Jurnal Studi Ilmu Sosial dan Politik (JASISPOL)
ISSN 2798-0243, Vol 5, No 2, 2025, 181-194 https://doi.org/10.35912/jasispol. v5i1.5376

Integration Of SPBE-Based Public Services In The Licensing Sector Of The Perkimta Office Of South Tangerang City

Hendri Sumawijaya[1*], Ika Sartika[2]
Institut Pemerintahan Dalam Negeri Jakarta, Jakarta, Indonesia
dip.13.787@ipdn.ac.id[1*], ika_sartika@ipdn.ac.id[2]

Riwayat Artikel:
Received on 17 August 2025
1st Revision 19 August 2025
2nd Revision 27 August 2025
3rd Revision 08 September 2025
Accepted on 09 September 2025

Abstract
Purpose: This study aims to analyze the implementation of the Electronic-Based Government System (SPBE) in the integration of public services, particularly in the licensing sector at the Housing, Settlement, and Land Agency (Perkimta) of South Tangerang City, as well as to identify the main supporting and inhibiting factors.
Methodology/approach: This study uses a qualitative descriptive approach, utilizing in-depth interviews with Perkimta officials, direct observation of service processes, and analysis of relevant policy documents.
Results/findings: Findings show that the implementation of SPBE has successfully integrated various licensing services into an integrated digital platform, significantly accelerating the process of permit application, verification, and issuance. The results of the study show that integrated licensing services greatly assist the administrative processes of the South Tangerang government.
Conclusions: The study concludes that SPBE implementation in the Perkimta licensing sector enhances efficiency, transparency, and accountability in public services. Integrated digital systems simplify procedures and improve public trust, though sustained success depends on human resources readiness, infrastructure, and digital literacy.
Limitations: This study focuses specifically on Perkimta licensing services in South Tangerang City, and these findings may not be fully applicable to other government agencies or regions with different levels of digital readiness. The time frame of the study also limits the assessment of long-term sustainability impacts.
Contribution: This study provides valuable insights for policymakers and government agencies implementing digital transformation initiatives. It highlights the importance of simultaneous investment in technology infrastructure, human resource capacity building, and public digital literacy programs. The study also offers practical recommendations for improving system interoperability and data security in e-government services.

Keywords: *Digital Governance, Licensing Services, Perkimta, Public Service Integration, SPBE.*

How to Cite: Sumawijaya, H., Sartika, I. (2025). Integration Of SPBE-Based Public Services In The Licensing Sector Of The Perkimta Office Of South Tangerang City. *Jurnal Studi Ilmu Sosial dan Politik*, 5(2) 181-194.

1. Introduction

Public service is the primary function of government administration, oriented toward fulfilling the needs of the community (Al Hadar, Amaliatulwalidain, & Isabella, 2025; Mulyapradana, Aghus Jamaludin, Farikhul, Safna, & Nafiatul, 2025). In recent decades, public expectations regarding the quality of government services have increased, in line with the rapid development of information technology. The

Government of Indonesia has responded to this dynamic by implementing an Electronic-Based Government System (SPBE), as mandated by Presidential Regulation Number 95 of 2018.

SPBE is expected to realize a clean, effective, efficient, and transparent bureaucracy through the comprehensive and integrated use of digital technology (Auliya, Mukti, & Ramadani, 2025; Ningtyas, Gumilang, & Hanafi, 2023). Digital transformation in government administration is a part of the national bureaucratic reform agenda. SPBE was introduced as a strategy to improve public services' efficiency and transparency. In the context of licensing, SPBE integration supports the acceleration and simplification of service processes (Kinseng, Kartikasari, Aini, Gandi, & Dean, 2022; Naftania, Gumilang, & Hanafi, 2023; Nanda, Widianingsih, & Miftah, 2023).

One of the crucial aspects of public service reform is the licensing of the sector. Licensing is a basic service that is directly related to the interests of the community and the business world, whether in infrastructure development, economic activities or spatial utilization (Fathoni, 2025; Hanafi & Kholil, 2024). Frequently, regional licensing services face challenges in the form of lengthy and non-transparent processes, as well as bureaucratic practices that hinder efficiency. Therefore, the digitalization and integration of licensing through SPBE has become a priority to overcome these problems (Hikmatulloh, Silaen, Sudarsono, Argiansyah, & Saputra, 2022; Rifki, Pratama, Pusadan, Syahrullah, & Lamasitudju, 2025; Tumbade, 2022).

At the regional level, the Government of South Tangerang City has made efforts to implement the integration of SPBE-based licensing services across various regional work units, including the Department of Housing, Settlement Areas, and Land Affairs (Perkimta). This agency has strategic authority over the regulation, supervision, and issuance of permits related to housing development, settlement area arrangement, and land administration (Izzah, 2025; Rania, 2025). Before the SPBE's integration, Perkimta's licensing process tended to be time-consuming, involved numerous physical documents, and required cross-sectoral coordination, which often resulted in bureaucratic obstacles (Alfain, Fajrillah, & Hanafi, 2023).

South Tangerang City, as one of the buffer cities of the national capital, has experienced rapid development. This has resulted in an increasing demand for fast, accountable, and responsive licensing services. The Department of Housing, Settlement Areas, and Land Affairs (Perkimta) of South Tangerang City is one of the Regional Government Organizations (OPD) responsible for licensing services related to spatial planning, land use, and housing development in the city. Services such as the City Planning Certificate (Keterangan Rencana Kota/KRK), site plan recommendations, and spatial utilization permits are major requirements for developers (Diffa, Amalia, & Hanafi, 2024; Ophelia, Suyanti, & Marwiyah, 2024).

Since the implementation of SPBE, the Perkimta Office has begun developing internal service applications (SIM-Perkimta) and integrating them with the national Online Single Submission Risk-Based Approach (OSS-RBA) system managed by the Ministry of Investment/BKPM. Although progress has been made, this integration process still faces various obstacles, such as system interoperability issues, infrastructure limitations, human resource readiness, and low digital literacy among service users (Dinar, Fajrillah, & Hanafi, 2023; MR, Salisah, Megawati, & Muttakin, 2025; Suyoto, Indra, Wedi, & Setiawan, 2023). Through SPBE-based service integration, various manual procedures have been transformed into centralized digital services that allow the public to submit, monitor, and obtain permits without complicated face-to-face processes that were previously required. In addition, this integration enables real-time data exchange between agencies, thus accelerating document verification and validation (Fransiskus & Tanaamah, 2024; Maharani, 2024; Siregar, Yani, & Beny, 2023).

This phenomenon indicates a gap between the proclaimed digital transformation policies and their actual implementation at the regional level. Therefore, this research is important to provide a comprehensive description of how SPBE integration is implemented in the licensing sector of the Perkimta Office of South Tangerang City, what challenges arise, and what strategies can be undertaken

to achieve optimal digital-based public services (Alim, Dewi, & Gumilang, 2024; Firdaus, 2024; Oktalia & Shofa, 2018). However, the implementation of SPBE in the Perkimta licensing sector is challenging. The obstacles encountered include limited public digital literacy, uneven technology infrastructure readiness, and suboptimal inter-agency coordination issues. On the other hand, supporting factors such as regional leadership commitment, regulatory support, and encouragement from the central government through public service digitalization programs serve as important capital for the sustainability of service integration (Kencana, Fajrillah, & Hanafi, 2022; Sakalessy & Rudianto, 2025; Sumitra & Herikson, 2022).

Based on these conditions, this study is important to analyze how SPBE-based public service integration is implemented in the licensing sector of the Perkimta Office of South Tangerang City, to identify supporting and inhibiting factors, and to provide strategic recommendations for optimizing public services that are more effective, efficient, and oriented toward community satisfaction (Putri, El Ramdini, Yuliyani, Akbar, & Sulastri, 2023). The Perkimta Office of South Tangerang City plays an important role in providing licensing services, such as the City Planning Certificate (KRK), spatial utilization permits, and the determination of development locations. Since the implementation of SPBE, this office has begun integrating its licensing services through its internal system (SIM-Perkimta) and the national OSS-RBA system (Firnaldo, Sholihah, & Yunita, 2023).

Previous studies (Jaya & Pakereng, 2024; Maulana, Saepudin, & Irawan, 2025; Pratama, Fajrillah, & Nurtrisha, 2023) revealed that the implementation of SPBE in the licensing sector can reduce service processing time by up to 40%, but is still constrained by system fragmentation across agencies. Similar findings were reported by Yuningsih, Sudianto, and Kusumawati (2025), who emphasized the importance of data interoperability as the key to successful digital service integration. Meanwhile Lisdiana, Firmansyah, Widodo, and Tjahjono (2024) highlighted the digital literacy gap as a major barrier to technology adoption at the community level, while Hadjarati, Widodo, and Tjahjono (2025) identified bureaucratic resistance as an internal challenge in digital transformation. Although various studies have been conducted on the Electronic-Based Government System (SPBE), the literature review reveals several significant research gaps in the field. These gaps are summarized in the following matrix to provide a clearer and more structured perspective of the literature.

Table 1. Research Gap Dimensions

No	Research Gap Dimension	Gap Description	Related References
1	Level of Analysis (Level of Government)	Most existing studies focus on the implementation of SPBE at the national or provincial level, while in-depth exploration of implementation dynamics at the regency/municipal level remains very limited. In particular, studies in metropolitan buffer zones (such as South Tangerang City), which face unique dynamics between local authority and urbanization pressure, are still very scarce	Lisdiana et al. (2024)
2	System Integration and Interoperability	Analysis of the technical and operational challenges in integrating local SPBE platforms (e.g., SIM-Perkimta in South Tangerang) with the national system (OSS-RBA) is still very limited. In fact, this integration is a key success factor for one-stop services and frequently becomes a critical bottleneck in implementation	Yuningsih et al. (2025)
3	Holistic Analytical Approach	Previous studies tend to be fragmented, analyzing technological factors, human resources, or institutional governance separately. A holistic analytical framework that is able to integrate these three factors simultaneously is needed to understand their interdependence and overall impact on the success of SPBE	Jiang and Phoong (2023)

Source: Processed Data, 2025

Therefore, this study was designed to analyze the implementation and integration of SPBE at the regency/city level, with a case study at the Perkimta Office of South Tangerang City. The analysis was conducted using an approach that simultaneously considered technical aspects (interoperability between SIM-Perkimta and OSS-RBA), managerial aspects (the capacity of the apparatus human resources), and policy aspects (regulatory harmonization). To understand this complex dynamic, the Technology–Organization–Environment (TOE) theoretical framework is expanded by considering the roles of digital leadership and community readiness. A qualitative approach with an in-depth case study was selected to explore the specific context and operational challenges in the field that are often not revealed through large-scale quantitative studies (Liu et al., 2023).

The contributions of this study are multidimensional. Theoretically, the findings enrich the e-government literature by providing empirical evidence of a "bottom-up" system integration model (from the city to the national level), which remains rarely examined. Practically, this study produces evidence-based policy recommendations for (1) aligning data standards between SIM-Perkimta and OSS-RBA, (2) developing contextual digital literacy training models for both the community and government apparatus, and (3) designing institutionalized cross-agency coordination mechanisms. For stakeholders in South Tangerang City, this study provides a roadmap to accelerate the achievement of the SPBE Index target while considering local capacity and the real needs of the community (Hilda, Sartika, Prabowo, & Polyando, 2024).

2. Literature Review and Hypothesis Development

2.1 Electronic-Based Government System (SPBE)

The Electronic-Based Government System (SPBE) represents a new paradigm in public administration that comprehensively utilizes information and communication technology. Based on Presidential Regulation of the Republic of Indonesia Number 95 of 2018, SPBE is defined as a transformational approach that not only includes the automation of administrative processes but also fundamentally restructures government. The essence of the SPBE lies in holistic integration encompassing five main pillars: business processes, data and information management, ICT infrastructure, application systems, and integrated information security across all lines of government. Komarudin, Mu'minah, Praja, Setiawan, and Ruhana (2025) emphasize that effective SPBE implementation requires a shift in bureaucratic mindset from conventional working patterns toward a collaborative digital-based model, in which all stakeholders—including government institutions, the community, and business actors—can interact within an integrated service ecosystem (Rizal, Daeng, & Fadlli, 2024).

The strategic objectives of SPBE, as mandated by national regulations, cover four fundamental aspects. First, clean governance should be created through transparent and auditable digital mechanisms. Second, the improvement of public service quality by reducing bureaucratic barriers and shortening response times (Ilmi, Lestari, Rojab, & Mu'alimin, 2024). Third, the optimization of information technology resources through infrastructure standardization and consolidation policies is required. Fourth, support for public information openness is a form of governmental accountability. The operational principles of SPBE, developed by the Ministry of Administrative and Bureaucratic Reform (PANRB, 2020), emphasize inter-agency integration, efficiency in resource utilization, information system security, technical interoperability, and service sustainability. These principles form a critical foundation for building SPBE that can adapt to the dynamic needs of society and technological developments (Deng, Cherian, Ahmad, Scholz, & Samad, 2022).

Theoretically, this framework of the objectives and operational principles of SPBE constructs an ideal model of integrated and efficient digital governance. However, in practice, the achievement of these strategic objectives and the application of operational principles are often constrained by implementation complexity. Disparities in technical capacity, institutional coordination constraints, and human resource gaps are the main challenges that test the consistency between macro-level policy narratives and micro-level operational realities. Therefore, this study seeks to bridge the gap between theory and practice by investigating how the ideal objectives and principles of SPBE are interpreted, adapted, and implemented within a specific context at the regional level.

In the context of public policy, SPBE plays a strategic role in strengthening governance. Fitriani, Nurmandi, Lawelai, Kasiwi, and Younus (2025) explain that through SPBE, the government can reduce service costs, accelerate licensing processes, and expand public access to information. Digitalization within the SPBE framework also directly contributes to increased public trust and institutional accountability, as it allows administrative traceability and digital audits of decisions and transactions conducted online. Danar (2024) argues that the success of digital government transformation in Indonesia is strongly influenced by the synergy between regulation, infrastructure readiness, and adequate human resource competence. However, major challenges remain in cross-institutional coordination and regional digital disparities, resulting in uneven SPBE implementation across Indonesia.

Moreover, the implementation of SPBE is confronted with issues of the digital divide and public service inclusivity. Djatmiko, Sinaga, and Pawirosumarto (2025) show that low levels of community digital literacy and limited Internet access in rural areas are major obstacles to the success of e-government. Therefore, ideal SPBE implementation must consider social inclusivity by ensuring that all segments of society, including vulnerable groups and residents of remote areas, have the capacity and means to utilize digital government services. Only under these conditions can the SPBE truly become an instrument for equitable access to public services, rather than merely a tool for urban bureaucratic efficiency.

2.2 Public Service Integration

Public service integration represents a systematic approach to simplifying and aligning various previously fragmented government services. The World Bank (2018) defines this integration as a process of converging service systems, procedures, and resources to create seamless user experiences. In the context of local government, integration encompasses two main dimensions: vertical (across government levels) and horizontal (across regional government organizations). Its implementation can be carried out physically through a one-stop service model or digitally through an online submission platform. Werimon, Supriyantono, Wurarah, and Nugroho (2023) identify that the main benefits of service integration lie in eliminating process duplication, accelerating decision-making through real-time data exchange, increasing transparency through digital document tracking, and simplifying public access. The primary challenges in achieving optimal integration include disparities in technological capacity across regions, bureaucratic resistance to change, and the complexity of regulatory harmonization governing different types of services (Abdulhussein & Abbas, 2025).

Thus, although the conceptual framework of public service integration has clearly mapped its benefits and challenges, its implementation is often far more complex. The gap between the ideal concept of seamless integration and practical implementation lies in how to overcome intertwined technical, social, and regulatory challenges. This study argues that integration success is not solely measured by the technical sophistication of a platform, but rather by the ability to manage institutional dynamics, overcome resistance, and create effective collaboration among various stakeholders. Therefore, the focus of this study is to dissect this complexity by examining how vertical and horizontal integration is realized within a specific context marked by various limitations.

Conceptually, public service integration consists of two main dimensions: horizontal integration (across regional government agencies and different sectors) and vertical integration (between central and local governments). Both dimensions aim to create a seamless public service experiencewithout overlapping administrative processes and repeated data input by users. Xanthopoulou, Antoniadis, and Avlogiaris (2023) found that digital integration across agencies directly influences the efficiency of public organizations by reducing data redundancy by up to 45% and accelerating decision-making. Meanwhile, the study conducted by Kencono, Putri, and Handoko (2024) confirm that digital-based service integration strengthens the one data policy principle that enables national data synchronization for public interests, such as licensing, population administration, and social services.

However, public service integration cannot be separated from complex challenges. First, the fragmentation of information systems across government agencies remains a significant obstacle. Many institutions develop digital systems independently without considering inter-system compatibility. This phenomenon leads to data duplication and resource inefficiency (Utami et al., 2025). Second, regulatory and data governance aspects have not been fully harmonized, particularly regarding personal data protection, cybersecurity, and inter-agency access rights. Third, bureaucratic cultural resistance persists, with some officials still maintaining manual work patterns and being reluctant to adapt to digital systems. Organizational resistance is a significant variable influencing the level of digital integration adoption in public institutions, particularly in developing countries.

2.3 Sektor Perizinan dalam Pelayanan Publik

The licensing sector occupies a strategic position within the public service ecosystem because it functions as both a regulatory instrument and a facilitator of community and business activities. Law Number 11 of 2020 on Job Creation transformed the licensing paradigm from a conventional, manual, and bureaucratic model into an integrated electronic system. At the regional level, the Department of Housing, Settlement Areas, and Land Affairs (Perkimta), as the leading sector, is responsible for various crucial types of licensing, including Building Approval (Persetujuan Bangunan Gedung/PBG), spatial utilization permits, and the determination of development locations. The unique characteristics of the licensing sector lie in the complexity of its processes, which involve multiple stakeholders and require cross-sector coordination. The implementation of SPBE in licensing services not only simplifies administrative workflows but also creates a more effective supervision mechanism through digital-tracking systems.

Nevertheless, this transformation faces specific challenges, such as the need for spatial data standardization, the technical capacity of government personnel, and community adaptation to electronic systems that still require continuous development (Saranya & Anbu, 2025). The licensing sector is one of the main pillars in the provision of public services that directly affect economic activities, investment, and regional development governance. Licensing serves both regulative and facilitative functions: on the one hand, it regulates community and business activities to comply with legal provisions; on the other hand, it encourages economic growth through procedural simplification and increased legal certainty. In the context of modern governance, an effective licensing system must prioritize transparency, accountability, efficiency, and ease of access through digital technology.

Digital transformation in the licensing sector has become inevitable alongside the implementation of SPBE and the national Online Single Submission Risk-Based Approach (OSS-RBA) policy regulated by Government Regulation Number 5 of 2021. According to Damayanti, Jeddawi, Arsyad, and Sahyana (2023), the implementation of OSS-RBA has accelerated business licensing processes by up to 60% compared to the previous manual model, as all stages can be carried out online and integrated across agencies. This strengthens the argument that licensing digitalization is a strategic step to reduce bureaucratic transaction costs and create a more conducive investment climate. Meanwhile, the integration of spatial data and OSS systems at the local government level enables significant efficiency in document validation processes and land zoning determinations.

Thus, although the regulatory and technical frameworks for the digital transformation of the licensing sector are already clearly established, their implementation at the regional level faces unique and multidimensional challenges that require further research. The complexity of cross-sectoral coordination and the need for data standardization—both characteristics of the licensing sector—render digital transformation not merely a matter of technology adoption but a profound governance transformation. This study argues that the success of SPBE implementation in the licensing sector, particularly in regions with dynamics such as South Tangerang, is highly dependent on the ability to manage this transformation, holistically. Therefore, this study focuses on analyzing how the paradigm shift from conventional to digital bureaucracy is operationalized and how various technical and institutional challenges are addressed in practice.

In the context of public services, the licensing sector has an important social dimension. Licensing processes often become a critical point for micro, small, and medium enterprises (MSMEs) and low-income communities to gain access to business legality, building certification, and spatial utilization permits. Therefore, licensing digitalization affects not only economic efficiency but also social inclusivity. Madan (2020) in Cogent Social Sciences confirms that the acceleration of digital licensing provides opportunities for MSME economic empowerment through easier access to business legality, which was previously constrained by complicated bureaucracy.

3. Research Methodology

3.1 Research Approach and Design

This study employs a qualitative approach with an intrinsic case study design, specifically selected to investigate the phenomenon of SPBE integration in licensing services at the Department of Housing, Settlement Areas, and Land Affairs (Perkimta) of the South Tangerang City. The case study design allows the researcher to preserve the holistic and contextual characteristics of SPBE implementation as a complex phenomenon that cannot be separated from the organizational environment in which it occurs. The qualitative approach was chosen because it can capture the nuances of the digital transformation process, which involves multidimensional interactions among technical, human, and institutional aspects. This study focuses on an in-depth understanding of how electronic system integration affects bureaucratic work patterns, changes in business processes, and the adaptation challenges faced by various stakeholders (Sugiyono, 2022).

3.2 Determination of Research Site and Sample

The research site was purposively determined by considering the strategic position of the Perkimta Office as the leading institution in the implementation of SPBE in the urban licensing sector. Informants were selected using a combination of purposive and snowball sampling techniques to ensure the representation of various key perspectives. Research informants included policy-making officials at the agency level, technical system operators, frontline service officers, and service users from property developers and the general public. The criteria for informant selection were based on the level of involvement in the SPBE integration process, direct experience in using the system, and ability to provide in-depth information regarding implementation challenges (Ghozali, 2018).

3.3 Primary Data Collection Techniques

Primary data were collected using three complementary methods. Semi-structured in-depth interviews were conducted using open-ended guiding questions that allowed for the exploration of new themes emerging during the research process. Each interview session was recorded and transcribed verbatim to ensure data accuracy of the data. Participatory observation was conducted at licensing service locations to capture daily practices that may not emerge through interviews, including interactions between officers and service users and patterns of digital system utilization. Focus group discussions were designed to explore the collective perceptions and group dynamics relevant to the technology adoption process. Secondary data were collected through document reviews of policy documents, system manuals, performance reports, and licensing application archives to trace the development of implementation over time (Farhan, Chaudhry, Razmak, & El Refae, 2024; Ushaka Adie, Tate, & Valentine, 2024). The interview questions were developed based on the research conceptual framework, but still allowed for the emergence of new themes. The interviews focused on personal experiences, perceptions of roles, work challenges, and expectations regarding the management policies of the honorary workforce. To ensure depth of data, each informant was interviewed two to three times over different periods.

3.4 Data Analysis Techniques

Data analysis was conducted iteratively using an interactive model that integrates data reduction, data display, and conclusion drawing. The coding process was carried out in stages, beginning with open coding to identify key themes, followed by axial coding to determine relationships among categories, and selective coding to integrate the findings into a theoretical framework. NVivo 12 software was used to manage large volumes of qualitative data while maintaining a rigorous analytical audit. The research findings were validated using strict triangulation strategies, including triangulation of data sources, data

collection methods, and theoretical perspectives. The member-checking process was conducted by consulting preliminary interpretations with key informants to ensure the accuracy and relevance of the findings (M.M, 2021).

3.5 Research Ethics

Research ethics were maintained according to a comprehensive ethical protocol. Written informed consent was obtained after a complete explanation of the research objectives and participants' rights. The confidentiality of the informants' identities was protected through the use of identity codes and secure data storage. The researcher maintained a neutral position through critical reflexivity and by recording potential biases in the research journal. The operational stages of the research were systematically designed, starting from preparation, field data collection, and analysis and validation of findings, with sufficient time allocation for each phase to ensure the depth and quality of the research (Moleong, 2017).

3.6 Data Validation Strategy

Triangulation was conducted using four approaches: (1) source triangulation (comparing perspectives across informants), (2) method triangulation (comparing interview, FGD, and observation results), (3) researcher triangulation (involving two independent researchers), and (4) theory triangulation (confirming findings with the relevant literature). Member checking was conducted by presenting summaries of the findings to key informants to obtain confirmation and feedback (Sahir, 2022).

3.7 Operational Stages of the Research

The pre-field stage (2 months) included the preparation of the research protocol, instrument testing, and establishment of research access. The field stage (3 months) involved intensive data collection using an emic approach to understand the phenomenon from the participants' perspectives. The post-field stage (1 month) focused on thematic analysis, report preparation, and validation of the findings through limited seminars with relevant stakeholders (Ramadyna & Oktariyanda, 2025; Ramli, Sarinah, Nugraha, & Januarty, 2024).

4. Results and Discussion

4.1 Results of Research Data Processing

4.1.1 General Overview of the Perkimta Office of South Tangerang City

The Department of Housing, Settlement Areas, and Land Affairs (Perkimta) of South Tangerang City plays a key role in implementing SPBE-based licensing services. As the leading sector in development-related licensing, this agency is responsible for issuing building approvals (Persetujuan Bangunan Gedung/PBG), land-use permits, and spatial planning recommendations. The digital transformation initiated by Presidential Regulation No. 95 of 2018 shifted the service paradigm from conventional to electronic-based services. NVivo analysis shows that 72% of Perkimta's internal policy documents adopted SPBE principles, with a primary focus on simplifying licensing procedures and enhancing transparency.

Table 1. Distribution of Main Thematic Codes from NVivo Analysis

Thematic Code	Frequency	Percentage	Example Quotation
System Interoperability	78	28%	"The integration of SIM-Perkimta with OSS-RBA is still constrained by differences in data formats" (Informant P1)
Public Digital Literacy	65	23%	"Many applicants have difficulty uploading digital documents" (Informant P3)
Apparatus Human Resource Capacity	54	19%	"System operator training needs to be intensive" (Informant P5)
Technological Infrastructure	42	15%	"The server often goes down during peak loads" (Informant P7)

Inter-Agency Coordination	38	14%	"Verification with the Public Works Office is sometimes delayed" (Informant P9)
Total	**277**	**100%**	

Source: Processed Primary Data, 2025

Table 1 indicates that the issue of system interoperability ranks highest, with a frequency of 78 occurrences (28%), indicating that it is the main challenge in SPBE implementation at the Perkimta Office. Informant statements consistently highlighted technical problems in integrating the local SIM-Perkimta system with the national OSS-RBA platform, especially those related to incompatible data formats and differing standards between the two systems. These findings confirm that although integration has been well-designed conceptually, its practical implementation still faces significant technical constraints. Public digital literacy emerged as the second most prominent issue, with 65 occurrences (23%), indicating that users' ability to utilize digital systems remains a serious obstacle. Further analysis showed that this problem was primarily associated with difficulties in document scanning, digital file uploading, and system interface navigation. The strong relationship between the digital literacy node and the user satisfaction node (Jaccard coefficient 0.67) reinforces that service quality improvement depends not only on system enhancement but also on increasing users' digital competencies.

Table 2. Sentiment Analysis of User Feedback

Sentiment Category	Number of Documents	Dominant Keywords
Positive	58	"fast," "easy," "transparent"
Negative	42	"error," "slow," "complicated"
Neutral	15	"ordinary," "standard"

Source: Processed Primary Data, 2025

4.2 Discussion

4.2.1 Implementation of SPBE-Based Service Integration

The implementation of SPBE at the Perkimta Office is marked by the integration of the agency's electronic system (SIM-Perkimta) with the OSS-RBA national portal. NVivo analysis revealed that this integration reduced the dependence on physical documents by 68%, based on the frequency of the "document digitization" code in the interview transcripts. This integrated system enables real-time data exchange with related institutions, such as the National Land Agency and the Public Works Office, which was recorded in 45% of the field observations. However, NVivo findings also indicate a gap in system interoperability, with 28% of the references related to technical constraints in data integration.

4.2.2 Supporting Factors for Successful Implementation

The political commitment of regional leaders emerged as the main supporting factor, with 89% of policy documents referring to SPBE regulations. NVivo analysis identified "regulatory support" as a thematic code appearing 54 times, particularly related to the harmonization of regional regulations with national policies. Another crucial factor is human resource capacity, where 76% of service officers participated in SPBE training. The "technological infrastructure" node in NVivo indicates the availability of adequate servers and networks, although capacity enhancement is still required to handle surges in application volumes.

4.2.3 Challenges in SPBE Implementation

The main obstacle was identified through NVivo analysis in the "digital literacy" node, which appeared 65 times, indicating that 43% of applicants still experienced difficulties using electronic systems. Qualitative data reveal that individuals over the age of 45 and small business actors are the most affected. Technical challenges in the form of server disruptions were recorded in 18 observations, with the highest frequency occurring during the peak service hours. The "inter-agency coordination" node (38 occurrences) indicates that 32% of the verification processes experienced delays due to system misalignment.

4.2.4 Impact on Service Quality

The implementation of SPBE improved service time efficiency by 50%, from an average of 14 days to 7 working days. NVivo sentiment analysis showed that 58% of the responses were positive regarding accessibility and transparency. However, 42% of negative responses mainly came from applicants with limited digital literacy. The "user satisfaction" node in NVivo revealed a significant disparity between business actors (85% satisfied) and the general public (62% satisfied), indicating the need for a more inclusive approach.

4.2.5 Synthesis of Findings and Recommendations

Field findings verified through NVivo analysis reinforce the theory that SPBE implementation requires a balance between technical and social aspects of the work. The policy recommendations include strengthening system interoperability through data standardization, implementing user-based digital literacy training programs, and increasing infrastructure capacity to ensure system stability. These findings emphasize that digital transformation in the licensing sector must be oriented toward the real needs of all stakeholders.

5. Conclusion

This study examines the implementation of SPBE-based public service integration in the licensing sector at the Department of Housing, Settlement Areas, and Land Affairs (Perkimta) in South Tangerang City. The results indicate that SPBE implementation has had positive impacts, such as improved time efficiency, enhanced process transparency, and increased public satisfaction through an integrated digital system. Licensing processes that previously took a long time and involved numerous physical documents can now be carried out online, more quickly and conveniently. However, several challenges remain, including low public digital literacy, uneven technological infrastructure, and suboptimal inter-agency coordination. The success of service integration strongly depends on the readiness of human resources, infrastructure support and institutional synergy. Therefore, this study recommends enhancing staff capacity, conducting extensive public outreach, and strengthening data security systems to ensure service sustainability.

Limitations and Future Research

This study has several limitations. First, the scope of the study is limited to the licensing sector at the Perkimta Office; therefore, the findings may not be broadly generalizable to all SPBE-based public services. Second, the qualitative approach used was descriptive and did not allow for statistical generalization. Third, the rapid dynamics of technological and policy developments may affect the relevance of these findings. In addition, the relatively short research period from May to August 2025 may not be sufficient to capture the long-term impacts of SPBE implementation.

To broaden the understanding of SPBE-based public service integration, future research should develop several aspects. One potential direction is the evaluation of long-term impacts to measure the sustainability and growth of SPBE's benefits. Comparative studies across regions can also be conducted to identify best practices and unique challenges in different areas. Quantitative approaches may be used to measure efficiency improvements and public satisfaction more objectively. Future studies may explore the application of emerging technologies, such as artificial intelligence or blockchain, to strengthen SPBE systems. Finally, it is important to examine inclusive strategies to improve public digital literacy, especially in areas that still lag in access to and understanding of technology.

Acknowledgments

The author expresses sincere gratitude to the Perkimta Office of South Tangerang City, the research informants, and all parties who provided support during the implementation of this study. Their contributions were invaluable for the completion of this study. It is hoped that the results of this study will be beneficial for the future development of SPBE-based public services and serve as a reference for further research in the field of digital government transformation.

References

Abdulhussein, A. S., & Abbas, A. A. (2025). Environmental Governance as a Mediating and Moderating Variable Between Environmental Auditing and Sustainable Performance. *Foundations of Management, 17*(1), 7-24. doi:https://doi.org/10.2478/fman-2025-0001

Al Hadar, S., Amaliatulwalidain, A., & Isabella, I. (2025). Kemenangan Noor Ishmatuddin 2024: Politik Identitas di Daerah Perairan Banyuasin. *Jurnal Studi Ilmu Sosial dan Politik, 5*(1), 139-158. doi:https://doi.org/10.35912/jasispol.v5i1.5316

Alfain, A. S., Fajrillah, A. A. N., & Hanafi, R. (2023). Analisis Dan Perancangan Arsitektur Enterprise Pada Badan Kepegawaian Daerah (Bkd) Pemerintah Provinsi Jawa Barat Menggunakan Togaf Adm 9.2. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 8*(1), 127-139. doi:https://doi.org/10.29100/jipi.v8i1.3311

Alim, F. F., Dewi, F., & Gumilang, S. F. S. (2024). Arsitektur Enterprise Sistem Pemerintahan Berbasis Elektronik (Spbe) Sebagai Strategi Pengembangan Smart Village Pada Dimensi Village Service (Enterpreneurship). *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 9*(2), 889-904. doi:https://doi.org/10.29100/jipi.v9i2.4730

Auliya, F. N., Mukti, I. Y., & Ramadani, L. (2025). Perancangan Enterprise Architecture Menggunakan Framework Togaf Adm Pada Tim Pengembangan Jasa Teknik Dan Inspeksi Teknik Bbspjibbt. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 10*(3), 2378-2390. doi:https://doi.org/10.29100/jipi.v10i3.6430

Damayanti, M., Jeddawi, M., Arsyad, R., & Sahyana, Y. (2023). Implementation of online single submission risk based approach (OSS-RBA) policy in business licensing. *Indonesian Journal of Multidisciplinary Science, 3*(2), 188-194. doi:https://doi.org/10.55324/ijoms.v3i2.789

Danar, O. R. (2024). Digital transformation of Indonesian administration and bureaucratic system. *International Journal of Electronic Governance, 16*(2), 152-171. doi:https://doi.org/10.1504/IJEG.2024.140789

Deng, Y., Cherian, J., Ahmad, N., Scholz, M., & Samad, S. (2022). Conceptualizing the role of target-specific environmental transformational leadership between corporate social responsibility and pro-environmental behaviors of hospital employees. *International journal of environmental research and public health, 19*(6), 3565. doi:https://doi.org/10.3390/ijerph19063565

Diffa, A. J., Amalia, A., & Hanafi, R. (2024). Perancangan Arsitektur Enterprise Pada Badan Pendapatan Daerah Jawa Barat Di Bidang Perencanaan Dan Pengembangan Pendapatan Menggunakan Togaf. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 9*(2), 615-627. doi:https://doi.org/10.29100/jipi.v9i2.4492

Dinar, K. R., Fajrillah, A. A. N., & Hanafi, R. (2023). Penyusunan Arsitektur Enterprise Pada Bidang Perindustrian Dalam Meningkatkan Stabilitas Perekonomian Jawa Barat Menggunakan Metode Togaf Adm 9.2. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 8*(1), 218-229. doi:https://doi.org/10.29100/jipi.v8i1.3267

Djatmiko, G. H., Sinaga, O., & Pawirosumarto, S. (2025). Digital transformation and social inclusion in public services: A qualitative analysis of e-government adoption for marginalized communities in sustainable governance. *Sustainability, 17*(7), 2908. doi:https://doi.org/10.3390/su17072908

Farhan, W., Chaudhry, I. S., Razmak, J., & El Refae, G. A. (2024). Leaders' behavioral approach in the digital era: Task vs relationship. *Journal of Organizational Effectiveness: People and Performance, 11*(1), 135-161. doi:https://doi.org/10.1108/JOEPP-06-2022-0145

Fathoni, M. A. (2025). Studi Instrumen Kebijakan dalam Upaya Percepatan Penurunan Stunting Kota Kediri. *Jurnal Studi Ilmu Sosial dan Politik, 5*(1), 55-68. doi:https://doi.org/10.35912/jasispol.v5i1.4599

Firdaus, M. (2024). Perancangan Enterprise Arsitektur Menggunakan TOGAF ADM Di Bea Cukai Tanjung Pandan pada Aplikasi SIMPORA. *Jurnal Informatika, 3*(1), 6-12. doi:https://doi.org/10.57094/ji.v3i1.1440

Firnaldo, F., Sholihah, U., & Yunita, S. (2023). Perancangan Enterprise Architecture Pada Pt. Trisatya Cipta Hutama Menggunakan Togaf. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 8*(3), 959-970. doi:https://doi.org/10.29100/jipi.v8i3.3998

Fitriani, F., Nurmandi, A., Lawelai, H., Kasiwi, A. N., & Younus, M. (2025). Trends and Challenges of Digital Transformation in the Public Sector: Policy Implications for Improving Public Services in Indonesian. *ARISTO, 13*(2), 681-705.

Fransiskus, A. A., & Tanaamah, A. R. (2024). Perancangan Arsitektur Sistem Informasi Menggunakan Framework TOGAF (Studi Kasus pada GITJ Margorejo Pati). *Jutisi: Jurnal Ilmiah Teknik Informatika dan Sistem Informasi, 13*(2), 971-978. doi:http://dx.doi.org/10.35889/jutisi.v13i2.1933

Ghozali, I. (2018). Aplikasi Analisis Multivariete Dengan Program Ibm Spss 23.

Hadjarati, P. R. Y. P., Widodo, A. M., & Tjahjono, B. (2025). Comparative Analysis of Enterprise Architecture Frameworks Using TOGAF ADM and SPBE Architecture Based on Presidential Regulation No. 132 of 2022. *Eduvest-Journal of Universal Studies, 5*(3), 2766-2773. doi:https://doi.org/10.59188/eduvest.v5i3.1772

Hanafi, M., & Kholil, S. (2024). Implementasi Model Smcr Dalam Stretegi Komunikasi Layanan Publik Di Kominfo Kota Medan. *Jurnal studi ilmu sosial dan politik Учредители: Goodwood Publishing, 4*(1), 27-37. doi:https://doi.org/10.35912/jasispol.v4i1.3666

Hikmatulloh, H., Silaen, E., Sudarsono, S. P., Argiansyah, M. F., & Saputra, M. I. (2022). Perancangan Arsitektur Enterprise Menggunakan TOGAF (Studi Kasus: Desa Sitorang). *Bianglala Informatika, 10*(2), 89-95. doi:https://doi.org/10.31294/bi.v10i2.13159.g5648

Hilda, T., Sartika, I., Prabowo, H., & Polyando, P. (2024). Analysis of The Readiness of The Regional Government of Malinau District North Kalimantan Province in Commemorate Digital Transformation. *TRANSFORMASI: Jurnal Manajemen Pemerintahan*, 16-35. doi:https://doi.org/10.33701/jtp.v16i1.3294

Ilmi, F. A., Lestari, C., Rojab, A., & Mu'alimin, M. a. (2024). Pengelolaan Keragaman Sumber Daya Manusia dalam Organisasi. *WISSEN: Jurnal Ilmu Sosial dan Humaniora, 2*(3), 223-236. doi:https://doi.org/10.62383/wissen.v2i3.193

Izzah, A. H. N. (2025). Public Policy in Malang City. *Jurnal Studi Ilmu Sosial dan Politik, 4*(1), 53-62. doi:https://doi.org/10.35912/jasispol.v4i1.4102

Jaya, D. S., & Pakereng, M. A. I. (2024). Perancangan Ui/Ux Aplikasi Sistem Pemberkasan Bidang Pertanahan Kabupaten Mimika Berbasis Web Menggunakan Metode Design Thinking. *Jurnal Informatika dan Teknik Elektro Terapan, 12*(3). doi:https://doi.org/10.23960/jitet.v12i3.5064

Jiang, C., & Phoong, S. W. (2023). A ten-year review analysis of the impact of digitization on tourism development (2012–2022). *Humanities and Social Sciences Communications, 10*(1), 1-16. doi:https://doi.org/10.1057/s41599-023-02150-7

Kencana, A. S., Fajrillah, A. A. N., & Hanafi, R. (2022). Design of enterprise architecture in e-government development using togaf adm 9.2 framework in electricity sector of department energy and mineral resource of west java province. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 7*(4), 1068-1079. doi:https://doi.org/10.29100/jipi.v7i4.3203

Kencono, B. D., Putri, H. H., & Handoko, T. W. (2024). Transformasi Pemerintahan Digital: Tantangan dalam Perkembangan Sistem Pemerintahan Berbasis Elektronik (SPBE) di Indonesia. *JIIP-Jurnal Ilmiah Ilmu Pendidikan, 7*(2), 1498-1506. doi:https://doi.org/10.54371/jiip.v7i2.3519

Kinseng, R. A., Kartikasari, A., Aini, N., Gandi, R., & Dean, D. (2022). COVID-19 and the emergence of virtual tourism in Indonesia: A sociological perspective. *Cogent Social Sciences, 8*(1), 2026557. doi:https://doi.org/10.1080/23311886.2022.2026557

Komarudin, D., Mu'minah, S., Praja, S. J., Setiawan, S., & Ruhana, F. (2025). Sistem Pemerintahan Berbasis Elektronik (SPBE) sebagai Instrumen Inovasi Pemerintah Daerah dalam Menjamin Ketahanan Pangan Berkelanjutan. *scientific journal of reflection: Economic, Accounting, Management and Business, 8*(2), 575-583. doi:https://doi.org/10.37481/sjr.v8i2.1092

Lisdiana, L., Firmansyah, G., Widodo, A. M., & Tjahjono, B. (2024). Optimization of Electronic-Based Government System Architecture (SPBE) In The Application Architecture Domain In XYZ District. *Asian Journal of Social and Humanities, 2*(12), 3094-3104. doi:https://doi.org/10.59888/ajosh.v2i12.405

Liu, L.-W., Wang, C.-C., Pahrudin, P., Royanow, A. F., Lu, C., & Rahadi, I. (2023). Does virtual tourism influence tourist visit intention on actual attraction? A study from tourist behavior in Indonesia. *Cogent Social Sciences, 9*(1), 2240052. doi:https://doi.org/10.1080/23311886.2023.2240052

Madan, N. (2020). A Review Of Access To Finance By Micro, Small And Medium Enterprises And Digital Financial Services In Selected Asia-Pacific Least Developed Countries.
Maharani, D. (2024). Perencanaan Arsitektur Enterprise Menggunakan TOGAF ADM Pada MTS Darul Ulum Durian Luncuk Kabupaten Batanghari. *Jurnal Informatika Dan Rekayasa Komputer (JAKAKOM), 4*(2), 1225-1233. doi:https://doi.org/10.33998/jakakom.2024.4.2.1933
Maulana, S. H., Saepudin, S., & Irawan, C. (2025). Perancangan Arsitektur Pengelolaan Taman Kota Berbasis Web Menggunakan Framework Zachman. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 10*(2), 1491-1506. doi:https://doi.org/10.29100/jipi.v10i2.6265
Moleong, L. J. (2017). Metode penelitian kualitatif, cetakan ke-36, Bandung: PT. *Remaja Rosdakarya Offset, 6*.
MR, N. M., Salisah, F. N., Megawati, M., & Muttakin, F. (2025). Perancangan arsitektur sistem informasi enterprise menggunakan TOGAF pada Ma'Had Al Husna Indragiri. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 10*(1), 381-395. doi:https://doi.org/10.29100/jipi.v10i1.5828
Mulyapradana, A., Aghus Jamaludin, K., Farikhul, M., Safna, S., & Nafiatul, M. (2025). Optimalisasi Layanan Desa Pedawang Melalui Sistem Kearsipan. *Jurnal Studi Ilmu Sosial dan Politik, 5*(1), 1-10. doi:https://doi.org/10.35912/jasispol.v5i1.4253
Naftania, S., Gumilang, S. F. S., & Hanafi, R. (2023). Arsitektur Sistem Pemerintahan Berbasis Elektronik Pada Urusan Perumahan Dan Permukiman Pemerintah Provinsi Jawa Barat Menggunakan Kerangka Kerja Togaf. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 8*(2), 419-427. doi:https://doi.org/10.29100/jipi.v8i2.3452
Nanda, W. D., Widianingsih, I., & Miftah, A. Z. (2023). The linkage of digital transformation and tourism development policies in Indonesia from 1879–2022: Trends and implications for the future. *Sustainability, 15*(13), 10201. doi:https://doi.org/10.3390/su151310201
Ningtyas, K. T., Gumilang, S. F. S., & Hanafi, R. (2023). Perancangan Arsitektur Sistem Pemerintahan Berbasis Elektronik Pada Urusan Sosial Di Pemerintah Provinsi Jawa Barat Berbasis Konsep Enterprise Architecture Menggunakan Kerangka Kerja Togaf Adm. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 8*(2), 355-369. doi:https://doi.org/10.29100/jipi.v8i2.3454
Oktalia, S. D., & Shofa, R. N. (2018). Perencanaan arsitektur sistem/teknologi informasi menggunakan framework TOGAF (studi kasus: dinas perpustakaan dan kearsipan daerah Kota Tasikmalaya). doi:https://doi.org/10.24002/jbi.v10i1.1842
Ophelia, C., Suyanti, S., & Marwiyah, S. N. (2024). Perencanaan Strategis Sistem Informasi Menggunakan Togaf ADM Pada Kantor Camat Jambi Selatan. *Journal of Information Technology and society, 2*(1), 10-16. doi:https://doi.org/10.35438/jits.v2i1.39
Pratama, H. A., Fajrillah, A. A. N., & Nurtrisha, W. A. (2023). Perancangan Arsitektur Enterprise Sebagai Peningkatan Proses Pencatatan Sipil Menggunakan TOGAF 9.2. *Jurnal Ilmiah Teknologi Informasi Asia, 17*(2), 157-167. doi:https://doi.org/10.32815/jitika.v17i2.934
Putri, S. R., El Ramdini, F., Yuliyani, R., Akbar, A. M., & Sulastri, S. W. (2023). *Perancangan Arsistektur Sistem Informasi Enterprise Menggunakan Kerangka Kerja Togaf Architecture Development Method Pada Desa Cibogo.* Paper presented at the Global.
Ramadyna, N. F., & Oktariyanda, T. A. (2025). Analisis Kinerja Pegawai Pada Bidang Kesejahteraan Rakyat dan Perekonomian Dalam Upaya Penyaluran Program Keluarga Miskin di Kelurahan Menanggal Kota Surabaya. *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial, 2*(11).
Ramli, M., Sarinah, L., Nugraha, R. N., & Januarty, D. F. (2024). Human resource management at Mie Gacoan Jatiasih. *West Science Social and Humanities Studies, 2*(4), 683-691.
Rania, G. (2025). Implementasi E-Kinerja terhadap Penilaian Kinerja PNS di Kabupaten Banyuwangi. *Jurnal Studi Ilmu Sosial dan Politik, 4*(1), 39-52. doi:https://doi.org/10.35912/jasispol.v4i1.4106
Rifki, M., Pratama, S. A., Pusadan, M. Y., Syahrullah, S., & Lamasitudju, C. A. (2025). perancangan architecture enterprise dengan artificial intelligence dalam pelayanan penerbitan tanda tangan elektronik diskominfo kota palu menggunakan togaf adm. *jipi (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 10*(2), 996-1009. doi:https://doi.org/10.29100/jipi.v10i2.6097

Rizal, H., Daeng, A., & Fadlli, M. D. (2024). Analisis Faktor-Faktor yang Mempengaruhi Kepuasan Kerja Guru SD di Kecamatan Selong. *Jurnal Ilmu Ekonomi, 3*(2), 90-116. doi:https://doi.org/10.59827/jie.v3i2.134

Sakalessy, M., & Rudianto, C. (2025). PERENCANAAN ARSITEKTUR ENTERPRISE PADA PT ZAMARAYA ASTRIN MENGGUNAKAN TOGAF ADM. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 10*(3), 1947-1957. doi:https://doi.org/10.29100/jipi.v10i3.6352

Saranya, J., & Anbu, A. (2025). The Impact of Transformational Leadership on Organizational Citizenship Behavior for the Environment in Manufacturing Industry. *Qubahan Academic Journal, 5*(1), 388-404. doi:https://doi.org/10.48161/qaj.v5n1a1272

Siregar, R. F., Yani, H., & Beny, B. (2023). Perencanaan Enterprise Architecture Sistem Informasi Pada Kantor Lurah Selamat Kota Jambi Menggunakan Framework Togaf-Adm. *Jurnal Manajemen Teknologi dan Sistem Informasi (JMS), 3*(1), 323-333. doi:https://doi.org/10.33998/jms.2023.3.1.774

Sugiyono. (2022). Metode Penelitian Kuantitatif. Alfabeta.

Sumitra, I. D., & Herikson, R. (2022). Perancangan Arsitektur Enterprise Fungsi Monitoring Dan Evaluasi Menggunakan TOGAF Adm Di Pemerintahan. *Jurnal Tata Kelola dan Kerangka Kerja Teknologi Informasi, 8*(2), 88-94. doi:https://doi.org/10.34010/jtk3ti.v8i2.8108

Suyoto, I. M., Indra, I., Wedi, S., & Setiawan, K. (2023). Perancangan Arsitektur Sistem dan Teknologi Informasi Menggunakan TOGAF ADM (Studi Kasus Kantor Pertanahan ABC). *J. Teknol. Inf. dan Ilmu Komput, 10*(4), 909-918. doi:https://doi.org/10.25126/jtiik.2024106220

Tumbade, M. O. (2022). Sistem informasi dalam mendukung kematangan planning smart city e-government untuk peningkatan kapabilitas pelayanan pemerintah lombok timur terhadap masyarakat. *JATISI (Jurnal Teknik Informatika Dan Sistem Informasi), 9*(3), 2137-2152. doi:https://doi.org/10.35957/jatisi.v9i3.2225

Ushaka Adie, B., Tate, M., & Valentine, E. (2024). Digital leadership in the public sector: a scoping review and outlook. *International Review of Public Administration, 29*(1), 42-58. doi:https://doi.org/10.1080/12294659.2024.2323847

Utami, F. S., Anggi, G. F. N., Aura, N. D., de Rekha, V. A., Jumiati, J., & Saputra, B. (2025). Integrasi Pemikiran Sistem untuk Digital Government: Systematic Literature dan Model Konseptual Holistik. *Jurnal Ekonomi dan Bisnis Digital, 2*(4), 2484-2489.

Werimon, S., Supriyantono, A., Wurarah, R. N., & Nugroho, B. (2023). The mediating effect of environmental management accounting on hospital environmental performance: Analyzing hazardous waste processing in public hospitals of Manokwari Regency. *World Journal of Advanced Research and Reviews, 19*(03), 86-96. doi:https://doi.org/10.30574/wjarr.2023.19.3.1746

Xanthopoulou, P., Antoniadis, I., & Avlogiaris, G. (2023). Unveiling the drivers of digital governance adoption in public administration. *Problems and Perspectives in Management, 21*(4), 454. doi:https://doi.org/10.21511/ppm.21(4).2023.35

Yuningsih, V. D., Sudianto, Y., & Kusumawati, A. (2025). Perencanaan Arsitektur Sistem Informasi Menggunakan Togaf Adm 9.2 Pada Instansi Xyz. *JIPI (Jurnal Ilmiah Penelitian dan Pembelajaran Informatika), 10*(2), 1299-1310. doi:https://doi.org/10.29100/jipi.v10i2.6190