International Journal of
Economics Development Research, Volume 6(6), 2025
pp. 4420-4433

# Strategy of Population Data Transfer Services through the Online Population Service System (SILOKA)

Radityo Dimas Prabowo [1], Nurliah Nurdin [2]

***Abstract:***

*This research is motivated by the problem of the suboptimal implementation of population data transfer services through SILOKA in Bogor Regency. The problem formulation in this study is why the population data transfer service through SILOKA has not been optimal, and how the strategy to optimize it. This research is based on the E-Government theory by Heeks and Bailur which includes the dimensions of service process speed, accessibility, procedural transparency, and service attitude. This research uses a descriptive qualitative method with data collection techniques through interviews, observations, and documentation. The results show that the implementation of population data transfer services through SILOKA in Bogor Regency still experiences three obstacles: First, there are SILOKA websites that are no longer functioning. Second, there is no specific website that is fast and of good quality for SILOKA services. Third, there is no SILOKA application available on the Playstore and App Store. The strategies to improve the quality of population data transfer services through SILOKA include: First, deleting failed websites that are no longer functioning. Second, creating a specific, fast, and high-quality website for SILOKA. Third, developing a SILOKA application that can be downloaded through the Playstore and App Store with user-friendly features, so that it can be easily accessed by Android and iOS users.*

***Keywords :*** *Digital Public Service; SILOKA; Population Administration; Service Evaluation; Bogor Regency*

Submitted: October 28, 2025, Accepted: November 27, 2025, Published: December 10, 2025

## 1. Introduction

The rapid advancement of digital technologies has significantly transformed public service delivery across the world. Digitalization enables governments to provide services that are faster, more accurate, and more transparent, thereby improving the overall quality of public administration. Countries such as Denmark, Estonia, Singapore, and South Korea stand out as global success stories in digital public service

[1] *NIPA School of Administration, Jakarta, Indonesia. stialanjak@gmail.com.*
[2] *NIPA School of Administration, Jakarta, Indonesia.*

transformation, having implemented integrated digital systems capable of consolidating various bureaucratic processes into efficient, user-centered platforms. In contrast, Indonesia remains in the developing stage of its digital governance journey. According to GoodStats, Indonesia is not included among the top ten countries with the best digital public services (Renaldy, 2024). Similarly, the 2024 United Nations E-Government Survey places Indonesia at 64th out of 193 countries (PanRB, 2024), underscoring the need for extensive improvements in digital public service implementation.

Neighboring countries provide relevant comparative benchmarks. Singapore, for instance, has advanced its service modernization through its Smart Nation initiative and the integration of more than 600 public services into a unified platform known as ServiceSG (Tati, 2024; S. T. Thian, 2025). South Korea has also achieved a highly mature level of e-government through its national GOV.KR platform, which functions as a one-stop integrated service supported by strong institutional coordination and interoperability (PanRB, 2022; Sarwindaningrum, 2025). Estonia has gone even further by achieving 100% digitalization of its government services, including sensitive processes such as divorce through its official population portal (S. Y. Thian, 2025). Its national campaign, "100% Digital & 0% Bureaucrazy," reflects the country's commitment to eliminating bureaucratic inefficiencies through a transparent, secure, and citizen-friendly digital ecosystem. These international cases illustrate that successful digitalization requires not only technological innovation but also organizational readiness, public trust, and strong digital literacy across society.

Indonesia's digitalization challenges are further reflected in its regional standing. Figure 1 shows that Indonesia ranks lowest in the 2024 Southeast Asia Digitalization Index with a score of 33.1, far behind the Philippines (34.9), Vietnam (36.7), Thailand (47.2), Malaysia (49.9), and especially Singapore with 76.1 (Iswenda, 2024). This regional disparity indicates insufficient readiness in digital infrastructure, service integration, regulatory maturity, and user capability. The lowest position within ASEAN highlights the urgency of strengthening Indonesia's digital public service framework, particularly in population administration, which serves as a fundamental requirement for citizen identity and access to government services.

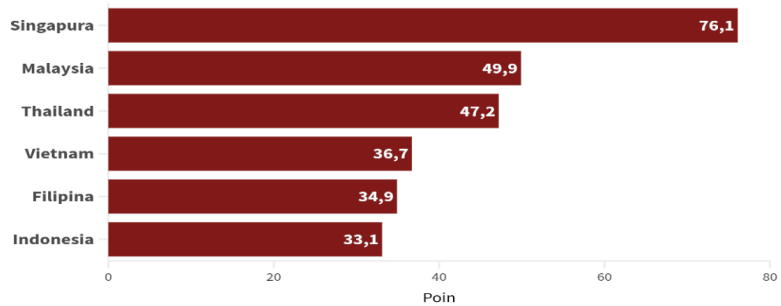


**Figure 1. Global Digitalization Index in Southeast Asia 2024**

Source: (Iswenda, 2024)

Digital transformation also requires adequate digital literacy within society. Figure 2 shows that the provinces with the highest digital society index—Jakarta, Bali, Bangka Belitung, Central Java, and Yogyakarta—do not include West Java, even though it is the most populous province in the country (Twento, 2024). This absence reflects a significant gap in public digital readiness. Bogor Regency, with a population of 5.56 million, carries an even greater responsibility to ensure that such a large population can effectively access and utilize digital public services. Low digital literacy among a very large population presents challenges for implementing digital innovations, emphasizing the need for parallel efforts to strengthen human capacity alongside technological development.

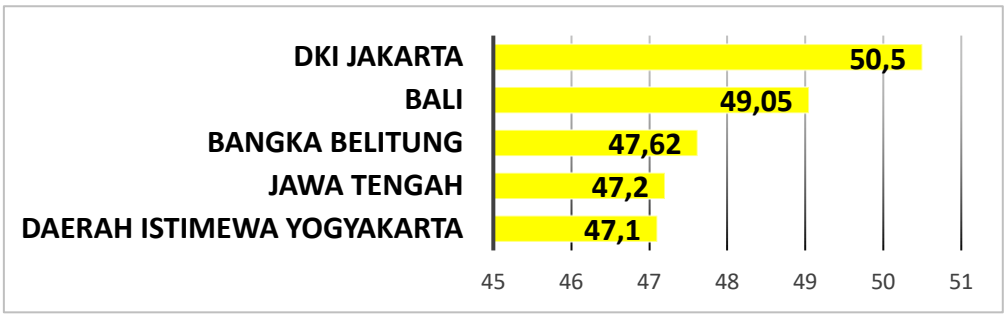


**Figure 2. Provinces in Indonesia with the Highest Digital Society Index**
Source: (Twento, 2024)

In response to these challenges, the Government of Bogor Regency through the Department of Population and Civil Registration (Disdukcapil) launched the Online Population Service System (SILOKA) on 10 October 2022. SILOKA was designed to provide easier access to population administration services, including electronic ID (e-KTP) applications, family cards, child identity cards, birth certificates, and population mobility services such as in-migration and out-migration. On 27 May 2025, the government expanded the SILOKA network to 435 villages and subdistricts across the regency to improve accessibility and reduce community travel and administrative costs (Setda.bogorkab.go.id, 2025). Although SILOKA represents a promising digital innovation, its utilization remains very low. As of September 2025, only 10,263 users were recorded—equivalent to merely 0.18% of the total population (Disdukcapil Bogor). Satisfaction survey data found on the official Bogor Regency website indicate that public satisfaction with general public services reached 80.59% in 2020 and 87.56% in 2025 (Setda.bogorkab.go.id, 2025). However, these figures do not specifically reflect satisfaction with SILOKA, and no comprehensive evaluation has been conducted.

Several obstacles have hindered the optimal implementation of SILOKA. Public complaints, such as those documented by Ninin Rahayu Sari (2025) in the Kompasiana article “Aplikasi SILOKA vs Warga Bingung. Siapa yang Menang?!”,

highlight various technical issues, including inaccessible website links, domain changes without proper notification, frequent system errors, and inability to load QR codes required for verification (Sari, 2025). Further research by Kurniawansyah et al. (2024) identifies institutional issues such as reluctance to overhaul ineffective programs, risk-averse bureaucratic culture, limited digital adaptability among staff and residents, dependence on specific IT personnel, and insufficient technological infrastructure. These challenges show that digitalization requires more than software development; it requires organizational transformation, skilled human resources, and consistent evaluation based on reliable data.

Given the low utilization rate, various technical barriers, and lack of systematic assessment, the implementation of SILOKA has yet to achieve its intended impact. Moreover, no empirical research has measured the extent to which SILOKA influences public satisfaction in Bogor Regency. Such evidence is essential for informing continuous improvement. Therefore, this study aims to identify the factors contributing to the suboptimal performance of SILOKA, particularly in population mobility services, and to formulate appropriate strategies to strengthen digital public service delivery in Bogor Regency. The findings are expected to contribute both practically, by supporting local government decision-making, and academically, by enriching the literature on digital public administration in developing regional contexts. Based on the challenges and research gaps identified above, the following section presents the theoretical and regulatory frameworks that guide this study.

## 2. Theoretical Background

Recent studies on digital transformation in population administration consistently highlight both its benefits and structural challenges. Research by Kurniawansyah et al. (2024) shows that SILOKA demonstrates clear advantages in terms of relative benefit and service compatibility, yet still faces organizational resistance, uneven staff capacity, and cultural barriers. A quantitative study by Pratidina et al. (2024) confirms that SILOKA significantly reduces queues and enhances service efficiency, while Rahmawati et al. (2024), applying the SERVQUAL framework, emphasize the need to strengthen reliability, responsiveness, and procedural assurance in administrative services. Further evidence from Pratami et al. (2023) underscores, that online mechanisms for Family Card (KK) data changes are essential to overcoming geographic constraints and service congestion. Broader analyses by Irfan and Anirwan (2023) affirm the urgency of e-government adoption for transparency and public participation, whereas Harun et al. (2022) identify persistent limitations in digital literacy and network stability in online services. Complementing these findings, Kurniawansyah et al. (2024) demonstrate that SILAMO improves service efficiency in Sumbawa but still requires stronger socialization and technological support. Collectively, prior research establishes that digital platforms like SILOKA offer substantial potential for improving service quality, accessibility, and administrative accuracy, yet their effectiveness remains highly dependent on institutional readiness, infrastructure reliability, and user capability—leaving a research gap that this study

addresses by examining the optimization of SILOKA for population data transfer services in Bogor Regency.

**Policy Review:** The regulatory framework governing population administration in Indonesia is anchored in Law No. 24/2013 (Undang-Undang Nomor 24 Tahun 2013), which establishes legal certainty, accountability, and uniform standards for civil registration and vital statistics. This law requires that every administrative process—whether offline or digital—maintains verifiable documentation, secure data management, and accurate population records. Complementary provisions in Law No. 14/2008 (Undang-Undang Nomor 14 Tahun 2008) on public information transparency emphasize the dual mandate of openness and data protection, obliging government agencies to disclose service procedures, processing timelines, and grievance mechanisms while safeguarding citizens' personal information. Technical alignment in population mobility, including inter-regional data transfer, is further regulated through Presidential Regulation No. 96/2018 (Peraturan Presiden Nomor 96 Tahun 2018) and Government Regulation No. 40/2019 (Peraturan Pemerintah Nomor 40 Tahun 2019), which formalize standardized procedures, reinforce interoperability with national systems, and assign clear institutional responsibilities. Together, these instruments outline the normative and operational requirements that digital service platforms such as SILOKA must fulfill to ensure legal compliance and data integrity.

At the ministerial level, the implementation of online population services is guided by a set of regulations that govern system standards, access rights, and administrative procedures. Minister of Home Affairs Regulation No. 7/2019 (Peraturan Menteri Dalam Negeri Nomor 7 Tahun 2019) mandates the use of electronic forms, digital verification, and accessible service delivery, while Regulation No. 95/2019 (Peraturan Menteri Dalam Negeri Nomor 95 Tahun 2019) on SIAK emphasizes interoperability, audit trails, and the safeguarding of demographic data within integrated information systems. Regulation No. 17/2023 (Peraturan Menteri Dalam Negeri Nomor 17 Tahun 2023) further strengthens data governance through explicit rules on user access, authentication, and sanctions for misuse, ensuring that digital platforms maintain accountability and information security. Local regulations in Bogor Regency—such as Regional Regulation No. 9/2009 (Peraturan Daerah Kabupaten Bogor Nomor 9 Tahun 2009) and Regent Regulation No. 124/2021 (Peraturan Bupati Bogor Nomor 124 Tahun 2021)—provide institutional structure for Disdukcapil operations, including the adoption, management, and continuous improvement of SILOKA. Collectively, this multi-level policy architecture forms a comprehensive foundation for evaluating whether SILOKA's implementation meets national standards for digital public services while addressing local administrative needs.

**Theoretical Review:** The theoretical foundation of this study draws primarily on e-government frameworks that conceptualize digital public service delivery as a socio-technical system rather than a purely technological intervention. Heeks and Bailur's (2020) model is particularly relevant, emphasizing the "design–reality gap" that determines the success or failure of digital initiatives. This perspective underscores that service performance depends not only on system features—such as speed,

accessibility, transparency, and usability—but also on institutional readiness, human capacity, and user adoption. Complementary perspectives from Homburg (2008) and Reddick (2010) frame e-government within broader governance dimensions, including service maturity models, democratic participation, and administrative efficiency. Collectively, these frameworks highlight, that digital platforms like SILOKA must balance technological reliability with organizational adaptation, intergovernmental integration, and responsive human support to achieve meaningful public value.

Public service theory further strengthens the analytical basis of this research by situating digital innovation within evolving paradigms of governance. Classical perspectives emphasize legality, accountability, and procedural fairness, while contemporary approaches—such as New Public Management (NPM) and New Public Service (NPS)—stress efficiency, citizen orientation, and participatory engagement. The SERVQUAL model (Parasuraman et al., 1990), widely applied in public administration, provides additional insight into service quality dimensions including reliability, responsiveness, assurance, empathy, and tangibles, all of which remain relevant in digital environments where user perceptions are shaped by both system performance and human interaction. Population administration theory also highlights the importance of accurate demographic data, mobility records, and documentation for policy planning (Mantra, 2003), reinforcing the need for reliable digital systems to manage processes such as population data transfer. Taken together, these theoretical lenses provide a comprehensive foundation for analyzing SILOKA's performance and identifying pathways for optimizing digital service delivery in Bogor Regency. To address the research questions and analyze the performance of SILOKA comprehensively, this study applies a descriptive qualitative approach, as outlined below.

## 3. Methodology

This study employs a qualitative descriptive research design to examine the implementation of the SILOKA-based population data transfer service in Bogor Regency. A qualitative approach is appropriate for understanding how digital public services operate within their natural administrative and social contexts, allowing the researcher to explore actors' experiences, institutional dynamics, and service processes as they unfold in real settings. Such an approach aligns with the purpose of capturing the depth and complexity of public service interactions rather than testing predefined hypotheses. As Miles and Huberman (2014) emphasize, qualitative inquiry enables researchers to construct contextually grounded explanations derived directly from empirical field realities.

Data were collected through three techniques: semi-structured interviews, observation, and document analysis. Interviews were conducted with key stakeholders including the Head of Population Registration Services, the SILOKA operator, the Cibinong Subdistrict Head, and ten community users, enabling an exploration of procedural practices, technical challenges, and user experiences. Observations at the

Disdukcapil office and selected subdistrict service points provided first-hand evidence of operational workflows, infrastructure readiness, and officer–citizen interactions. Document analysis included reviewing service guidelines, SOPs, organizational structures, and administrative records to understand regulatory frameworks and institutional arrangements. To ensure data trustworthiness, this study employed credibility, transferability, dependability, and confirmability criteria, following the framework proposed by Hardani et al. (2020), including method and source triangulation, thick contextual description, systematic documentation, and evidence-based verification.

The data analysis process followed the interactive model developed by Miles et al. (2014), consisting of data reduction, data display, and conclusion drawing with continuous verification. Field data were coded and grouped into thematic categories such as system performance, technical barriers, organizational support, and user engagement. These categories were then synthesized into analytical narratives to clarify patterns and relationships embedded within the service ecosystem. Conclusions were developed iteratively and validated through repeated cross-checking with diverse data sources to maintain objectivity and alignment with empirical evidence. Throughout the research, the investigator served as the primary instrument, supported by structured interview guides, observation protocols, and document review templates to ensure methodological consistency and analytical rigor. The findings obtained through interviews, observations, and document analysis are presented in this section, accompanied by theoretical interpretations discussed earlier.

## 4. Empirical Findings/Result and Discussion

SILOKA was introduced as a strategic response to the need for faster, more accessible, and territorially equitable civil registration services across Bogor Regency. The region's wide geographic span and high population mobility had long resulted in service delays, travel burdens, and unequal access under conventional in-person procedures. By facilitating online submissions, digital document uploads, and scheduled appointments, SILOKA streamlines administrative processes and enhances service predictability. This initiative is aligned with the district's digital governance agenda to expand public service reach across 435 villages and strengthen decentralized service points, including Public Service Malls and technical units. Embedded audit trails and transparent tracking mechanisms further support efforts to reduce physical queues and strengthen accountability throughout the registration process.

Beyond improving access, SILOKA operates as an administrative governance instrument that enhances institutional capacity within the Department of Population and Civil Registration. The platform standardizes verification procedures, supports electronic record-keeping, and improves the accuracy and timeliness of performance reporting. Its integrated digital–physical service portfolio—from certificate amendments and legalization services to KTP, KK, and KIA issuance—addresses essential population administration needs while promoting data-driven, transparent

service delivery. Consistent with Heeks and Bailur's e-government framework, SILOKA's performance can be assessed through four key dimensions: service speed, accessibility, transparency, and service attitude. Empirical findings indicate that effectiveness across these dimensions is shaped by technical readiness, institutional capacity, and user experience, with persistent constraints related to speed, accessibility, procedural clarity, and administrative responsiveness. These findings underscore the need for continued system refinement to strengthen the overall effectiveness of digital population services in Bogor Regency.

**Inefficiencies in Service Speed**

Users commonly reported that initial access and account creation for SILOKA are time-consuming due to unclear navigation from the main Disdukcapil page to the SILOKA service. Multiple respondents described encountering several different SILOKA links (including inactive or erroneous pages), which forced them to try alternative browsers or links before reaching the functional portal; one informant reported repeated failures to obtain a verification code because the displayed link redirected or timed out (Interview with Community Member 3, 16 October 2025). This observation was corroborated by the researcher's website audit, which identified three distinct login options—some leading to errors or external domains—thereby validating that fragmented entry points materially slow down users' initial steps.

Beyond entry problems, appointment-based processing to speed service sometimes failed in practice: while some users stated that booking through SILOKA produced smooth, quick verification when they arrived with complete documentation, others reported arriving at the office after booking only to find long queues and extended waiting times, effectively negating the intended time-saving benefit of the digital queue (Interview with Community Member 1, 13 October 2025; Interview with Community Member 2, 15 October 2025). Observational notes indicate these mismatches occur when offline capacity or peak demand outstrips the scheduled slots, showing that digital scheduling alone cannot guarantee speed without operational capacity alignment.

Finally, users described instances where backend updates were delayed—application statuses remaining unchanged for several days—forcing applicants to visit the office for clarification. These reports point to a synchronization gap between front-end notifications and back-end processing, where system errors or update lags produce perceived service slowness despite the presence of digital functions (Interview with Community Member 3, 16 October 2025). In theoretical terms, the problem combines interface fragmentation, capacity management, and back-end reliability—consistent with Heeks & Bailur's warning that retaining underperforming system components can perpetuate inefficiency rather than resolving it.

**Limited Accessibility and Unequal Digital Reach**

Disdukcapil and SILOKA operators stated that the system is intended to display real-time application statuses and issue automated notifications regarding delays, revisions, or rejections, which should enhance procedural transparency and reduce

unnecessary office visits (Interview with Head of Disdukcapil; Interview with SILOKA Operator, 18 October 2025). This design intent matches national expectations for accountable e-government and provides a technical basis for citizen monitoring of each procedural step.

Nonetheless, user experiences of transparency are inconsistent. Some users confirmed they could follow statuses in real time and felt reassured by the notifications, reporting fewer return visits to the office as a result (Interview with Community Member 1, 13 October 2025). Conversely, other respondents reported delayed or ambiguous notifications—unclear messages about required revisions or late status changes—that compelled them to seek clarification in person (Interview with Community Member 2; Interview with Community Member 3, 15–16 October 2025). These disparities imply that transparency in practice depends not only on data availability but also on message clarity, timeliness, and users' ability to interpret system cues.

A further transparency challenge arises from the fragmented digital footprint of SILOKA (multiple domains and non-authoritative links). Users described difficulty verifying which website address was official, thereby raising doubts about the authenticity and reliability of status information when encountered on ambiguous pages (Interview with Community Member 3 reporting navigation confusion). Consequently, procedural transparency is undermined by both communication-quality issues and infrastructure fragmentation; resolving it requires clearer, standardized messaging, consolidation of the service portal, and user education to interpret status indicators properly.

**Gaps in Procedural Transparency**

Disdukcapil and SILOKA operators stated that the system is intended to display real-time application statuses and issue automated notifications regarding delays, revisions, or rejections, which should enhance procedural transparency and reduce unnecessary office visits (Interview with Head of Disdukcapil; Interview with SILOKA Operator, 18 October 2025). This design intent matches national expectations for accountable e-government and provides a technical basis for citizen monitoring of each procedural step.

Nonetheless, user experiences of transparency are inconsistent. Some users confirmed they could follow statuses in real time and felt reassured by the notifications, reporting fewer return visits to the office as a result (Interview with Community Member 1, 13 October 2025). Conversely, other respondents reported delayed or ambiguous notifications—unclear messages about required revisions or late status changes—that compelled them to seek clarification in person (Interview with Community Member 2; Interview with Community Member 3, 15–16 October 2025). These disparities imply that transparency in practice depends not only on data availability but also on message clarity, timeliness, and users' ability to interpret system cues.

A further transparency challenge arises from the fragmented digital footprint of SILOKA (multiple domains and non-authoritative links). Users described difficulty

verifying which website address was official, thereby raising doubts about the authenticity and reliability of status information when encountered on ambiguous pages (Interview with Community Member 3 reporting navigation confusion). Consequently, procedural transparency is undermined by both communication-quality issues and infrastructure fragmentation; resolving it requires clearer, standardized messaging, consolidation of the service portal, and user education to interpret status indicators properly.

**Variability in Administrative Responsiveness**

Evidence shows that administrative responsiveness in SILOKA is heterogeneous: many users reported positive, timely, and helpful replies from administrators, which enhanced satisfaction and trust (Interview with Community Member 1, 13 October 2025). Administrators and operators emphasize professionalism and aim to provide clear, accurate answers, positioning staff as a key support layer that complements the automated features of the platform (Interview with SILOKA Operator; Interview with Head of Disdukcapil, 18 October 2025).

Yet some users experienced slow or insufficiently detailed responses that required follow-up contacts, indicating variability in response quality and timeliness (Interview with Community Member 2, 15 October 2025). Although management reports that current staffing is adequate for handling incoming queries, user testimonies suggest uneven workload distribution or coordination gaps among staff that produce inconsistent response experiences.

Operators also noted the intrinsic limitations of text-based digital communication: without non-verbal cues, written replies must be particularly clear and well-structured to avoid misunderstandings. The combination of occasional unclear replies, workload variability, and the friction of remote exchange implies that improving responsiveness will require standardized response templates, triage protocols, and possibly automated first-line support (e.g., chatbots) to maintain speed and consistency while preserving the human judgment necessary for complex cases.

**Strategic Implications**

The findings reveal that improving SILOKA's performance requires a multi-layered strategy grounded in both digital governance theory (Heeks & Bailur, 2020) and the SERVQUAL service-quality framework. Several weaknesses in reliability—including inconsistent login pathways, slow back-end synchronization, and unclear status updates—indicate the need for system consolidation and algorithmic optimization to ensure consistent service delivery. The recurring navigation confusion and documentation errors experienced by users show gaps in tangibles, reflecting the inadequate clarity of the user interface and the absence of a standardized, authoritative SILOKA access point. Moreover, limited accessibility caused by uneven internet connectivity and varied digital literacy demonstrates deficiencies in assurance, as citizens cannot always trust that the system will function dependably across contexts. Addressing these issues requires redesigning the information architecture, strengthening infrastructure, and improving interoperability between front-end and

back-end modules to create a more predictable, reliable, and technically coherent service environment.

At the same time, variations in administrative responsiveness, coupled with inconsistencies in operator communication, underscore the need to reinforce human-support mechanisms. Empirical evidence shows that while some users received fast and polite responses, others faced delays or unclear explanations, indicating uneven empathy and inconsistent adherence to service standards. These challenges imply the need for standardized response protocols, service-level agreements (SLAs), and structured communication training for administrators to maintain consistency in tone, clarity, and timeliness. Additionally, establishing assisted-digital models—such as subdistrict-based digital helpdesks, guided application booths, or community facilitators—can bridge the digital literacy gap and enhance user confidence, especially for individuals unfamiliar with online administrative systems. By integrating SERVQUAL principles with digital-system improvements, the strategic direction becomes clearer: SILOKA can deliver its intended value only if technological enhancements, procedural reforms, and human-centered service quality improvements progress simultaneously and coherently.

## 5. Conclusions

This study examined the implementation of the Online Population Service System (SILOKA) in supporting population data transfer services in Bogor Regency. The findings indicate that SILOKA has not yet reached optimal performance, particularly regarding system reliability, accessibility, and user experience. While some users acknowledged that digital services shortened administrative procedures, widespread issues—such as frequent system errors, slow processing, the absence of a dedicated platform, and the lack of a mobile application—have hindered service efficiency and caused user frustration, especially among less digitally literate groups. Malfunctioning website links, inconsistent navigation, and insufficient guidance further highlight gaps in the current digital service ecosystem.

The analysis suggests that these shortcomings arise from structural, technological, and organizational factors. Structurally, SILOKA lacks a streamlined digital architecture with consistent operational standards. Technologically, unstable servers, unclear form requirements, missing automatic notifications, and poor interface usability reduce platform effectiveness. Organizationally, limited public outreach, inadequate user support, and reliance on manual confirmation processes undermine intended service benefits. These findings underscore that effective digital transformation requires not only technological upgrades but also integrated administrative capacity, user-centred design, institutional commitment, and inter-agency coordination to deliver efficient, transparent, and citizen-oriented population services in Bogor Regency.

Based on the study's findings, SILOKA can be strengthened as an effective digital platform for population data transfer through combined technological and institutional improvements. The development of a dedicated, user-centred website and a mobile

application for Android and iOS, supported by robust infrastructure, clear guidance, and complete document information, will enhance accessibility, reduce errors, and improve service quality. Institutional commitment, including strong leadership, adequate budgeting, systematic monitoring, continuous upgrades, and staff capacity-building, is essential to sustain these improvements. Collaboration with professional developers ensures cybersecurity and adherence to digital governance standards, while expanded public outreach through social media, community training, and integrated local assistance promotes broader usability. Together, these measures aim to make SILOKA a reliable, accessible, and citizen-oriented platform, supporting the digital transformation of public services in Bogor Regency.

**References:**

Hardani, Aulia, N. H., & Others. (2020). *Metode Penelitian Kualitatif & Kuantitatif*. Pustaka Ilmu.

Harun, D. A., Rares, J. J., & Mambo, R. (2022). Inovasi dalam pelayanan publik (studi pada sistem layanan online di Dinas Kependudukan dan Pencatatan Sipil Kota Manado). *Jurnal Administrasi Publik (JAP)*, *8*(116), 10–17.

Heeks, R., & Bailur, S. (2020). Analyzing e-government research: Perspectives, philosophies. *Government Information Quarterly*, *37*(2), 101–388.

Homburg, V. (2008). *Understanding e-government: Information systems in public administration*. Routledge.

Irfan, B., & Anirwan. (2023). Pelayanan publik era digital: Studi literatur. *IJI Publication*, *4*(1), 23–31.

Iswenda, B. A. (2024). *Indonesia Jadi Negara dengan Indeks Digitalisasi Terendah di Asia Tenggara*. https://goodstats.id/article/indonesia-menjadi-negara-dengan-indeks-digitalisasi-terendah-di-asia-tenggara-q0MGd

Kurniawansyah, H., Haryadi, W., Ismawati, Syafruddin, & Rahayu, S. (2024). Analisis penerapan sistem layanan administrasi kependudukan online (SILAMO). *Entrepreneur: Jurnal Bisnis Manajemen Dan Kewirausahaan*, *5*(3), 412–419.

Mantra, I. B. (2003). *Demografi Umum* (2nd ed.). Pustaka Belajar.

Miles, M., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis* (3rd ed.). Sage Publications.

PanRB. (2022). *Menilik praktik baik digitalisasi pelayanan publik di negeri ginseng*. https://www.menpan.go.id/site/berita-terkini/menilik-praktik-baik-digitalisasi-pelayanan-publik-di-negeri-ginseng

PanRB. (2024). *Indonesia naik 13 peringkat pada UN e-Government Survey 2024*. https://menpan.go.id/site/berita-terkini/indonesia-naik-13-peringkat-pada-un-e-governmentsurvey-2024-menteri-panrb-kolaborasi-akselerasi-transformasi-digital-pemerintah-melalui-spbe

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1990). *Delivering quality service: Balancing customer perceptions and expectations*. Free Press.

Peraturan Bupati Bogor Nomor 124 Tahun 2021. (2021). *Susunan Organisasi dan Tata Kerja Disdukcapil Kabupaten Bogor*. https://jdih.bogorkab.go.id

Peraturan Daerah Kabupaten Bogor Nomor 9 Tahun 2009. (2009). *Penyelenggaraan Administrasi Kependudukan*. https://jdih.bogorkab.go.id/peraturan/peraturan_daerah/show/169

Peraturan Menteri Dalam Negeri Nomor 17 Tahun 2023. (2023). *Perubahan atas Permendagri No.102 Tahun 2019*. https://peraturan.bpk.go.id/Details/280636/permendagri-no-17-tahun-2023

Peraturan Menteri Dalam Negeri Nomor 7 Tahun 2019. (2019). *Pelayanan Administrasi Kependudukan Secara Online*. https://peraturan.bpk.go.id/Download/118855/Permendagri No. 7 Tahun 2019.pdf

Peraturan Menteri Dalam Negeri Nomor 95 Tahun 2019. (2019). *Sistem Informasi Administrasi Kependudukan (SIAK)*. https://peraturan.bpk.go.id/Download/129868/Permendagri 95 Tahun 2019.pdf

Peraturan Pemerintah Nomor 40 Tahun 2019. (2019). *Pelaksanaan Administrasi Kependudukan*. https://peraturan.bpk.go.id/Download/99816/PP Nomor 40 Tahun 2019.pdf

Peraturan Presiden Nomor 96 Tahun 2018. (2018). *Persyaratan dan Tata Cara Pendaftaran Penduduk dan Pencatatan Sipil*. https://setkab.go.id/wp-content/uploads/2018/10/Perpres-Nomor-96-Tahun-2018-2.pdf

Pratami, M., Ranbilal, R., Marezka, Wahyudin, C., & Salbiah, E. (2023). Strategi inovasi pelayanan perubahan data kartu keluarga berbasis online. *Karimah Tauhid*, *2*(1), 60–75.

Pratidina, G., Maulinda, W., Apriliyani, N. V, & Salbiah, E. (2024). Pengaruh implementasi sistem layanan online kependudukan terhadap optimalisasi kualitas pelayanan administrasi kependudukan. *Jurnal Governansi*, *10*(1), 65–76.

Rahmawati, R., Fitriyana, D., Pratidina, G., & Seran, G. G. (2024). Efektivitas pelayanan administrasi kependudukan di Dinas Kependudukan dan Pencatatan Sipil Kabupaten Bogor. *Karimah Tauhid*, *3*(2), 1349–1361.

Reddick, C. G. (2010). *Comparative e-government*. Springer.

Renaldy, B. (2024). *GoodStats*. https://data.goodstats.id/statistic/10-negara-dengan-indeks-perkembangan-e-government-tertinggi-0hnet

Sari, N. R. (2025). *Kompasiana*. https://www.kompasiana.com/ninin34403/687d9c4ded641575d8356b06/aplikasi-siloka-vs-warga-bingung-siapa-yang-menang?page=1&page_images=1

Sarwindaningrum, I. (2025). *Kompas*. https://www.kompas.id/artikel/korea-selatan-berpacu-pulihkan-layanan-publik-pasca-kebakaran-pusat-data

Setda.bogorkab.go.id. (2025). *SILOKA hadir di 435 desa dan kelurahan Kabupaten Bogor*. https://setda.bogorkab.go.id/berita/seputar-opd/siloka-hadir-di-435-desa-dan-kelurahan-kabupaten-bogor-permudah-pelayanan-administrasi-kependudukan

Tati. (2024). *Singapura luncurkan Smart Nation 2.0*. https://pttati.co.id/news/singapura-luncurkan-smart-nation-20-menyiapkan-masa-depan-digital-yang-lebih-tangguh

Thian, S. T. (2025). *ServicesG dan integrasi layanan publik di Singapura*. https://govinsider.asia/indo-en/article/servicesg-dan-integrasi-layanan-publik-di-singapura

Thian, S. Y. (2025). *Layanan pemerintah Estonia kini 100 persen digital termasuk perceraian*. https://govinsider.asia/indo-en/article/layanan-pemerintah-estonia-kini-100-persen-digital-termasuk-perceraian

Twento, R. (2024). *5 Provinsi dengan Indeks Masyarakat Digital Indonesia Tertinggi 2024*. https://data.goodstats.id/statistic/5-provinsi-dengan-indeks-masyarakat-digital-indonesia-tertinggi-2024-t6JI9

Undang-Undang Nomor 14 Tahun 2008. (2008). *Keterbukaan Informasi Publik*. https://peraturan.bpk.go.id/Details/39047/uu-no-14-tahun-2008

Undang-Undang Nomor 24 Tahun 2013. (2013). *Administrasi Kependudukan*. https://peraturan.bpk.go.id/Download/28348/UU Nomor 24 Tahun 2013.pdf