development:** *catalogue, transaction, vertical integration, and horizontal integration.* This model helps explain the level of digital readiness of local governments.

3. **SPBE and the National Policy on Government Digitalization SPBE aim to realize an integrated government through the effective and efficient use of information technology (KemenPANRB, 2018).** The implementation of SPBE encourages data integration, system interoperability, and simplification of public service processes.

METHODS

This study uses a qualitative approach with *the literature review method*. Literature sources include scientific articles, books, policy reports, and national and international journals published in the last five years. The literature selection was carried out with the criteria of relevance to the topic of digitization of public services and e-Government in Indonesian local governments. The analysis was carried out thematically to identify patterns of findings, research gaps, and policy recommendations.

RESULTS AND DISCUSSION

1. The Influence of Digital Technology on Public Service Efficiency Various studies show that digitalization speeds up administrative processes, reduces costs, and increases the speed of public service response (Wiranti & Frinaldi, 2023). For example, the implementation of the e-Licensing and e-Tax systems in several urban areas has been proven to reduce service time by up to 50% (Nurlaila et al., 2024).

2. The Role of SPBE in Increasing Transparency and Accountability SPBE encourages public information disclosure through the integration of inter-institutional digital systems. Karunia et al. (2023) found that the quality of IT infrastructure and human resource capabilities have a significant effect on the success of SPBE implementation in Indonesia.

3. Challenges in Implementing Digitalization in Regional Governments Rachmatullah and Purwani (2022) emphasized that digital infrastructure inequality is the main obstacle. In addition, the low digital literacy of regional apparatus reduces the effectiveness of e-Government. Continuous training and organizational reform are needed to overcome change resistance.

4. Digitalization Optimization Strategy for Regional Governments Digital technology optimization requires policy synergy between the central and regional governments. According to the UN E-Government Survey (2022), countries with a high level of cross-level coordination have more effective digital performance. Therefore, strengthening SPBE institutions, investing in infrastructure, and increasing human resource capacity is a strategic step in accelerating regional digital transformation.

5. Comparison of International Digitalization Implementation When compared to the digitalization model in South Korea and Estonia, Indonesia is still in the stage *of vertical integration* (Layne & Lee, 2001), where interoperability between agencies has not been fully achieved. South Korea has reached the stage *of horizontal integration* through cross-sector data integration and a single public service portal (*K-Gov Portal*). This shows the importance of cross-institutional synergy and long-term investment in national

digital infrastructure so that Indonesia is able to achieve a mature and inclusive digital governance stage.

Table 1. Summary of Literature Findings on Efficiency and Transparency
Public Service

No	Researcher (Year)	Research Focus	Key Findings
1	Nurlaila et al. (2024)	Transformation of e-Government in Bima Regency	Digitalization improves the efficiency and transparency of public services
2	Karunia et al. (2023)	Factors of e-Government implementation	Infrastructure and human resources have a significant impact on the success of SPBE
3	Wiranti & Frinaldi (2023)	Efficiency of digital technology in public services	Digitalization reduces costs and speeds up service processes
4	Rachmatullah & Purwani (2022)	Technology infrastructure and digital divide	Infrastructure gaps hinder equitable distribution of public services

CONCLUSIONS AND POLICY IMPLICATIONS

The application of digital technology plays an important role in accelerating bureaucratic processes, increasing efficiency, and strengthening transparency of public services in local governments. However, the gap in infrastructure and digital literacy is still a major obstacle. The central government needs to strengthen cross-regional coordination, ensure equitable distribution of digital infrastructure, and integrate SPBE comprehensively. In addition, increasing the capacity of the apparatus through continuous digital training is the main prerequisite for the success of the government's digital transformation.

POLICY IMPLICATIONS:

1. Local governments need to adopt data-driven policies to support transparency.
2. ASN digital literacy needs to be included in the training curriculum for regional apparatus.
3. Strengthening regional SPBE regulations must be accompanied by measurable implementation supervision.
4. The central government can use best practices from South Korea and Estonia as a model for the development of an integrated digital governance system in Indonesia.
5. Further research is recommended to measure the effectiveness of SPBE implementation through public service performance indicators at the regional level.

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