



The Optimization of Digital Based Population Administration Services in Jekan Raya District, Palangka Raya City

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Abstract

The advancement of digital technology has encouraged local governments to improve the quality of public services, particularly in the field of population administration. This article aims to analyze the efforts to optimize digital-based population administration services in Jekan Raya District, Palangka Raya City. The study employs a qualitative approach using interview, observation, and documentation techniques. The findings indicate that the implementation of digital administrative services – such as online applications for ID cards (KTP), family cards (KK), and birth certificates – has provided convenience and efficiency for the public. However, several challenges remain, including limited internet infrastructure, low digital literacy among certain community groups, and inadequate human resources to operate the system. This article emphasizes that optimizing digital services requires strengthening the capacity of government personnel, improving infrastructure, and conducting intensive public outreach to ensure that all segments of society can benefit from digital-based population administration services.



INTRODUCTION

Population administration services are one of the essential public services that the government is obligated to provide to its citizens. These services include the management of important documents such as Identity Cards (KTP), Family Cards (KK), birth certificates, and other documents that play a strategic role in supporting citizens' social, political, and economic lives. With the increasing public demand for services that are fast, accurate, and transparent, the digitalization of population administration has become an unavoidable necessity (Suharto & Ramadhan, 2021).

Digital transformation in public services is part of the broader e-government agenda as mandated by Presidential Regulation No. 95 of 2018 concerning the Electronic-Based Government System (SPBE). The implementation of SPBE aims to create a more efficient, transparent, and accountable bureaucracy through the use of information technology. In the context of population administration, digitalization not only improves service efficiency but also strengthens the accuracy of population data, which serves as the foundation for public policy formulation (Kurniawan & Susanto, 2022).

Jekan Raya Subdistrict, as one of the administrative regions in Palangka Raya City, has experienced a steady population increase each year. This condition demands a responsive administrative service system to accommodate the dynamics of

society. Prior to digitalization, the public often faced issues such as long queues, limited service hours, and uncertainty in document processing. These factors lowered public satisfaction with the quality of public services (Rahman & Putri, 2023). With technological advancements, the Palangka Raya City government began integrating digital-based population administration services. These innovations include online document applications, virtual consultation services, and a more structured electronic queueing system. Digital services are expected to accelerate bureaucratic processes, reduce the potential for illegal levies, and improve the quality of public service delivery (Andini & Wibowo, 2020).

Nevertheless, the implementation of digital services still faces several challenges. One of the main issues is the digital divide between urban and rural communities, where some residents still struggle to access the internet or understand digital service mechanisms. Another challenge is the limited capacity of government staff, who are not yet fully prepared to operate digital systems effectively (Sari & Nugroho, 2021).

Optimizing digital-based population administration services also requires adequate internet network infrastructure support. In some areas of Jekan Raya Subdistrict, the network quality remains unstable, which affects the effectiveness of services. This limitation indicates that the development of digital infrastructure is a key success factor in implementing technology-based population administration services (Utami & Pratama, 2022).

Apart from infrastructure, digital literacy among the public is also a crucial factor in optimizing services. Digital literacy includes individuals' ability to understand, access, and utilize information technology for administrative needs. Without sufficient literacy, people tend to continue relying on manual services even when digital alternatives are available (Yuliani & Arifin, 2024).

Digital-based population administration services also align with the principles of good governance. Through digital systems, service transparency can be enhanced since every application is recorded in a system that can be monitored in real-time. This reduces the potential for maladministration practices such as illegal levies and data manipulation (Fauzan & Hartono, 2020).

In practice, residents in Jekan Raya Subdistrict have shown mixed responses to the implementation of digital administrative services. Some feel assisted by the faster and more efficient services, while others still struggle to understand the digital procedures. This phenomenon shows that digital transformation requires strong social adaptation strategies from both the government and the community (Latifah & Rahayu, 2023).

Based on this background, this study focuses on analyzing the optimization of digital-based population administration services in Jekan Raya Subdistrict, Palangka Raya City. The research aims to examine supporting factors, obstacles, and strategies that can be implemented to improve the quality of digital public services at the subdistrict level. Therefore, the findings of this study are expected to contribute to strengthening the implementation of SPBE at the regional level, particularly in population administration services.

METHOD

This research adopts a descriptive qualitative approach aimed at gaining an in-depth understanding of the implementation and optimization of digital-based population administration services in Jekan Raya District, Palangka Raya City. This approach was chosen because it allows for an exploration of experiences, perceptions, and the dynamics of interaction between government officials and the public in the digitalization of public services (Creswell & Creswell, 2023).

The research location was set in Jekan Raya District, selected purposively as it serves as one of the administrative and public service hubs in Palangka Raya City. This subdistrict also has a relatively high population density compared to other districts, making it representative in illustrating both the needs and challenges of digital-based population administration services.

The informants in this study were determined using purposive sampling, consisting of: (1) subdistrict officials responsible for population administration services, (2) community members who have accessed digital civil registration services, and (3) community leaders knowledgeable about public service dynamics in the area. In total, this study involved 20 key informants considered capable of providing relevant data.

Data collection techniques were carried out through three main methods:

1. In-depth interviews with subdistrict officials and service users to understand their experiences, challenges, and expectations regarding digital services.
2. Participant observation of the administrative service process at the subdistrict office, both manual and digital, to compare system effectiveness.
3. Document analysis, including service reports, population data, and local government policies related to the implementation of digital civil registration systems.

Data analysis employed the interactive model of Miles, Huberman, & Saldaña (2020), which includes data reduction, data display, and conclusion drawing/verification. This analytical model enabled the researcher to identify patterns, relationships, and meanings within the collected field data. To ensure data validity, this research utilized source and method triangulation. Source triangulation was conducted by comparing data obtained from officials, community members, and official documents. Method triangulation was carried out by combining interviews, observations, and document analysis. Through this methodology, the research is expected to provide a comprehensive overview of the supporting factors, constraints, and optimization strategies for digital-based population administration services in Jekan Raya District, Palangka Raya City.

RESULTS AND DISCUSSION

The research findings indicate that the implementation of digital-based population administration services in Jekan Raya District has been progressing, although not yet optimal. Residents can submit applications for documents such as ID cards, family cards, and birth certificates through online service applications integrated with the Population and Civil Registration Office of Palangka Raya City. These services facilitate access, especially for those with limited time, as document applications no longer require visiting the subdistrict office in person. However, despite increased efficiency, some community members still face technical difficulties accessing the application.

One of the positive impacts identified is the improvement in service efficiency. The registration and verification process has become faster, with average processing time reduced from 5-7 working days to 2-3 working days. This aligns with the principles of good governance, which emphasize effectiveness and efficiency in public service delivery (Sari & Nugroho, 2021). However, the speed of service is still heavily dependent on internet stability and staff readiness to process applications.

In addition to efficiency, the implementation of digital systems has also improved transparency. Through online applications, citizens can monitor the status of their submitted documents, from verification to issuance. This reduces opportunities for maladministration practices such as illegal levies and data manipulation. Therefore, digital services not only ease access but also strengthen bureaucratic accountability at the subdistrict level (Fauzan & Hartono, 2020).

Nevertheless, infrastructure limitations remain a major challenge. In several areas of Jekan Raya District, especially peripheral regions, internet access is still unstable. As a result, residents often still have to visit the subdistrict office to ensure their documents can be processed. This indicates that the success of public service digitalization is highly dependent on the availability of adequate internet infrastructure (Utami & Pratama, 2022).

Another finding reveals the existence of a digital literacy gap. Younger people tend to be more adaptive in using digital services, while the elderly often struggle to understand how the application works. Consequently, the older demographic still prefers manual services. This supports the research of Yuliani & Arifin (2024), which states that digital literacy is a crucial factor in the adoption of public service technology.

Subdistrict officials also face challenges in operating digital systems. Some staff members are not yet fully proficient in managing the application, resulting in delays in the verification process. Although training efforts have been initiated by the local government, the intensity and scope of these training sessions remain limited. Therefore, strengthening human resource capacity must become a key focus in optimizing services (Kurniawan & Susanto, 2022). To better visualize the supporting and inhibiting factors in the implementation of digital population services, the following table is presented:

Table 1. Supporting and Inhibiting Factors in Digital Population Administration Services in Jekan Raya District

Supporting Factors	Inhibiting Factors
National SPBE policy support	Unequal internet infrastructure
Integrated online service applications	Low community digital literacy
Public awareness of service efficiency	Limited staff capacity in system operation
Increased transparency and accountability	Access gap between younger and older age groups
Supporting Factors	Inhibiting Factors

From the table 1, it is evident that the supporting factors mainly come from the existence of a national policy framework on SPBE, the availability of applications, and increasing public awareness regarding the efficiency of digital services. On the other hand, the inhibiting factors are still related to structural limitations such as internet infrastructure and cultural factors such as low digital literacy. Thus, optimization strategies must bridge these two aspects.

In addition to technical barriers, social aspects also influence the success of service digitalization. Some community members still show resistance to change, feeling more comfortable with face-to-face services. This aligns with the findings of Latifah & Rahayu (2023), who emphasize that transforming public service systems requires a lengthy process of social adaptation. Therefore, public outreach programs need to be expanded to help communities become accustomed to digital services.

The implementation of digital administrative services in Jekan Raya also has implications for increased citizen participation. With online services, people can more actively apply for documents without being constrained by time. This participation serves as important capital for creating an administratively aware society, which in turn strengthens the national population system. However, service inequality still exists. Residents with access to smartphones and stable internet are more advantaged than those without such facilities. This phenomenon illustrates the potential for a digital divide that could worsen public service inequality if not addressed promptly (Rahman & Putri, 2023).

To address these challenges, the Palangka Raya City Government needs to strengthen technological infrastructure, enhance staff capacity, and conduct ongoing public outreach. Additionally, service innovations such as digital assistance centers at subdistrict offices are needed to support citizens who struggle with using the application. Optimization strategies for digital services must also involve multi-stakeholder collaboration, including the private sector and local communities. Internet service providers can partner with the government to expand network coverage, while local communities can serve as digital literacy agents to help residents understand the service system.

From an evaluation perspective, performance indicators for digital services need to be applied regularly. This includes measuring citizen satisfaction, document processing speed, and administrative error rates. With these indicators, the government can assess program effectiveness and make continuous improvements. Overall, the research results show that digital-based population administration services in Jekan Raya District have brought many positive changes, although they are not yet fully optimized. Digitalization has improved efficiency, transparency, and citizen participation, but challenges remain in infrastructure, digital literacy, and the capacity of public servants. Therefore, optimization strategies must simultaneously address technical, social, and institutional aspects to ensure that the benefits of digital services are equitably distributed.

CONCLUSION

This study reveals that the optimization of digital-based population administration services in Jekan Raya District, Palangka Raya City has had a positive impact on the efficiency, transparency, and public participation in accessing government services. The digital system enables faster and more transparent submission of population documents, thereby reducing the potential for maladministration. However, the implementation of this service still faces several challenges, including limited internet infrastructure, low digital literacy among segments of the population, and uneven staff capacity in operating the system. Key supporting factors for successful implementation include the existence of a national policy on the Electronic-Based Government System (SPBE), the availability of integrated online applications, and growing public awareness of the efficiency of digital services. On the other hand, inhibiting factors relate to disparities in technology access, differences in adaptability among age groups, and the need to enhance the capacity of civil servants.

Based on these findings, optimization strategies may include: (1) strengthening internet infrastructure in peripheral areas, (2) improving staff capacity through continuous training, (3) intensive public outreach programs to increase digital literacy, and (4) multi-stakeholder collaboration between the government,

internet service providers, and local communities. Through these measures, digital-based population administration services are expected to operate more effectively, inclusively, and sustainably, thus supporting the realization of better governance in Palangka Raya City.

REFERENCES

- Amelia, R. R., & Yuwono, D. T. (2024). Supporting learning information system through knowledge management optimization using long short-term memory method. *KnE Social Sciences*, 2024, 361–371.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Fauzan, A., & Hartono, D. (2020). Transparansi pelayanan publik berbasis digital dalam mewujudkan good governance. *Jurnal Ilmu Administrasi Negara*, 10(2), 112–124. <https://doi.org/10.21831/jian.v10i2.34560>
- Kurniawan, A., & Susanto, H. (2022). Penguatan kapasitas aparatur dalam era digitalisasi pelayanan publik. *Jurnal Administrasi Publik Indonesia*, 7(1), 35–49. <https://doi.org/10.22146/japi.65422>
- Latifah, N., & Rahayu, S. (2023). Resistensi sosial terhadap digitalisasi layanan publik di daerah. *Jurnal Sosioteknologi*, 22(3), 211–225. <https://doi.org/10.5614/sostek.2023.22.3.07>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). SAGE Publications.
- Rahman, T., & Putri, A. D. (2023). Digital divide dalam pelayanan publik: Studi kasus di wilayah perkotaan dan pedesaan. *Jurnal Kebijakan Publik*, 14(1), 65–80. <https://doi.org/10.24815/jkp.v14i1.6543>
- Sari, D. R., & Nugroho, Y. (2021). Efektivitas dan efisiensi pelayanan publik berbasis aplikasi digital. *Jurnal Ilmu Pemerintahan dan Sosial Politik*, 9(2), 145–158. <https://doi.org/10.17509/jipsi.v9i2.31056>
- Utami, R., & Pratama, G. (2022). Infrastruktur internet dan keberhasilan digitalisasi layanan publik. *Jurnal Teknologi dan Masyarakat*, 4(1), 77–91. <https://doi.org/10.1080/jtm.2022.04109>
- Yuliani, T., & Arifin, Z. (2024). Literasi digital sebagai kunci adopsi layanan publik berbasis teknologi. *Jurnal Transformasi Digital*, 5(1), 23–38. <https://doi.org/10.22146/jtd.87123>
- Yuwono, D. T., & Hariyanti, A. (2024). Applying clustering and recommendation system for effective supervision in Central Kalimantan Inspectorate. *Jurnal Informatika Teknologi dan Sains (JINTEKS)*, 6(2), 367–374.