

E-Government In West Java: Implementation, Evaluation, And Sustainability

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ABSTRACT: This study analyzes how the West Java Provincial Government has implemented the Electronic-Based Government System (SPBE) as part of its efforts to improve public service delivery through digital transformation. The purpose of the research is to assess how well SPBE has been carried out, identify areas that still need attention, and offer practical recommendations for future improvements. The analysis is based on official evaluation reports and relevant government regulations, using a descriptive and policy-focused approach. In 2024, West Java achieved a score of 4.73 on the SPBE index, exceeding the target of 4.15 and receiving a “satisfactory” rating. However, some components—particularly SPBE management and IT audits—were still found to be below the desired level. The findings suggest that strong leadership, qualified human resources, and coordinated collaboration across departments are key to improving SPBE performance. This study concludes that while progress has been made, there is still a need for consistent follow-up, better planning, and stronger evaluation mechanisms to ensure the system continues to support a more efficient, transparent, and accountable government.

KEY WORDS: Electronic-Based Government System (SPBE), Digital Governance, Public Sector Evaluation.

INTRODUCTION

The Electronic-Based Government System (Sistem Pemerintahan Berbasis Elektronik or SPBE) refers to the implementation of governance that utilizes information and communication technology (ICT) to enhance the quality of public services. The implementation of SPBE is a manifestation of e-government as mandated by Presidential Regulation Number 95 of 2018 concerning SPBE. This system aims to provide better services to government institutions, civil servants, business actors, the general public, and other relevant stakeholders. The management of SPBE is a mandatory responsibility of provincial governments. To ensure that ICT supports the realization of good governance, the Provincial Government of West Java has issued Governor Regulation Number 161 of 2022 concerning the Implementation of SPBE within the Provincial Government of West Java. The West Java Provincial Government has adopted SPBE as a strategy to achieve effective, efficient, sustainable governance and to deliver high-quality public services. This policy is in line with Presidential Regulation Number 95 of 2018 on SPBE and the Regulation of the Minister of Administrative and Bureaucratic Reform (PAN-RB) Number 59 of 2020 on SPBE Monitoring and Evaluation. The evaluation conducted by the Ministry of PAN-RB in 2024 indicated a significant improvement, with an average score of 4.73 (Table 1), compared to an average of 4.14 in 2023. Overall, the implementation of SPBE in the West Java Provincial Government was rated as “SATISFACTORY,” although several variables still require special attention.

The sustainability of SPBE policy implementation plays a critical role in improving the quality of bureaucratic reform. The realization of an informative provincial government through SPBE can be achieved by optimizing all available resources. Continuous follow-up and improvements are necessary. This policy recommendation is formulated based on a review of the SPBE Evaluation Report, with the hope that it may serve as a reference for improving the implementation of SPBE in the West Java Provincial Government. As noted, Presidential Regulation Number 95 of 2018 and Ministerial Regulation PAN-RB Number 59 of 2020 form the legal basis for SPBE monitoring and evaluation. The 2024 evaluation by the Ministry of PAN-RB reaffirmed the significant progress, with the West Java Provincial Government scoring 4.73, up from 4.14 in 2023, and receiving a “SATISFACTORY” rating.

Table 1.

SPBE INDEX – WEST JAVA PROVINCIAL GOVERNMENT

SPBE Index Score: 4.73 (Satisfactory)

Index Name	2024 Score
SPBE	4.73
SPBE Policy Domain:	
- Internal SPBE Governance Policy	5.00
SPBE Governance Domain:	
- Strategic Planning	4.75
- Information and Communication Technology	5.00
- SPBE Organizing Entity	5.00
SPBE Management Domain:	
- SPBE Management Implementation	4.25
- ICT Audit	2.67
SPBE Services Domain:	
- Electronic-Based Government Administrative Services	4.80
- Electronic-Based Public Services	5.00

Analysis of SPBE Evaluation Results is as follows:

Based on the scope of the SPBE domains, the following conclusions can be drawn:

a. SPBE domains categorized as Satisfactory:

- SPBE Policy (5.00)
- SPBE Governance (4.90)
- SPBE Services (4.88)

b. SPBE domain categorized as Good:

- SPBE Management (3.82)

A more detailed review of the SPBE aspects leads to the following conclusions:

a. Aspects that still require improvement and increased effort in implementation:

- ICT Audit (2.67)

b. Aspects that need to be optimized and sustained (requiring review, evaluation, and follow-up):

- Internal Policy (5.00)
- Strategic Planning (4.75)
- Information and Communication Technology (5.00)
- SPBE Organizing Entity (5.00)
- Implementation of SPBE Management (4.25)
- Electronic-Based Government Administrative Services (4.80)
- Electronic-Based Public Services (5.00)

Based on the results of the analysis, there remains a gap in several indicators that have not yet reached the maturity level of 5. Table 2 presents the Gap Analysis of the SPBE Evaluation Results of the West Java Provincial Government that have not yet attained the maximum maturity level.

Table 2. Gap Analysis of Evaluation Results 2024

SPBE Indicator	Maturity Level	Follow-up Actions
SPBE Roadmap of the Regional Government	4	- Review SPBE budgeting to ensure alignment with the e-Government Management Budget Plan (DPA) - Review and evaluate the SPBE Architecture System for alignment with the SPBE Roadmap - Review and evaluate the SPBE Roadmap implementation, particularly under Smart Province in the Smart Governance domain

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SPBE Risk Management	Risk	3	- Conduct evaluation and follow-up of 2024 SPBE Risk Management - Implement Integrity Pact signing by all Heads of Regional Apparatus (UPR) in 2025 - Develop 2025 SPBE Risk Management forms in accordance with Ministerial Regulation No. 5 of 2020 - Prepare quarterly SPBE Risk Monitoring Reports in 2025 - Establish strategic SPBE Risk Management policies set by the SPBE Coordination Team
Information Security Management	Security	2	- Implement the Information Security Management cycle as stipulated in BSSN Regulation No. 4 of 2021 - Evaluate and optimize the CSIRT Team - Review and evaluate the implementation of the Information Security Management cycle - Conduct follow-up actions based on review results and cycle implementation outcomes
SPBE Change Management	Change	4	- Implement the SPBE Change Management cycle: planning, analysis, development, implementation, monitoring, and evaluation of: • Application Changes • Hardware Changes • Software Changes • Infrastructure Changes • Business Process Changes • Organizational Environment Changes • Service Changes • Data Changes • Security Changes • Architectural Changes - Review and evaluate the implementation of the Change Management cycle - Follow up on results of the review and evaluation
SPBE Infrastructure Audit	Infrastructure	3	- Establish Internal ICT SPBE Audit Team Decree including Inspectorate (chair), Communications Office, and other relevant agencies - Conduct Internal ICT SPBE Audit using BRIN tools focusing on infrastructure and applications (SPLP and Intra-Government Network) - Conduct Internal ICT SPBE Security Audit using BSSN instruments covering Application and Infrastructure Security - Conduct External ICT SPBE Audit by BRIN and BSSN - Follow up on audit findings
SPBE Application Audit	Application	3	
SPBE Security Audit	Security	2	
Internal Government Oversight Services	Government Oversight Services	3	- Integrate Internal Oversight Services with other services - Review, evaluate, and follow up on the Internal Oversight Application with the Inspectorate - Implement follow-up actions based on evaluation results with the Inspectorate

Source: West Java Communication and Information Agency (Diskominfo), 2024

LITERATURE REVIEW

E-Government

E-Government is the application of information and communication technology (ICT) by the government to provide services, disseminate information, and facilitate relationships with the community, the business world, and between government agencies. According to the United Nations (2020), e-Government is the use of ICT by the government in providing services and information to the public to increase transparency, efficiency, and public participation. This definition emphasizes that e-Government not only includes the provision of information, but also its role in creating better governance. In addition, the Ministry of PAN-RB (2020) explains that the Electronic-Based Government System (SPBE) is a government administration that utilizes ICT in an integrated manner to create a clean, effective, efficient and accountable bureaucracy. The basic concepts of an electronic-based government system include:

a. Digitalization of Administration

Transformation of manual administrative processes into digital form, such as document submission, recording population data, taxation, or online licensing.

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b. Transparency and Accountability

Information technology helps open access to public data and information so as to encourage transparency and strengthen government accountability. As explained by Bertot, Jaeger, and Grimes (202), information technology helps open access to public data and information, thereby encouraging transparency and strengthening government accountability.

c. Public Participation (e-Participation)

Through digital channels, the government can involve the public in the process of policy formulation, supervision, and evaluation of public services. This is in line with the collaborative digital government approach.

d. Interoperability of Public Services

Connectivity between agencies allows data and systems to be integrated to facilitate cross-sector and regional services, thereby reducing redundancy and speeding up the process.

e. Efficiency and Effectiveness

By utilizing ICT, the government can reduce operational costs, accelerate services, and improve the quality of public policies. A study by Wirtz, Weyerer, & Müller (2020) shows that digitization contributes to increased citizen satisfaction with public services.

Models and Approaches in E-Government

The e-Government development model generally follows four stages, namely:

- a. Information provision (online static information)
- b. Online public service transactions
- c. Vertical integration between levels of government
- d. Horizontal integration between agencies at the same level of government

This model is used by many governments in designing their digital transformation roadmap. (Al-Sharafi et al., 2020) The e-Government system was developed to reach various parties, such as:

- a. G2C (Government to Citizen)
- b. G2B (Government to Business)
- c. G2G (Government to Government)
- d. G2E (Government to Employee)

Implementation of E-Government

Public policy implementation is the process of translating policy formulations into concrete actions in the field, and in the context of SPBE, this concerns how digital policies are operationalized by government agencies. According to Edward III (in Nugroho, 2017), the success of policy implementation is strongly influenced by four main factors: communication, resources, executor disposition, and bureaucratic structure. These four factors are also very relevant in the implementation of SPBE, which requires cross-sectoral understanding as well as adequate human resources and technology support. In practice, SPBE is not just the digitization of manual services, but a comprehensive transformation of the way bureaucracy works, business processes, and public service patterns. According to Dwiyanto (2008), bureaucratic reform through ICT utilization must be accompanied by a commitment to build participatory, transparent, and accountable governance. Therefore, in the context of the West Java Provincial Government, the implementation of SPBE requires synergy between regulations, technological tools, and organizational readiness to change. SPBE implementation is an integral part of the bureaucratic reform strategy and strengthening digital-based public services.

Evaluation of E-Government

Evaluation in the context of public policy, including SPBE implementation, is not only intended to measure the end result, but also to understand the implementation process. According to Winarno (2021), policy evaluation aims to assess the success of government programs through a systematic approach, taking into account their effectiveness, efficiency, and impact on society. In terms of SPBE, evaluation is an important tool to determine the extent to which the digital system implemented is able to support bureaucratic reform and improve the quality of public services. Furthermore, Budiati (2020) said that policy evaluation in the digital era must accommodate the dynamics of technological change and community expectations. Evaluation cannot only be fixated on administrative documents, but needs to see how the system is actually used and the benefits felt by users. Therefore, SPBE evaluation indicators such as risk management, information security, and ICT audits need to be reviewed not only from the aspect of regulatory compliance, but also in terms of system functioning and integration.

Sustainability of E-Government

Maintaining SPBE sustainability is not just a matter of maintaining a high index score every year, but also about how this system continues to run, is relevant, and has a real impact in the long term. Saputra (2021) explains that a sustainable policy is one that is not only well designed, but also able to adapt to changing needs and continues to receive support from various parties. In practice,

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this means that SPBE must be able to adjust to technological developments and society's increasingly high expectations for digital services. However, realizing sustainability is not always easy. Susanti (2022) reminds us that many digital programs in government work well in the beginning, but start to lose direction when there is a change in leadership or a change in budget priorities. Other challenges include limited human resources, weak coordination between regional agencies, and the lack of a culture of collaboration within the bureaucracy. Therefore, efforts to maintain SPBE sustainability need to be directed at fundamental things, such as strengthening leadership commitment, building a flexible system architecture, and creating a work ecosystem that is open to innovation.

RESEARCH METHODS

This research was conducted to see how far the implementation of the E-Government (SPBE) has gone in the West Java Provincial Government. The main focus is to evaluate the results that have been achieved, identify which parts still need to be improved, and formulate strategic steps so that the implementation of SPBE in the future can be more effective, efficient, and sustainable. This research was conducted using a qualitative approach to obtain a more in-depth picture of the implementation of the E-Government (SPBE) within the West Java Provincial Government. Data were obtained through reviewing SPBE policy documents, evaluation reports in 2024, and other relevant complementary documents. In addition, interviews were conducted with several informants who have an important role in the SPBE planning and implementation process, both from the agency leadership and the implementing technical team. The data analysis process was conducted descriptively, by observing emerging patterns, grouping key themes, and examining the interrelationships between various factors that influence program success. This approach was chosen because it was considered the most appropriate to fully understand the context of SPBE implementation, including constraints faced in the field, as well as opportunities that can be utilized for future improvements.

DISCUSSION

In response to the central government's policy regarding the implementation of E-Government through SPBE (Electronic-Based Government System), the Regional Government of West Java Province has issued Governor Regulation Number 161 of 2022 concerning the Implementation of SPBE. The Communication and Informatics Office (Diskominfo), as the leading sector, has prepared an action plan and carried out the implementation of SPBE within the West Java Provincial Government. The implementation of SPBE refers to various assessment variables, which include: SPBE Policy, SPBE Governance, SPBE Management, and SPBE Services. Each variable has more detailed aspects or indicators, which can be seen in Table 3.

Table 3. Domains and Aspects Assessed in SPBE Implementation in Regional Governments

Source: Ministry of Administrative and Bureaucratic Reform (Kemenpan RB)

SPBE
SPBE Policy Domain
Internal Governance Policy of SPBE
SPBE Governance Domain
SPBE Strategic Planning
Information and Communication Technology
SPBE Implementing Agency
SPBE Management Domain
SPBE Management Implementation
ICT Audit
SPBE Service Domain
Electronic-Based Government Administration Services
Electronic-Based Public Services

These various variables and their indicators must be continuously developed by each regional government, including the West Java Provincial Government. Based on both internal evaluations and external assessments conducted by the Ministry of Administrative and Bureaucratic Reform (Kemenpan RB), the results related to the SPBE capability of the West Java Provincial Government have shown fluctuating development from 2018 to 2024. The achievements and targets of the West Java Provincial Government’s SPBE can be seen in Figure 1 below:



Figure 1. SPBE Index Achievements and Targets

Table 4 presents the SPBE capability index values of the West Java Provincial Government from 2021 to 2024.

Table 4. SPBE Index Capability Values of the West Java Provincial Government by Domain and Aspect

Domain / Aspect	Evaluation	Monitoring	Evaluation	Evaluation
	Score			
	2021	2022	2023	2024
SPBE Index	3,28	3,37	4,14	4,73
Predicate	Good	Good	Very Good	Satisfactory
SPBE Policy Domain	2,90	3,00	4,70	5,00
Internal Governance Policy	2,90	3,00	4,70	5,00
Governance Domain	3,40	3,30	4,00	4,90
Strategic Planning	2,75	2,75	3,75	4,75
ICT	3,50	3,00	3,75	5,00
SPBE Implementation	4,50	5,00	5,00	5,00
Management Domain	1,18	1,00	2,91	3,82
Management Implementation	1,25	1,00	2,88	4,25
ICT Audit	1,00	1,00	3,00	2,67
SPBE Service Domain	4,08	4,38	4,51	4,88
Government Administration	3,80	4,30	4,40	4,80
Public Services	4,50	4,50	4,67	5,00

If illustrated in a simple graphical form, the evaluation results of the SPBE implementation in the West Java Provincial Government can be seen in **Figure 2**. These assessment results certainly provide lessons for Diskominfo and the West Java Provincial Government in relation to the implementation process of SPBE, highlighting the need for improvement across the evaluated variables and indicators.

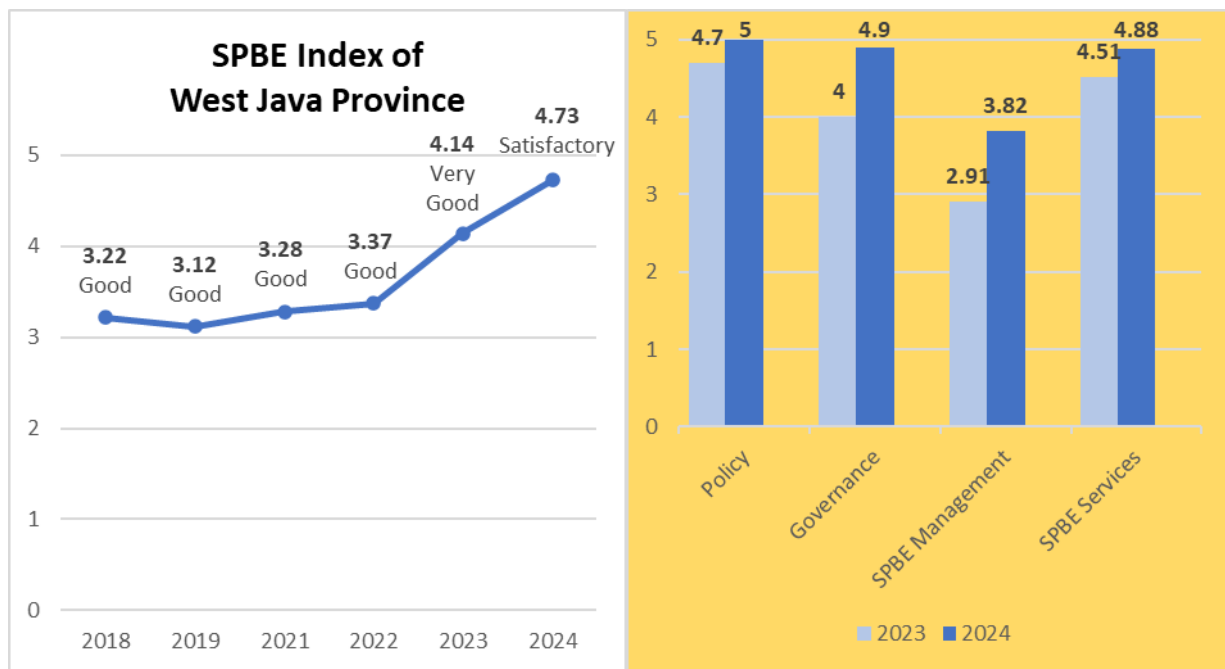
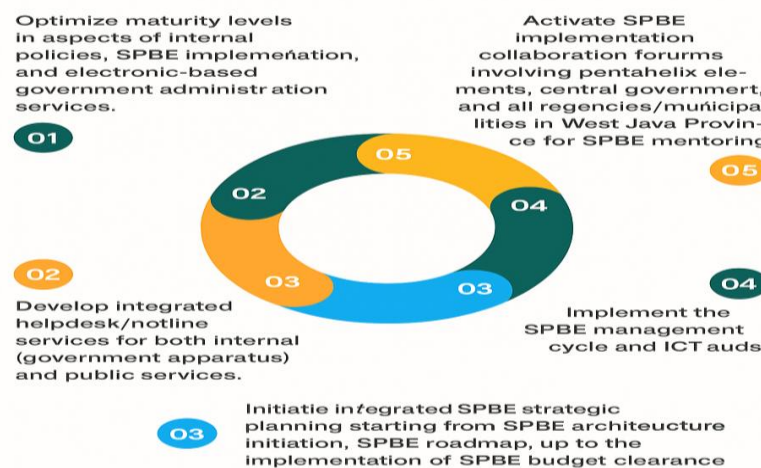


Figure 2. SPBE Index Graph of the West Java Provincial Government

In addition, the strategy for improving the SPBE index can be seen in **Figure 3**, which represents concrete efforts for improvement undertaken by the West Java Provincial Government.



Source: West Java Provincial Government

Figure 3. SPBE Index Improvement Strategy for 2024

CONCLUSIONS AND SUGGESTIONS

Based on the results of mapping policies and their implementation, factors that influence the implementation of SPBE in West Java Province were found, namely: a) Leadership and Management. Leaders have attention to the implementation of SPBE, but for now the Regional Government of West Java Province is still not optimal in implementing SPBE Management. b) Human Resources (HR) both in number and qualifications. c) Updating the SPBE Architecture and SPBE Plan Map. d) Cooperation both within internal units, Regional Apparatus, and with external parties of West Java Province.

Noting the results of the current implementation of SPBE of the West Java Provincial Government, for the sustainability and realization of the vision, mission and goals of the West Java Provincial Government in realizing effective, efficient, agile, productive, transparent, accountable and excellent services based on electronics, here are some strategic suggestions and action plans that need attention:

- Updating the SPBE Architecture and Plan Map with operationalization directions that focus on the fundamental structural framework in building the architecture and that are in accordance with the content of the national architecture and plan map;

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- b. Conduct a review and evaluation of internal SPBE policies;
- c. Implementing business process innovation;
- d. Monitoring and evaluating the use of Data Centers and Intra-Government Networks as well as the use of SPLP;
- e. Carry out the implementation of SPBE management and ICT Audit as a whole;
- f. Improving the optimization of electronic-based government administration services and public services; and
- g. Strengthening coordination and collaboration in implementing SPBE within the Regional Government of West Java Province.

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