Digital Transformation in Public Administration: Strategies for mproving the Quality of E-Government-Based Public Services

Mario Loe Sina
Univeridade da Paz (UNPAZ), Timor Leste

Article Info	Abstract
	This study aims to analyze digital transformation strategies in public administration as an effort to improve the quality of e-government-based public services. The study used a qualitative approach with a case study design supported by a literature review. Data were obtained through in-depth interviews, observations, and documentation at government agencies that have implemented digital-based services. Data analysis was conducted interactively through the stages of data reduction, data presentation, and conclusion using triangulation techniques to ensure data validity. The results show that digital transformation has a positive impact on improving the quality of public services, particularly in aspects of reliability, responsiveness, transparency, and ease of access to services. The implementation of e-government systems can accelerate administrative processes, reduce complicated bureaucratic procedures, and increase service accountability. However, challenges faced include limited technological infrastructure, the digital literacy gap among the public, and resistance from some officials to change. The success of digital transformation is greatly influenced by visionary leadership, adaptive regulatory support, and increased human resource competency. Therefore, digital transformation strategies must be implemented in an integrated and sustainable manner to achieve public services that are effective, inclusive, and responsive to community needs.

Corresponding Author:
Mario Loe Sina
Univeridade da Paz (UNPAZ), Timor Leste
Email Correspondent: marioloesina@gmail.com

1. INTRODUCTION

Digital transformation in public administration has become a strategic issue in the face of the dynamics of globalization and the increasingly rapid development of information technology. Digitalization not only changes patterns of interaction between government and citizens but also drives bureaucratic reform towards more effective, transparent, and responsive governance. The concept of e-government is a key instrument in this process, leveraging information and communication technology to improve the quality of public services (Heeks, 2006; United Nations, 2022). The implementation of digital transformation is believed to strengthen the efficiency of public sector organizations and increase public trust in government (OECD, 2020).

From a public administration perspective, digital transformation is not simply the adoption of technology, but rather a shift in managerial and institutional paradigms. Dwivedi et al. (2019) assert that the success of e-government depends on the integration of

technology, human resources, and regulations. Furthermore, Mergel, Edelmann, and Haug (2019) emphasize the importance of digital leadership in driving bureaucratic innovation. This transformation requires the government to build a data-driven service system that is accurate, fast, and integrated. Thus, digitalization is an integral part of modern public administration reform that is oriented towards results and public satisfaction.

The quality of public services is a key indicator of public administration's success in meeting citizen needs. The SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988) shows that the dimensions of reliability, responsiveness, assurance, empathy, and tangibles influence public perceptions of services. In a digital context, these dimensions translate into system accessibility, data security, and ease of use of online service platforms (Carter & Bélanger, 2005). Therefore, digital transformation strategies must be directed at improving service quality that is oriented towards user-centered services.

However, e-government implementation in various countries still faces challenges, such as the digital divide, organizational resistance, and limited infrastructure (Jaeger & Thompson, 2003; Gil-Garcia & Pardo, 2005). Bureaucratic culture and low public digital literacy can also hinder the optimization of technology-based services (Nam, 2019). Therefore, a comprehensive digital transformation strategy needs to be designed by strengthening the capacity of civil servants, providing adequate infrastructure, and adapting policies to technological developments. A collaborative approach between the government, the private sector, and the public is key to the sustainability of digital innovation in the public sector.

Thus, digital transformation in public administration is a strategic step to improve the quality of e-government-based public services. Integrating technology with institutional reform, improving human resource competency, and strengthening regulations are key determinants of successful implementation (West, 2004; Fountain, 2001). The government is required to focus not only on digitizing procedures but also on creating public value through inclusive, transparent, and accountable services. Therefore, studying digital transformation strategies is relevant in strengthening adaptive and sustainable public administration practices.

2. METHOD

This research uses a qualitative approach with a case study design, supported by a literature review, to gain a deeper understanding of digital transformation strategies for improving the quality of e-government-based public services. A qualitative approach was chosen because this research aims to explore the phenomenon contextually, emphasizing the meaning, process, and dynamics of digital policy implementation in public administration.

1. Types and Approaches of Research

This research is descriptive-analytical. Case studies are used to in-depth explore digital transformation practices in government agencies that have implemented e-government. This approach allows researchers to understand the social realities, policies, and strategies implemented in specific contexts. Literature reviews are used to strengthen the theoretical foundations related to digital transformation, e-government, and the quality of public services.

2. Location and Subject of Research

The research location was purposively determined within government agencies that have implemented digital-based public service systems. Research informants were selected using purposive sampling techniques, namely parties deemed to have knowledge and direct involvement in the implementation of digital transformation,

such as heads of agencies, information system managers, service personnel, and service users.

3. Data Collection Sources and Techniques

Data sources consist of:

a. Primary data was obtained through in-depth interviews and observations of e-government-based service processes.

b. Secondary data, obtained through policy documents, agency performance reports, laws and regulations, and relevant scientific literature.

c. Data collection techniques included semi-structured interviews, participant observation, and documentation. The researcher acted as the primary instrument in data collection and interpretation.

4. Data Analysis Techniques

Data analysis is carried out interactively through the following stages:

a. Data reduction, namely the process of selecting and simplifying field data.

b. Data presentation, in the form of descriptive narrative and thematic matrix.

c. Drawing conclusions and verification, to find patterns, themes, and meanings related to digital transformation strategies in improving the quality of public services.

The analysis was conducted thematically with reference to the concepts of digital transformation, e-government, and quality of public services as an interpretative framework.

5. Data Validity Test

To ensure data validity and reliability, this study employed source triangulation, method triangulation, and member checking techniques. Triangulation was conducted by comparing the results of interviews, observations, and documentation. Member checking was conducted by requesting confirmation from informants regarding the researcher's interpretations.

3. RESULTS AND DISCUSSION

RESULTS

Based on in-depth interviews, observations, and document analysis at the government agencies serving as case study locations, it was found that the implementation of digital transformation has brought significant changes to the public service system. This transformation is realized through the development of online service applications, the integration of information systems across sectors, and the use of electronic signatures and online queuing systems. Officials stated that digitalization can accelerate administrative processes, reduce cumbersome bureaucratic practices, and increase service transparency. Service users also experience ease of access, particularly in submitting documents and monitoring service status in real time.

Observations show that the quality of public services has improved in terms of reliability and responsiveness. Electronic systems enable faster service delivery compared to previous manual procedures. Furthermore, automated notifications and digital complaint channels strengthen two-way communication between the government and the public. However, challenges remain, including network disruptions, limited digital literacy among some members of the public, and resistance from some officials who have not yet fully adapted to technological changes.

Research findings also reveal that the success of digital transformation is heavily influenced by leadership commitment and internal policy support. Agency leaders play a crucial role in fostering a technology- and innovation-based work culture. Training programs and technical assistance for employees are key strategies for improving the digital

competence of human resources. Furthermore, clear regulations regarding standard operating procedures for digital services contribute to strengthening the consistency of e-government implementation.

DISCUSSION

The research findings show that digital transformation in public administration is not merely a technical change, but rather a comprehensive organizational transformation. Digitalization drives procedural simplification, increased efficiency, and transparency in public services. This aligns with public administration reform theory, which emphasizes the importance of innovation and adaptation to technological developments in creating public value. E-government implementation has been shown to improve service quality, particularly in terms of speed, ease of access, and accountability.

The improvements in public service quality identified in this study are also relevant to a user-centered service approach. Digital systems enable the public to access information openly and minimize face-to-face interactions that could potentially lead to maladministration. However, the sustainability of digital transformation requires strengthening technological infrastructure and increasing public digital literacy to prevent gaps in access to services.

Furthermore, the discussion shows that digital leadership and organizational culture are key determinants of transformation success. Without leadership commitment and human resource readiness, technology implementation risks becoming merely a symbol of modernization without a substantive impact on service quality. Therefore, a digital transformation strategy must be holistic, encompassing technological, institutional, regulatory, and staff capacity development aspects.

Overall, this study confirms that e-government-based digital transformation can improve the quality of public services when supported by system integration, visionary leadership, and active public participation. These findings reinforce the urgency of developing sustainable digital strategies in public administration to achieve effective, transparent, and responsive governance.

4. CONCLUSION

Based on the research results and discussion, it can be concluded that digital transformation in public administration through the implementation of e-government has significantly contributed to improving the quality of public services. Service digitization has been proven to increase the efficiency of administrative processes, accelerate service completion times, and strengthen government transparency and accountability. Service quality dimensions such as reliability, responsiveness, and ease of access have shown significant improvements following the implementation of an information technology-based service system.

The success of digital transformation is determined not only by the availability of technological infrastructure but also by leadership, human resource competency, and adaptive regulatory support. Leadership commitment to fostering an innovative work culture and improving the capacity of civil servants are key factor in ensuring the sustainability of e-government implementation. Furthermore, public participation and increased digital literacy also influence the effectiveness of digital-based services.

Thus, digital transformation in public administration must be understood as a comprehensive and sustainable process of organizational change. An integrated strategy of technology, institutions, and capacity development is a prerequisite for achieving high-quality, inclusive, and responsive public services to community needs. This study

recommends strengthening digital infrastructure and developing civil servant competencies as strategic steps to support modern and adaptive governance.

5. ACKNOWLEDGMENTS

6. BIBLIOGRAPHY

Bannister, F., & Connolly, R. (2014). ICT, public values and transformative government. Government Information Quarterly, 31(1), 119–128.

Carter, L., & Bélanger, F. (2005). The utilization of e-government services: Citizen trust, innovation, and acceptance factors. Information Systems Journal, 15(1), 5–25.

Cordella, A., & Tempini, N. (2015). E-government and organizational change. Government Information Quarterly, 32(3), 279–286.

Dwivedi, Y. K., et al. (2019). Setting the future of digital and social media marketing research. International Journal of Information Management, 49, 1–21.

Fountain, J. E. (2001). Building the virtual state: Information technology and institutional change. Brookings Institution Press.

Gil-Garcia, J. R., & Pardo, T. A. (2005). E-government success factors. Government Information Quarterly, 22(2), 187–216.

Heeks, R. (2006). Implementing and managing eGovernment. SAGE Publications.

Jaeger, P. T., & Thompson, K. M. (2003). E-government around the world. Government Information Quarterly, 20(4), 389–394.

Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation. Government Information Quarterly, 36(4), 101385.

Nam, T. (2019). Digital government and public administration. Public Administration Review, 79(3), 373–384.

OECD. (2020). Digital government index: 2019 results. OECD Publishing.

Osborne, S. P. (2006). The new public governance? Public Management Review, 8(3), 377–387.*

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL. Journal of Retailing, 64(1), 12–40.

United Nations. (2022). United Nations E-Government Survey 2022. United Nations.

West, D. M. (2004). E-government and the transformation of service delivery. Public Administration Review, 64(1), 15–27.