Research Article

The Impact of Digitalization of Public Administration on Increasing The Efficiency and Transparency of Government Services

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Abstract

The digitalization of public administration has emerged as a strategic approach to bureaucratic reform aimed at improving the efficiency and transparency of government services, particularly in developing countries such as Indonesia. This article seeks to analyze the impact of public administration digitalization on service efficiency and transparency while identifying key factors that influence its effectiveness. The study adopts a qualitative approach using library research by systematically reviewing scholarly books, peer-reviewed journal articles, and official government documents related to digital governance and public sector reform. The findings indicate that public administration digitalization positively contributes to simplifying bureaucratic procedures, accelerating service delivery, optimizing resource utilization, and enhancing information openness and accountability. However, the effectiveness of digitalization is strongly determined by institutional capacity, human resource readiness, policy coordination, organizational culture, and the availability of digital infrastructure. Overall, the study concludes that public administration digitalization can significantly enhance efficiency and transparency when implemented as a comprehensive institutional transformation rather than merely a technological initiative.

Keywords: public administration digitalization; service efficiency; government transparency.

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INTRODUCTION

The rapid advancement of information and communication technology has profoundly transformed governance systems worldwide, including in Indonesia. The digitalization of public administration has become a central strategy for reforming bureaucratic structures that have traditionally been characterized as slow, complex, and insufficiently transparent. In the national context, the Indonesian government has introduced a range of strategic initiatives, most notably the Electronic-Based Government System (*Sistem Pemerintahan Berbasis Elektronik* [SPBE]), aimed at enhancing the quality of public services through the integrated application of digital technologies. The digitalization of public administration is expected to streamline bureaucratic procedures, accelerate service delivery, reduce operational costs, and expand public access to information, thereby supporting the principles of good governance that emphasize efficiency, accountability, and transparency (Mulyadi et al., 2016; Indrajit, 2002).

From a conceptual perspective, efficiency in government services refers to the capacity of public organizations to utilize resources optimally in order to deliver services that are timely, accurate, and of high quality. Transparency, in contrast, pertains to the openness of information, accessibility of public data, and clarity of governmental decision-making processes. Public administration digitalization is widely recognized as a strategic instrument for strengthening both dimensions through service automation, data integration, and the provision of digital platforms that enable citizens to access information and public services in real time (Heeks, 2017; Bannister & Connolly, 2011).

The urgency and relevance of this study are further substantiated by empirical evidence from prior research. Septiani et al., (2022) demonstrated that the implementation of e-government in Indonesia has positively contributed to improving access to and the speed of public service delivery, although persistent challenges remain, particularly in terms of digital literacy gaps and limited infrastructure in certain regions. Similarly, Hibatullah, (2024) found that digital-based public administration reforms enhance bureaucratic efficiency and strengthen governmental accountability; however, their effectiveness is highly contingent upon the readiness of human resources and the consistency of policy support. In addition, Rakhman, (2024), in an analysis of public procurement digitalization, reported that
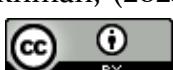
the adoption of digital systems significantly improves transparency and operational efficiency, while also underscoring the need for cross-sectoral integration and stronger regulatory frameworks to ensure long-term sustainability.

Despite the generally positive findings reported in the literature, several limitations remain evident. Most existing studies focus on a single dimension either efficiency or transparency without examining both simultaneously within a comprehensive analytical framework. Moreover, prior research is often fragmented, emphasizing specific case studies or sectors, and thus has not sufficiently linked public administration digitalization to national policy frameworks such as SPBE or to implementation dynamics across different levels of government. Furthermore, contextual factors—including organizational culture, infrastructure readiness, and the digital literacy of both public officials and citizens have not been adequately examined as moderating variables shaping the relationship between digitalization and improvements in service efficiency and transparency (Bannister & Connolly, 2011; Mergel et al., 2019).

Addressing these gaps, the present study seeks to make an academic contribution by examining the impact of public administration digitalization on government service efficiency and transparency in a more holistic manner within the Indonesian context. Accordingly, this study addresses the following research questions: (1) how does public administration digitalization affect the efficiency of government services in Indonesia? (2) how does it influence the transparency of government services? and (3) what factors determine the effectiveness of public administration digitalization in enhancing service efficiency and transparency? In line with these questions, the objectives of this study are to analyze the contribution of public administration digitalization to improving service efficiency, to evaluate its effects on service transparency, and to identify the key enabling and constraining factors influencing the implementation of public administration digitalization in Indonesia.

2. METHOD

This study employs a qualitative research design using a library research approach. This approach is selected because the study aims to analyze, synthesize, and interpret conceptual and empirical findings from previously published literature concerning the impact of public administration digitalization on the efficiency and

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transparency of government services. Library research enables researchers to develop a comprehensive understanding of theoretical frameworks, conceptual developments, and empirical evidence without conducting primary data collection in the field (Zed, 2008; Creswell & Poth, 2016).

Type and Research Approach

The study adopts a descriptive-analytical approach, which seeks to systematically describe the phenomenon of public administration digitalization and analyze its relationship with service efficiency and transparency based on relevant literature. A qualitative approach is applied to explore meanings, patterns, and trends in prior research findings in depth, as well as to identify existing research gaps for further academic inquiry (Sugiyono, 2007; Creswell & Poth, 2016).

Data Sources

The data used in this study are secondary data obtained from several sources, including: (1) scholarly books and academic references addressing public administration, e-government, digital governance, and good governance; (2) peer-reviewed journal articles from reputable national and international journals indexed in SINTA and Scopus, published within the last ten years (2015–2025); and (3) official government documents, such as policies related to the Electronic-Based Government System *(Sistem Pemerintahan Berbasis Elektronik—SPBE)*, institutional reports, and regulations concerning the digitalization of public services. The selection of these data sources is intended to ensure the validity, credibility, and relevance of the data to the research focus (Heeks, 2017; Mergel et al., 2019).

Data Collection Techniques

Data collection was conducted through several systematic stages. First, literature identification was carried out by searching relevant academic sources through databases such as Google Scholar, Scopus, and nationally accredited journal portals using keywords including digitalization of public administration, e-government, public service efficiency, and government transparency. Second, literature selection involved screening sources based on inclusion criteria such as topical relevance, publisher or journal reputation, year of publication, and contextual suitability. Third, literature classification was undertaken by organizing the selected sources into thematic categories, including concepts of public administration digitalization, government service efficiency, public service transparency, and factors

facilitating or constraining digitalization implementation (Zed, 2008; Snyder, 2019).

Data Analysis Techniques

Data analysis was performed by combining several qualitative analytical techniques. First, content analysis was used to identify key concepts, definitions, and principal findings related to public administration digitalization, service efficiency, and transparency. Second, thematic analysis was applied to uncover patterns, trends, and dominant themes emerging from the reviewed literature. Third, critical-comparative analysis was employed to compare findings across studies, identify similarities and differences, and evaluate the strengths and limitations of each study in explaining the impact of public administration digitalization (Bannister & Connolly, 2011; Snyder, 2019).

Through these analytical procedures, the study is expected to produce a comprehensive and well-structured synthesis of the literature and to contribute theoretically to the field of public administration, particularly in relation to the role of digitalization in enhancing the efficiency and transparency of government services in Indonesia.

3. RESULT AND DISCUSSION

Based on the analysis of relevant scholarly literature, the results of this study are organized into three main sub-themes in accordance with the research focus and objectives: (1) the impact of public administration digitalization on the efficiency of government services in Indonesia, (2) the impact of public administration digitalization on the transparency of government services, and (3) factors influencing the effectiveness of public administration digitalization in enhancing efficiency and transparency in government services.

1. The Impact of Public Administration Digitalization on the Efficiency of Government Services

The literature review indicates that the digitalization of public administration generally has a positive impact on improving the efficiency of government services. Such efficiency is reflected in the simplification of bureaucratic processes, acceleration of service delivery time, and optimization of resource utilization within public organizations. Almarabeh and AbuAli (2010) emphasize that the implementation of e-government is capable of reducing complex administrative procedures through service automation and information system integration, thereby expediting decision-making

processes and public service delivery.

In the Indonesian context, Aritonang, (2017) finds that e-government systems contribute significantly to the improvement of public service quality, particularly in terms of service speed and ease of access. This finding is reinforced by Dwiyanto, (2021), who positions administrative digitalization as an integral component of public bureaucratic reform in Indonesia aimed at addressing structural inefficiencies and convoluted bureaucratic practices. Comparatively, Nam, (2019), through a cross-country study, also demonstrates that e-government implementation is positively correlated with increased governmental efficiency, although the magnitude of its impact is highly dependent on each country's institutional capacity.

Furthermore, Janssen & Estevez, (2013) introduce the concept of lean government, which emphasizes the use of digital technology to "do more with fewer resources." From this perspective, public administration digitalization not only enhances operational efficiency but also drives a paradigm shift in bureaucratic work practices toward more adaptive and responsive governance that better addresses societal needs.

2. The Impact of Public Administration Digitalization on the Transparency of Government Services

In addition to efficiency, the literature also shows that public administration digitalization has a significant influence on enhancing the transparency of government services. Transparency is manifested through greater openness of information, improved public access to government data, and increased accountability in decision-making processes. Meijer, (2015), argues that advances in digital technology have shifted the paradigm of governmental transparency from mere administrative disclosure toward an open government model that enables broader public engagement.

Bannister & Connolly, (2014) highlight that information and communication technologies play a crucial role in shaping public values, including transparency and accountability, when appropriately integrated into governmental systems. In the context of public sector reform, Cordella & Bonina, (2012) assert that public administration digitalization can generate public value by enhancing public trust, particularly when digital systems are used to provide accurate, accessible, and accountable information.

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Empirical findings in Indonesia reflect similar trends. Virnandes et al., (2024) reveal that digital transformation within the bureaucracy, particularly in national civil service institutions, contributes to increased transparency and public trust. However, the level of transparency achieved remains highly dependent on system quality, data openness, and institutional commitment to consistently implementing accountability principles(Setyarto, 2024).

3. Factors Influencing the Effectiveness of Public Administration Digitalization

Although the literature demonstrates the positive impacts of digitalization on efficiency and transparency, the findings also identify various factors that influence the effectiveness of its implementation. Anthopoulos et al., (2016) indicate that failures in e-government projects are often caused by non-technical factors, such as weak project governance, lack of inter-agency coordination, and organizational unpreparedness in managing digital change.

Bekkers & Homburg, (2005) argue that public administration digitalization should be understood as both an institutional and technological innovation simultaneously. Without changes in organizational culture and institutional structures, the implementation of digital technologies risks becoming merely an administrative formality without substantive impact. This argument is reinforced by Gil-Garcia et al., (2018), who emphasize the importance of integrating technological, public management, and policy dimensions to ensure successful digital government transformation.

Moreover, Mergel et al., (2019) identify human resource readiness, digital leadership, and organizational adaptability as key determinants of public sector digital transformation. Ubaldi & Okubo, (2020), through the OECD Digital Government Index, also demonstrate that countries with high levels of digital policy coordination and strong institutional capacity tend to derive greater benefits from public administration digitalization.

In the Indonesian context, Dwiyanto, (2021) highlights that digital infrastructure gaps, variations in civil servant capacity, and bureaucratic resistance to change remain major challenges. These factors significantly affect the extent to which public administration digitalization can effectively enhance efficiency and transparency in government services across different levels and regions of government(Setyarto et al., 2025).

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4. CONCLUSION

Based on the review of relevant literature, this study concludes that the digitalization of public administration has a positive contribution to improving the efficiency and transparency of government services. Digitalization facilitates the simplification of bureaucratic procedures, accelerates service delivery, and optimizes the use of organizational resources, thereby enhancing overall administrative performance.

In addition to efficiency, the digitalization of public administration strengthens government transparency through increased information openness, improved access to public data, and greater accountability. The implementation of digital systems supports the realization of more open, responsive, and accountable governance.

However, the effectiveness of public administration digitalization is strongly influenced by institutional and organizational factors, including human resource readiness, digital leadership, policy coordination, bureaucratic culture, and the availability of digital infrastructure. Therefore, public administration digitalization should be understood as a comprehensive transformation process that extends beyond technological adoption to include institutional capacity building. Academically, this study contributes to the public administration literature by emphasizing the importance of a holistic approach to digital government implementation, particularly within the Indonesian context.

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