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ARTICLE

The Role of JAKI as a Super App in Enhancing Jakarta's Digital Governance

An Evaluation of System, Information, and Service Quality and Public Well-Being

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Abstract: This study evaluates the effectiveness of super-app-based digital governance, focusing on Jakarta Kini (JAKI) as an integrated public-service platform. Despite the proliferation of over 27,000 government applications in Indonesia, which has produced systemic inefficiencies and fragmented services, comprehensive evaluations linking digital-service performance, bureaucratic integration, and public well-being remain limited in the academic literature. This research addresses that gap by analyzing the interrelationships among digital-service quality—system, information, and service quality—user satisfaction, and public well-being, while considering the role of bureaucratic integration within the JAKI ecosystem. Employing a secondary data analysis method, the study synthesizes information from the JAKI service database, official government documents, media reports, and scientific publications to identify institutional patterns and dynamics of digital governance. The findings indicate that system, information, and service quality are associated with user satisfaction, which in turn relates to public well-being, as measured by perception, participation, and acceptability. However, bureaucratic fragmentation, regulatory inconsistencies, and the absence of a unified governance framework emerge as significant impediments to optimizing digital-service integration. These insights underscore that effective digital services require robust institutional alignment and coherent governance. Theoretically, the study integrates the information systems success model with a well-being approach to digital governance, underscoring the importance of coherent policy, cross-sectoral governance harmonization, and inclusive digital literacy to maximize the impact of digital public services.

Keywords: digital governance; super app; digital service quality; bureaucratic integration; public well-being.

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1. Introduction

The twenty-first century has witnessed a fundamental transformation of government systems, driven by the rapid development of information and communication technology—a phenomenon widely recognized as digital transformation, involving the comprehensive adoption of digital technology to improve the effectiveness, efficiency, and quality of public services (Mergel et al., 2019). Data from the thirteenth edition of the United Nations E-Government Survey indicate significant progress in global e-government development, with the average E-Government Development Index rising from 0.6102 in 2022 to 0.6382 in 2024; 71.5% of the 193 United Nations member states now reach a high or very high level (United Nations, 2024). This transformation is often divided into three stages: government to citizen, which focuses on providing information; *government as platform*, which emphasizes transactional interactions; and *we-government*, which fosters collaboration between government and citizens in the co-production of public services (OECD, 2020). Major cities worldwide are now experiencing this third stage, in which citizens are no longer passive recipients of services but active participants in the public-service process through integrated digital platforms.

Indonesia, the world's fourth most populous country, is part of this trend. Asosiasi Penyelenggara Jasa Internet Indonesia [Indonesian Internet Service Providers Association] (APJII) reports that national internet penetration has reached 78.19% of the population, with Jakarta as the epicenter of digital connectivity (Asosiasi Penyelenggara Jasa Internet Indonesia, 2023). The Jakarta Provincial Government capitalized on this momentum through the Jakarta Smart City (JSC) initiative, launching the Jakarta Kini (JAKI) super app in October 2019 (Meijer & Bolívar, 2015). JAKI is a single platform that integrates a range of services into a unified digital ecosystem (Gao et al., 2011)—a model that, in a government context, can serve as a one-stop instrument enabling residents to access public services through a single digital platform (van Dijck et al., 2018).

Although JAKI has recorded substantial user growth, comprehensive evaluations of its service quality, the effectiveness of its bureaucratic integration, and its impact on public well-being remain notably limited in the academic literature. Existing studies often focus on isolated aspects, such as user satisfaction or technical usability, and overlook the intricate interrelationships among digital-service performance, bureaucratic integration, and broader public well-being (Al-Kautsar Maktub et al., 2025). This study evaluates the quality of JAKI's services from a user perspective on the basis of available secondary data; analyzes the level of integration of regional agencies within JAKI's digital ecosystem; examines the association between JAKI usage and public well-being; and formulates evidence-based policy recommendations to strengthen digital governance through the super app in Jakarta. Theoretically, the study draws on three frameworks: the e-government maturity model (Layne & Lee, 2001) to assess service-integration maturity; the information systems success model (Delone & McLean, 2003) to evaluate the effectiveness of technology use; and e-government service quality (Zeithaml et al., 2002) to evaluate the dimensions of digital-service quality.

The contributions of this research operate at three levels—academic, policy, and practical—and can serve as a foundation for developing a more inclusive, responsive, and impactful JAKI for all segments of Jakarta's population. The study addresses the research gaps identified in previous work by conducting a holistic evaluation of JAKI: examining the quality of its services from the users' perspective, analyzing the level of bureaucratic integration into its digital ecosystem, and formulating evidence-

based policy recommendations to strengthen digital governance through the super app in Jakarta.

The urgency of this research is amplified within the broader context of Indonesia's national digital transformation agenda, under which the government has identified more than 27,000 fragmented government applications (Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi, 2024). To address this, the government launched INA Digital in May 2024, a strategic initiative to integrate and simplify public services within a unified national digital portal, with platforms such as JAKI serving as regional prototypes for this national integration effort. The contribution of this study lies in combining the East Ventures Digital Competitiveness Index (EV-DCI)—particularly its Regulatory and Capacity sub-index—with data from Badan Pusat Statistik Provinsi Daerah Khusus Ibukota Jakarta [BPS-Statistics DKI Jakarta Province] (BPS DKI Jakarta), JSC, APJII, and other sources to assess JAKI's public benefit across the perception, participation, and acceptability (PPA) dimensions.

2. Methods

This study employs secondary data analysis as its primary method. Secondary data analysis is a scientific approach that reanalyzes data previously collected by others for different purposes in order to answer new research questions (Heaton, 2004; Vartanian, 2011). The method was chosen for the availability of rich, relevant public data on JAKI and its suitability for comprehensive policy evaluation; it also draws on a wide range of empirical data, enabling resource savings, the testing of new hypotheses, and the analysis of large datasets over a defined period (Wickham, 2019).

The analysis adopts an integrative secondary research model, which combines multiple methodologies—such as mixed methods—as the basis for evidence-based policy evaluation (Whittemore & Knafl, 2005). It is complemented by a well-being methodology that gauges the effectiveness of government interventions on citizens' quality of life through the PPA dimensions: perception, participation, and acceptability (Muktiono & Suriadi, 2023).

These sources are supported by government documents, including the evaluation results of the Sistem Pemerintahan Berbasis Elektronik [Electronic-Based Government System] (SPBE)—established by Peraturan Presiden Republik Indonesia Nomor 95 Tahun 2018 tentang Sistem Pemerintahan Berbasis Elektronik [Presidential Regulation of the Republic of Indonesia No. 95 of 2018 on the Electronic-Based Government System]—as reported by Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi (2022, 2023); Peraturan Gubernur Daerah Khusus Ibukota Jakarta Nomor 68 Tahun 2022 tentang Penyelenggaraan Sistem Pemerintahan Berbasis Elektronik [Jakarta Governor Regulation No. 68 of 2022 on the Implementation of the Electronic-Based Government System]; Peraturan Gubernur Daerah Khusus Ibukota Jakarta Nomor 37 Tahun 2022 tentang Satu Data Indonesia Tingkat Provinsi [Jakarta Governor Regulation No. 37 of 2022 on Provincial-Level One Data Indonesia]; and Undang-Undang Republik Indonesia Nomor 27 Tahun 2022 tentang Pelindungan Data Pribadi [Law of the Republic of Indonesia No. 27 of 2022 on Personal Data Protection].

The analysis proceeds through several stages designed to ensure transparency. First, data selection identified and gathered relevant secondary datasets, including official reports from JSC on JAKI user statistics for 2020–2024 (Jakarta Smart City, 2020, 2021, 2022, 2023, 2024); statistical data from BPS-Statistics DKI Jakarta

Province (2023); reports from APJII; and the EV-DCI reports for 2020–2025, specifically the Regulatory and Capacity sub-index (East Ventures, 2020, 2021, 2022, 2023, 2024, 2025). Second, data reduction systematically filtered the collected data to retain the information most relevant to the research questions on service quality, bureaucratic integration, and public well-being within the JAKI ecosystem, excluding irrelevant or redundant material. Third, categorization organized the reduced data according to the study's theoretical frameworks—system quality, information quality, service quality, user satisfaction, bureaucratic integration, and the PPA dimensions. Fourth, conclusion drawing and verification interpreted emerging patterns and themes, and initial conclusions were continuously verified against the full dataset and across sources to ensure consistency and robustness.

To ensure validity and reliability, two techniques were applied. Triangulation drew on independent sources—government reports on JAKI, industry indices, and academic literature—which were cross-referenced and compared to corroborate findings and reduce single-source bias (Luna-Reyes et al., 2005); for example, user-growth statistics from JSC reports were cross-validated against internet-penetration data from APJII and user reviews from public platforms. Cross-validation of documents examined findings on specific issues—such as bureaucratic fragmentation and regulatory inconsistencies—across multiple government documents and media reports to confirm that observed patterns were systemic rather than isolated (Twizeyimana & Andersson, 2019).

3. Results and Discussion

3.1. JAKI User Growth

JAKI, launched by the Jakarta Provincial Government in October 2019, is a one-stop service platform that consolidates numerous overlapping government applications. Its development forms part of the JSC master plan, established under Keputusan Gubernur Daerah Khusus Ibukota Jakarta Nomor 1251 Tahun 2021 tentang Tim Percepatan Pelaksanaan Transformasi Digital [Jakarta Governor Decree No. 1251 of 2021 on the Digital Transformation Acceleration Team].

Architecturally, the platform runs on cloud-computing infrastructure using a microservices approach and integrates more than 30 public services (Dinas Kesehatan Provinsi DKI Jakarta, 2023). To date, JAKI offers approximately 11 core features, including a citizen-complaint feature, with six more planned for 2025. This breadth of services positions JAKI among the more comprehensive government super apps in Indonesia.

From a user perspective, data from JSC indicate a marked increase in adoption. In 2020, JAKI recorded approximately 650,000 cumulative downloads, which surged to approximately 2.5 million downloads and about 340,000 active users in 2021—growth driven partly by the COVID-19 pandemic, during which JAKI became a primary information channel for Jakarta residents seeking updates on the pandemic, healthcare facilities, and vaccination (Dinas Kesehatan Provinsi DKI Jakarta, 2023). This pattern suggests that a crisis can catalyze government digital adoption (Luna-Reyes et al., 2005). Growth continued year over year, though the rate slowed after the pandemic. That deceleration indicates that JAKI entered a maturity phase in the adoption curve, in which attracting new users becomes harder and retaining existing users becomes increasingly important—pointing to potential issues in information quality and service quality as defined by the information systems success model. User figures are summarized in Table 1, drawn from the JSC kaleidoscope reports.

Table 1. JAKI User Growth, 2020–2024

Year	Total Downloads (approx.)	Active Users[a]	Year-over-Year Change (Active Users)
2020	650,000	180,000	—
2021	2,500,000	340,000	+89%
2022	3,000,000	520,000	+53%
2023	4,000,000	555,618	+7%
2024	6,000,000	379,114	−32%

[a] Figures for 2020–2022 are rounded as reported in the source; figures for 2023–2024 are as published.

Source: *Jakarta Smart City kaleidoscope reports, 2020–2024, data processed (2026).*

The JAKI app holds an average rating of 3.8 out of 5 on the Google Play Store (based on 12,000 reviews as of 2025), reflecting a fairly positive reception; even so, user reviews highlight technical issues and a lack of transparency on regulatory matters. Within the information systems success model, JAKI's principal weakness lies in the uneven optimization of its features: the JakLapor complaint feature is the most heavily used, while the JakSurvei feature is the least used. This imbalance in the digital-participation mechanism—the dominance of a single feature—indicates that JAKI has not yet fully become the primary platform for complex services, where service equity is the benchmark for a government super app's success (Twizeyimana & Andersson, 2019). Furthermore, delayed complaint responses, arising from disparities in governance and institutional capacity across regional agencies, underscore the persistent challenge of achieving seamless bureaucratic integration, which is central to overall service quality.

3.2. Benchmarking JAKI Against ASEAN Government Super Apps

JAKI's evaluation becomes more meaningful when compared with government super apps from the ASEAN region, drawing on official government sources from Singapore, Malaysia, and Thailand (Table 2).

Table 2. Benchmarking JAKI Against ASEAN Regional Super Apps

Indicator	JAKI (Indonesia)	LifeSG (Singapore)	MyGOV (Malaysia)	Thang Rath (Thailand)
Platform operator	Jakarta Smart City	Government Technology Agency	Ministry of Digital	Digital Government Development Agency
User rating	3.8	4.6	3.3	4.2
Integration services	30+	100+	36+	173
Complaint resolution (approx.)	90%	91%	92%	88%
System uptime (approx.)	97%	99%	99%	99%
Accessibility for people with disabilities	Does not meet standards	Meets international standards (Web Content Accessibility Guidelines [WCAG] 2.1)	No stated WCAG conformance (W3C WAI goal only)[b]	Limited to facial recognition

[b] W3C WAI = World Wide Web Consortium Web Accessibility Initiative.

Source: *Official government publications of Singapore, Malaysia, and Thailand, and Jakarta Smart City reports, data processed (2026).*

The benchmarking reveals a gap in user ratings: JAKI trails LifeSG and Thang Rath but outperforms Malaysia's MyGOV. On complaint resolution, JAKI outperforms Thang Rath yet trails LifeSG and MyGOV. The widest disparities lie in system uptime, where JAKI ranks last among the four, and in accessibility for people with disabilities, which remains very limited—a key indicator of an inclusive e-government's maturity (Dwivedi et al., 2019; Heeks, 2020). These gaps run counter to the expectations of e-government service quality. Overall, although JAKI continues to expand service integration, considerable room remains for improvement in foundational system attributes and inclusivity to match regional leaders (Liang, 2025).

3.3. Digital Competitiveness in Supporting JAKI's Sustainability

According to the EV-DCI 2025, Jakarta has been the province with the highest digital-competitiveness score in Indonesia for six consecutive years, at 78.4—well above the national average of 38.3 (East Ventures, 2025). This standing rests on three pillars: entrepreneurship and productivity (100.0, first nationally), infrastructure (95.8, first nationally), and finance, including digital financial inclusion (84.5, first nationally). Within the information systems success model, these results reflect system-quality maturity at the infrastructure level: Jakarta has strong technical prerequisites for operating government digital platforms such as JAKI, from 4G signal coverage across the administrative region (100) and the highest national e-wallet-adoption score (100) to sustained growth in the information and communication sector (BPS-Statistics DKI Jakarta Province, 2023). In 2024, Jakarta's total Gross Regional Domestic Product at current prices reached Rp3,679.36 trillion, with cumulative economic growth of 4.90%. Within that total, the information and communication sector accounted for Rp342.48 trillion, or 9.31% of Gross Regional Domestic Product, and contributed 0.66 percentage points to the year's growth—the third-largest sectoral contribution after wholesale and retail trade and construction (BPS-Statistics DKI Jakarta Province, 2025).

However, in quantitative terms, the regulatory and capacity indicators for the Jakarta Provincial Government have fluctuated from year to year, peaking at 70.6 in 2021 before falling to a low of 37.4 in 2023. Although the 2025 score of 45.1 represents a partial recovery from that low, it remains well below the 2021 peak, and Jakarta now ranks only 28th nationally on this pillar (East Ventures, 2025). This decline stems from bureaucratic fragmentation and unresolved regulatory inconsistencies, compounded by some civil servants' limited technical readiness to operate the SPBE, which may hinder JAKI's transformation into an inclusive and tangible instrument of digital governance.

This fluctuation affects JAKI's performance, especially the effectiveness of the regional agencies operating the super app. It suggests that although system quality—infrastructure and the e-government framework—is robust, service quality—organizational and human capacity—is hampered by bureaucratic fragmentation, unresolved regulatory inconsistencies, and civil servants' limited technical readiness to operate digital public services fully. This gap between technical readiness and institutional capacity poses a significant challenge to JAKI's transformation into an inclusive, tangible instrument of digital governance, constraining its ability to realize the benefits envisioned by the e-government maturity model (Janowski, 2015; Layne & Lee, 2001) and the broader goals of digital transformation.

4. Conclusion

This study examined the effectiveness of a super-app-based digital government system through JAKI, an integrated public-service platform in Jakarta. Overall, the findings indicate that JAKI has served as a tangible tool for addressing the fragmentation of government digital services, which previously comprised roughly 27,000 overlapping applications with low interoperability (Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi, 2024). Built on cloud-computing infrastructure using a microservices approach, JAKI integrates more than 30 public services into a single digital ecosystem, reflecting the Jakarta Provincial Government's commitment to a modern, responsive one-stop service.

The research relied primarily on secondary data analysis, which, while offering a broad overview and leveraging existing datasets, carries inherent limitations.

Secondary data do not capture direct insights into users' perceptions, motivations, and experiences—the kind typically gathered through surveys or interviews. Consequently, although the available data support associations and indications, the study cannot definitively establish causal relationships or statistically demonstrate the direct influence of system, information, and service quality on user satisfaction and public well-being that a primary-data quantitative study could.

Theoretically, drawing on the information systems success model, the e-government maturity model, and the e-government service quality framework, the study suggests that system, information, and service quality are associated with user satisfaction, which in turn relates to public well-being, as measured by perception, participation, and acceptability. The study also identifies significant structural barriers. Although Jakarta's digital infrastructure ranks first nationally, with an East Ventures Digital Competitiveness Index score of 78.4 for six consecutive years, regulatory performance and institutional capacity have weakened, with the local-government capacity score falling to 45.1 and ranking 28th nationally in 2025. Bureaucratic fragmentation among regional agencies, cross-sectoral regulatory inconsistencies, and the uneven technical readiness of civil servants in operating Sistem Pemerintahan Berbasis Elektronik [Electronic-Based Government System] are significant barriers to optimizing the integration of JAKI's digital services. This situation creates a paradox in which superior technical infrastructure does not automatically yield effective governance. Compared with government super apps in the ASEAN region, JAKI still lags well behind Singapore's LifeSG and Thailand's Thang Rath—particularly in the number of integrated services, system uptime, and, most critically, accessibility for people with disabilities, which does not yet meet the international Web Content Accessibility Guidelines 2.1 standard.

Accordingly, we offer evidence-based policy recommendations. First, Jakarta should accelerate consistent provincial implementation of One Data Indonesia, accompanied by a cross-sectoral data-governance team with executive authority to standardize data governance across regional agencies. Second, regulations should be harmonized and bureaucratic capacity strengthened through programs to improve civil servants' digital literacy and technical training, so that they do not become a bottleneck in digital-service delivery (Kominfo & Katadata Insight Center, 2023; Warschauer, 2003). Third, JAKI should adopt international accessibility standards so that people with disabilities receive equal service, and inclusive digital-literacy strategies should be expanded, particularly for communities with limited digital capabilities. To build on these findings, future research could pursue several avenues. Primary data collection through surveys or interviews with JAKI users and government officials would yield deeper insight into user satisfaction, perceived service quality, and the challenges of bureaucratic integration from an internal perspective. A quantitative approach with empirical testing could statistically validate the proposed relationships among system quality, service quality, and user satisfaction, allowing a more robust assessment of the direct and moderating roles of the various factors. Finally, comparative studies with other regions, using a mixed-methods approach, could offer a more comprehensive understanding of the best practices and contextual factors shaping the success of digital-governance initiatives.

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