

Challenges and Strategies in the Implementation of E-Government in Bandar Lampung City: A Comparative Study

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ABSTRAK

Penelitian ini mengeksplorasi tantangan dan pendekatan strategis dalam implementasi e-government di Kota Bandar Lampung melalui analisis komparatif beberapa instansi pemerintah daerah. Menggunakan metode studi kasus kualitatif, data dikumpulkan melalui wawancara, analisis dokumen, dan observasi pada institusi-institusi kunci yang bertanggung jawab atas layanan publik digital. Temuan menunjukkan bahwa adopsi e-government sangat bervariasi antar instansi, dengan hambatan utama meliputi keterbatasan infrastruktur digital, rendahnya literasi digital di kalangan aparatur sipil negara, ketidakkonsistenan prosedur operasional standar, serta lemahnya koordinasi antarinstansi. Namun, penelitian ini juga mengidentifikasi strategi efektif seperti komitmen kepemimpinan, kolaborasi lintas sektor, perencanaan adaptif, dan pelibatan masyarakat yang turut mendorong keberhasilan transformasi digital. Penelitian ini menekankan pentingnya pendekatan tata kelola digital yang holistik dan peka terhadap konteks, dengan mempertimbangkan aspek teknis maupun sumber daya manusia. Temuan ini memberikan wawasan bagi penguatan desain dan keberlanjutan inisiatif e-government di kota menengah yang sedang menjalani modernisasi birokrasi.

Kata kunci: e-government, layanan publik, transformasi digital, pemerintah daerah, strategi implementasi, Bandar Lampung, studi komparatif.

ABSTRACT

This study explores the challenges and strategic approaches in the implementation of e-government in Bandar Lampung City through a comparative analysis of several local government departments. Utilizing a qualitative case study method, data were collected through interviews, document analysis, and observations across key institutions responsible for public digital services. The findings reveal that the adoption of e-government varies significantly across departments, with critical barriers including limited digital infrastructure, low digital literacy among civil servants, inconsistent standard operating procedures, and weak interdepartmental coordination. However, the study also identifies effective strategies such as leadership commitment, cross-sector collaboration, adaptive planning, and community engagement that contribute to more successful digital transformation. The research highlights the need for a holistic and context-sensitive approach to digital governance that addresses both technical and human resource dimensions. These insights can inform future efforts to strengthen the design and sustainability of e-government initiatives in mid-sized cities undergoing bureaucratic modernization.

Keywords: e-government; public service; digital transformation; local government; implementation strategy; Bandar Lampung; comparative study

INTRODUCTION

The advancement of information and communication technology (ICT) has transformed the public sector globally,

encouraging governments to adopt digital tools to improve service delivery, transparency, and citizen engagement. E-government, as a manifestation of digital

transformation in public administration, aims to modernize bureaucratic processes and make them more accessible, efficient, and accountable (Heeks, 2006). In Indonesia, the government has actively promoted e-government through various regulations and strategic roadmaps, including Presidential Instruction No. 3 of 2003 concerning National Policy and Strategy for E-Government Development.

Despite these efforts, the implementation of e-government at the regional level—particularly in second-tier cities such as Bandar Lampung—remains uneven. While some government agencies have successfully digitized administrative processes and public services, others struggle with system integration, limited infrastructure, and resistance from both users and civil servants (Indrajit, 2006). These disparities underscore the need for a more contextual understanding of the challenges and strategic responses in local e-government development.

Bandar Lampung, as the capital city of Lampung Province, serves as a vital administrative and economic hub in southern Sumatra. The local government has introduced various e-government initiatives such as online licensing systems, e-budgeting, and e-planning. However, the success of these programs varies across departments, raising questions about the factors that facilitate or hinder effective implementation (Darmawan, 2019). A comparative study across several agencies within the city can reveal critical insights into organizational readiness, leadership commitment, and user adaptation.

Numerous studies have highlighted infrastructure, human resource capability, and institutional commitment as core challenges in e-government implementation (Gil-García

& Helbig, 2006; Ndou, 2004). These obstacles are often compounded by local bureaucratic culture, fragmented digital systems, and the lack of sustainable policy enforcement. In some cases, e-government is implemented symbolically to satisfy central mandates, rather than to reform service delivery substantively (Sagala & Nurmandi, 2020).

In addition to technical and institutional barriers, public participation and digital literacy also play essential roles in determining the success of e-government. Citizens who lack access to digital platforms or the ability to use them meaningfully are often excluded from online services, thereby undermining the goal of inclusive governance (Bertot et al., 2010). In Bandar Lampung, community engagement and awareness regarding e-government are still limited, especially in marginalized urban areas.

To address these multifaceted challenges, local governments must adopt comprehensive strategies that combine technical innovation, organizational change, and stakeholder collaboration. Leadership commitment, cross-sector partnerships, capacity building, and adaptive policy design are widely considered essential for sustainable e-government implementation (Janowski, 2015). The comparative approach in this study is intended to identify which strategies have proven most effective in specific organizational contexts within Bandar Lampung.

This research focuses on comparing e-government implementation in several departments within the Bandar Lampung City Government, including the Department of Population and Civil Registration, the Office of Communications and Information Technology, and the Department of Investment and Integrated Services. The

comparative dimension allows for a richer understanding of how internal policies, digital ecosystems, and leadership styles influence the performance of e-government initiatives.

By exploring both the challenges and strategic responses, this study aims to provide empirical insights for improving digital governance practices in regional cities. The lessons learned from Bandar Lampung could inform broader policy recommendations for strengthening e-government initiatives in similar urban contexts across Indonesia. The analysis also contributes to the literature on local e-government, which remains underrepresented in the broader discourse dominated by studies from major metropolitan areas.

The study adopts a qualitative research design using case study methodology, including document analysis, interviews, and field observations. This approach enables an in-depth understanding of the contextual factors affecting implementation. Data will be analyzed thematically to capture recurring patterns, unique institutional dynamics, and comparative differences between departments.

Ultimately, this research seeks to bridge the gap between normative expectations of e-government and its practical realities at the local level. Through comparative analysis, it aims to highlight actionable strategies that can enhance the effectiveness, sustainability, and inclusiveness of e-government in Bandar Lampung and similar urban settings undergoing digital transformation.

METHOD

This study employed a qualitative research design using a comparative case study approach to explore the challenges and strategies in the implementation of e-

government in Bandar Lampung City. The comparative method enables researchers to analyze similarities and differences across multiple local government departments involved in digital governance. By focusing on distinct units—such as the Department of Population and Civil Registration, the Office of Communication and Information Technology, and the Department of Investment and One-Stop Integrated Services—the study captures a comprehensive view of institutional dynamics, implementation gaps, and policy responses (Creswell & Poth, 2018).

Data collection was conducted through in-depth semi-structured interviews, document analysis, and participant observation. Key informants included department heads, IT staff, front-line public service officers, and local stakeholders involved in e-government development. The interviews were guided by open-ended questions exploring topics such as institutional readiness, infrastructure, digital literacy, inter-agency coordination, and citizen participation. In addition, policy documents, standard operating procedures (SOPs), and system usage records were reviewed to support triangulation and enhance data credibility (Yin, 2018).

Thematic analysis was used to interpret the data, involving coding of interview transcripts and field notes to identify recurring patterns, contrasts, and institutional practices. Themes such as leadership commitment, staff capacity, infrastructure challenges, and citizen engagement were categorized and compared across departments. The validity of findings was ensured through source triangulation and member checking. The qualitative approach is suitable for this study as it provides deep

contextual understanding of the practical realities behind e-government policy implementation in a local setting (Miles, Huberman, & Saldaña, 2014).

RESULTS AND DISCUSSION

The implementation of e-government in Bandar Lampung City demonstrates varied outcomes across different departments. In the Department of Population and Civil Registration, the adoption of digital services such as online identity card applications and family data updates has significantly improved service speed. However, these gains are not uniform across other departments. The Office of Communication and Information Technology, responsible for coordinating digital infrastructure, still faces internal challenges related to system interoperability and the lack of standardized digital platforms.

Interviews with department staff revealed that infrastructure limitations remain a major barrier to optimal e-government service delivery. Several offices experience slow internet connections and outdated hardware, particularly in subdistrict-level service points. These technical constraints hinder the smooth operation of web-based systems and discourage both civil servants and citizens from utilizing digital platforms effectively (Ndou, 2004).

Another important issue is the varying level of digital competence among civil servants. While some employees are well-trained in using online platforms and service dashboards, others, especially in senior administrative positions, struggle with adopting new technology. The absence of continuous training and a lack of digital culture within the bureaucracy were identified as key contributors to this challenge (Heeks, 2006).

The organizational commitment to e-government varies significantly between departments. In agencies where leaders actively support innovation, such as the Department of Investment and Integrated Services, digital adoption has been more successful. Leadership plays a central role in motivating employees, allocating resources, and ensuring accountability in the digital transformation process (Janowski, 2015). In contrast, departments with passive or transitional leadership exhibit slower adoption and lower system utilization rates.

Citizen participation is also a critical determinant of success. In departments with accessible user interfaces and responsive digital helpdesks, citizen engagement was reported to be high. However, low digital literacy among residents, particularly in suburban and low-income areas, limits the broader use of e-government services. This finding is consistent with Bertot et al. (2010), who emphasize the importance of inclusivity in digital governance.

Document analysis further highlighted that standard operating procedures (SOPs) for digital services are often incomplete or inconsistently implemented. Some departments operate without clearly defined digital workflows, leading to confusion and inefficiencies. The lack of regulatory clarity results in parallel manual and digital systems being used simultaneously, which defeats the purpose of digital transformation and causes redundant administrative burdens (Sagala & Nurmandi, 2020).

Moreover, coordination among departments was found to be weak. There is no integrated data management system that allows real-time sharing of citizen data across departments. This fragmentation forces citizens to

repeatedly input the same information for different services, reducing the efficiency and convenience of e-government. Integrated governance systems such as a single sign-on (SSO) portal or centralized citizen database remain underdeveloped in Bandar Lampung.

Despite these challenges, departments that applied collaborative strategies and stakeholder engagement showed more resilient implementation outcomes. For instance, partnering with local universities for IT training or involving local community leaders in digital literacy campaigns helped bridge the gap between government services and public use. Such initiatives reflect the adaptive capacity of local institutions to contextualize e-government practices (Gil-García & Helbig, 2006).

Comparative analysis reveals that flexibility in strategic planning and responsiveness to feedback are key differentiators in successful e-government departments. Agencies that continuously revise their digital roadmaps based on public input and internal performance evaluations tend to deliver better services. This highlights the importance of dynamic governance models in local e-government development (Janowski, 2015).

In conclusion, while Bandar Lampung has made significant strides in digitizing public services, persistent barriers such as infrastructure gaps, low digital skills, institutional fragmentation, and weak leadership hinder comprehensive success. A tailored, cross-sectoral strategy that addresses both technical and human dimensions is crucial for the sustainability and inclusiveness of e-government initiatives in the city.

CONCLUSION

The study concludes that the implementation of e-government in Bandar Lampung City presents both promising developments and persistent challenges. While certain departments such as the Department of Population and Civil Registration and the Department of Investment and Integrated Services have made meaningful progress in adopting digital services, the overall implementation remains uneven due to a combination of infrastructural, organizational, and human resource constraints.

Key challenges identified include outdated digital infrastructure, varying levels of digital literacy among civil servants, lack of standardized procedures, and poor interdepartmental coordination. These obstacles hinder the efficiency, accessibility, and integration of e-government services across different administrative units. Additionally, limited citizen participation—exacerbated by digital inequality—remains a concern in ensuring inclusive governance.

Despite these challenges, the study also highlights several effective strategies that have contributed to successful digital implementation. These include strong leadership commitment, collaborative planning, adaptive policy revisions, stakeholder engagement, and capacity-building partnerships with external institutions. Departments that actively employ these strategies tend to demonstrate better service outcomes and higher levels of system adoption.

Therefore, the success of e-government in Bandar Lampung depends not only on technological readiness but also on institutional adaptability and community involvement. A more holistic and coordinated approach—emphasizing infrastructure investment, cross-sector collaboration, and continuous training—is essential to strengthen digital

governance. Future policies should also prioritize inclusive access, especially for marginalized groups, to ensure that digital transformation contributes equitably to public service improvement.

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