

Improving Public Service Delivery through E-Government Innovation in Regional Bureaucracy: A Case Study of Disdukcapil Sleman

Sa'adih¹, Ade Fahmi², Decky Perdanaputra³

¹ Universitas Indonesia Mandiri, Indonesia

² Universitas Indonesia Mandiri, Indonesia

³ Universitas Indonesia Mandiri, Indonesia

Email: saadih@gmail.com

ABSTRAK

Penelitian ini menganalisis penerapan e-Government dalam meningkatkan kualitas pelayanan publik di Dinas Kependudukan dan Pencatatan Sipil (Disdukcapil) Kabupaten Sleman. Dengan menggunakan metode deskriptif kualitatif dengan data yang dikumpulkan melalui wawancara, dokumentasi, dan studi pustaka sebelum tahun 2021, penelitian ini menemukan bahwa inovasi seperti aplikasi "SILAKAS" (Sistem Layanan Kependudukan Sleman) dan "PANDAWA" (Pelayanan Administrasi Kependudukan via WhatsApp) telah meningkatkan aksesibilitas, efisiensi, dan transparansi layanan. Meskipun terdapat beberapa kendala teknis dan infrastruktur, hasilnya menunjukkan langkah signifikan menuju reformasi birokrasi dan keunggulan layanan berbasis digital. Penelitian ini berkontribusi pada wacana reformasi administrasi publik daerah dan peran digitalisasi dalam tata kelola pemerintahan daerah.

Kata kunci: pelayanan publik, e-Government, Disdukcapil Sleman, inovasi digital, birokrasi daerah

ABSTRACT

This study analyzes the implementation of e-Government in improving the quality of public services at the Department of Population and Civil Registration (Disdukcapil) in Sleman Regency. Utilizing qualitative descriptive methods with data collected through interviews, documentation, and literature studies prior to 2021, the research finds that innovations such as the "SILAKAS" (Sistem Layanan Kependudukan Sleman) and "PANDAWA" (Pelayanan Administrasi Kependudukan via WhatsApp) applications have improved service accessibility, efficiency, and transparency. Despite some technical and infrastructural constraints, the results indicate significant strides toward bureaucratic reform and digital-based service excellence. The study contributes to the discourse on local public administration reforms and the role of digitalization in regional governance.

Keywords: public service; e-Government; Disdukcapil Sleman; digital innovation; regional bureaucracy

INTRODUCTION

Public services are the most visible manifestation of government performance in the eyes of citizens. The quality, accessibility, and efficiency of such services determine not only citizen satisfaction but also the legitimacy of public institutions (Dwiyanto, 2006). In Indonesia, public service reforms have been institutionalized through Law No. 25 of 2009 on Public Services, which emphasizes transparency, accountability, and responsiveness as essential principles.

However, regional disparities in the delivery of public services remain a significant issue. Many local government institutions struggle with inefficiencies, overlapping authorities, and lack of technological integration (World Bank, 2018). In response to these challenges, several local governments have initiated service innovation programs, particularly through digital transformation or e-Government systems. One such case is the Disdukcapil of Sleman Regency, which has been recognized for its proactive implementation of technology-based services.

The Disdukcapil is responsible for administering civil registration services such as issuance of identity cards (KTP-el), family cards (KK), birth and death certificates, and population data updates. The traditional service delivery process was often criticized for being time-consuming, non-transparent, and prone to bureaucratic delays. In response, Sleman introduced innovations like SILAKAS and PANDAWA to digitalize service access and reduce dependency on physical presence.

E-Government is defined by the United Nations as the use of information

and communication technologies (ICTs) to deliver public services, enhance democratic processes, and support public policy-making (UN DESA, 2020). In the context of Sleman, the objective was to increase public convenience, reduce processing times, and ensure services could continue amid the COVID-19 pandemic. The program aligns with Presidential Regulation No. 95 of 2018 concerning the Electronic-Based Government System (SPBE).

Previous studies have highlighted the benefits and limitations of digital service delivery. For instance, digital systems can increase efficiency but may exacerbate exclusion among citizens lacking digital literacy (Setyowati, 2019). Hence, an assessment of Sleman's experience offers valuable insights into how local governments can balance innovation with inclusivity.

This study aims to examine the effectiveness, challenges, and impacts of e-Government innovation in Disdukcapil Sleman before 2021. The focus is on institutional readiness, community acceptance, and the transformation of service procedures. Findings from this study are expected to contribute to academic discussions and offer policy recommendations for other regions seeking to replicate similar innovations.

Furthermore, this paper adopts the lens of New Public Service theory (Denhardt & Denhardt, 2003), which shifts the focus from controlling bureaucracies to empowering citizens. By doing so, the research emphasizes that technology is not merely a tool for efficiency, but a medium for realizing participatory governance and public value creation.

METHOD

This research utilizes a qualitative descriptive approach with a single-case study design, focusing on the Department of Population and Civil Registration (Disdukcapil) of Sleman Regency. The case study method is deemed appropriate as it allows for an in-depth understanding of a real-world phenomenon within its actual context (Yin, 2014). The phenomenon under scrutiny is the implementation of e-Government-based services through SILAKAS and PANDAWA.

Primary data were collected through semi-structured interviews with ten informants, including Disdukcapil staff, sub-district administrators, and community members who had utilized the services. To maintain research ethics, each informant signed a consent form, and all data were anonymized. These interviews provided firsthand insights into service performance, user experiences, and institutional readiness. Secondary data were gathered from institutional reports, regulatory documents, internal performance assessments, and public satisfaction surveys conducted by the Sleman Regency Government between 2018–2020. Among the key documents were Standard Operating Procedures (SOP), Service Charters, and reports on the utilization rates of SILAKAS and PANDAWA platforms.

The data analysis technique applied in this research follows Miles, Huberman, and Saldana's interactive model (2014), consisting of data condensation, data display, and conclusion drawing/verification. The coding process involved identifying themes such as accessibility, efficiency, transparency, and service satisfaction. Coded data were then cross-compared to triangulate findings.

To ensure the validity and reliability of the research, triangulation was conducted across methods, sources, and investigators. Method triangulation combined interviews with document analysis; source triangulation ensured perspectives from both service providers and users; and investigator triangulation was carried out through peer debriefing with fellow researchers.

The research setting is limited to the period before 2021 to capture the original operational conditions of the digital platforms before the broader digitization efforts triggered by the COVID-19 pandemic. This historical framing allows the study to assess whether the observed innovations were reactive (crisis-driven) or proactive (planned transformation). Overall, the methodological design ensures that the study captures the multidimensional dynamics of digital innovation in public service delivery at the regional level, offering insights for both scholars and practitioners interested in public administration, governance, and ICT in government.

RESULTS AND DISCUSSION

3.1 Digital Transformation through SILAKAS

The SILAKAS (Sistem Layanan Kependudukan Sleman) platform marked the beginning of a shift from manual to online-based population administration in Sleman. Launched in 2018, this platform enabled residents to apply for services such as birth certificates, identity cards, and family cards without physical visits. Data from Disdukcapil Sleman showed that by late 2020, approximately 65% of civil

registration applications were submitted through SILAKAS. This significantly reduced queues at service counters and increased efficiency in document processing.

Service innovations through SILAKAS were supported by the integration of back-office systems with national databases managed by the Ministry of Home Affairs. This integration allowed real-time data synchronization and minimization of duplication. The system also implemented notification features to inform citizens about the status of their applications via SMS or email, thereby improving service transparency.

3.2 PANDAWA and Service Flexibility

PANDAWA (Pelayanan Administrasi Kependudukan via WhatsApp) was introduced in 2020 in response to social distancing needs during the pandemic. This platform allowed users to initiate document requests through WhatsApp by submitting required data and scanned documents. Feedback from the community indicates that PANDAWA was easier to use, especially for residents unfamiliar with web applications.

A survey conducted in late 2020 by Bappeda Sleman reported a satisfaction level of 87% among 250 respondents who used PANDAWA. Respondents highlighted time savings and ease of access as major benefits. However, some limitations included slow response times during peak hours and the need for clearer guidance on required documentation.

3.3 Service Performance Improvements

Comparative analysis of service performance between 2018 and 2020

indicates measurable improvements. The average service time for issuing identity documents decreased from 5 working days in 2018 to 2 working days in 2020. The number of complaints related to delayed services dropped by 42%, according to internal reports of Disdukcapil Sleman.

Institutional capacity was also enhanced through staff training and system upgrades. Disdukcapil partnered with local universities and the Department of Communication and Informatics to provide digital literacy training for frontline officers. These capacity-building efforts ensured the smooth implementation of e-Government tools.

3.4 Constraints and Adaptation

Despite achievements, challenges remained. Internet access inequalities in rural areas posed a barrier to adoption of online services. Elderly residents and marginalized groups often needed assistance to complete digital forms. Moreover, server downtimes and occasional software bugs affected service reliability.

To address these issues, Disdukcapil established help desks in sub-district offices and cooperated with community-based organizations to conduct public outreach. Printed user guides and information posters were distributed widely to increase public awareness and capability to use SILAKAS and PANDAWA.

3.5 Policy and Governance Implications

The case of Sleman underscores the importance of institutional commitment, cross-sectoral collaboration, and user-centered design in public service innovation. It also suggests that local governments must proactively anticipate

digital divides and ensure inclusivity in their transformation efforts. The experience reinforces the relevance of the New Public Service paradigm, where citizen engagement and empowerment are prioritized alongside efficiency.

In summary, the e-Government initiatives of Disdukcapil Sleman serve as a reference model for other regions aiming to modernize their administrative services. The program's emphasis on accessibility, adaptability, and accountability aligns with broader governance objectives at the national level and offers lessons for future digital innovation initiatives in the public sector.

CONCLUSION

The implementation of e-Government at Disdukcapil Sleman through the SILAKAS and PANDAWA platforms represents a significant step forward in regional public service innovation. These initiatives demonstrate how local governments can leverage technology to enhance service quality, accessibility, and transparency. Through digital transformation, Sleman has successfully reduced bureaucracy, improved service delivery time, and increased citizen satisfaction.

The findings reveal that while digital innovation offers clear advantages, its success depends heavily on institutional readiness, public acceptance, and inclusive

design. Constraints such as digital literacy gaps, infrastructure limitations, and system reliability issues must be addressed proactively to ensure that no segment of the population is left behind.

This study reinforces the importance of aligning digital services with the principles of New Public Service, emphasizing citizen engagement, democratic accountability, and responsiveness. The participatory and user-centered approach adopted by Disdukcapil Sleman should serve as a model for other local governments aiming to modernize their public service delivery.

In conclusion, the case of Sleman offers valuable lessons on the implementation of e-Government in the public sector. It shows that digital transformation is not solely about adopting new technologies but also about rethinking how public institutions interact with citizens. With continued support, capacity building, and policy alignment, such innovations can be scaled and sustained across other regions in Indonesia.

Future studies may expand this research by applying comparative analysis across districts or by incorporating longitudinal designs to assess the long-term impact of such innovations. As digital governance continues to evolve, understanding its implications for equity, efficiency, and accountability remains crucial.

REFERENCES

- Denhardt, J. V., & Denhardt, R. B. (2003). *The New Public Service: Serving, Not Steering*. M.E. Sharpe.
- Dwiyanto, A. (2006). *Mewujudkan Good Governance Melalui Pelayanan Publik*. UGM Press.
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd ed.). Sage Publications.
- Setyowati, E. (2019). Digital inclusion and exclusion in Indonesia: Political economy perspectives. *Asian Journal of Communication*, 29(5), 449–465. <https://doi.org/10.1080/01292986.2019.1643842>
- UN DESA. (2020). *E-Government Survey 2020: Digital Government in the Decade of Action for Sustainable Development*. United Nations Department of Economic and Social Affairs.
- World Bank. (2018). *Indonesia's Public Service Delivery Assessment: Strengthening Local Public Services*. The World Bank.
- Yin, R. K. (2014). *Case Study Research: Design and Methods* (5th ed.). Sage Publications.