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INSTITUTIONAL ECONOMIC PERSPECTIVE ON GOVERNMENT SYSTEM MATURITY LEVEL INDONESIAN ELECTRONIC BASED 2023

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ABSTRACT

This research aims to analyze the maturity level of Electronic-Based Government Systems, both at the National, Central, and Provincial Levels in 2022 using quantitative data sourced from the Decree of the Minister for Empowerment of State Apparatus and Bureaucratic Reform Number 108, 2023 concerning Results of Monitoring and Evaluation of Results Electronic Based Government. The quantitative data analysis technique used is descriptive statistical techniques, while the evaluation technique covers four SPBE domains, eight SPBE aspects, and forty-seven SPBE indicators. The research results show that the SPBE maturity level at the national level is 2.40, at the central level is 2.49, and at the provincial level is 2.37. The three SPBE indices show that the Indonesian SPBE process is at the managed level, while the SPBE service is at the interaction level. This means that both the managed level and the interaction level show that Indonesia's SPBE is still far from the optimal level. Based on these findings, it can be recommended to policymakers that economic institutions as a value and bureaucratic reform as a modern organization are more optimized in their implementation.

Keywords: Economic institutions; Bureaucracy; SPBE.

ABSTRAK

Penelitian ini bertujuan untuk menganalisis tingkat kematangan Sistem Pemerintahan Berbasis Elektronik, baik di Tingkat Nasional, Pusat, dan Provinsi pada tahun 2022 dengan menggunakan data kuantitatif yang bersumber dari Keputusan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Nomor 108 Tahun 2023 tentang Hasil Pemantauan dan Evaluasi Hasil Pemerintahan Berbasis Elektronik. Teknik analisis data kuantitatif yang digunakan adalah teknik statistik deskriptif, sedangkan teknik penilaian meliputi empat domain SPBE, delapan aspek SPBE, dan empat puluh tujuh indikator SPBE. Hasil penelitian menunjukkan tingkat kematangan SPBE di tingkat nasional sebesar 2,40, di tingkat pusat sebesar 2,49, dan di tingkat provinsi sebesar 2,37. Ketiga indeks SPBE menunjukkan bahwa proses SPBE Indonesia berada pada level terkelola, sedangkan layanan SPBE berada pada level interaksi. Artinya, baik level pengelolaan maupun level interaksi menunjukkan SPBE Indonesia masih jauh dari level optimal. Berdasarkan temuan tersebut, dapat direkomendasikan kepada pengambil kebijakan agar institusi ekonomi sebagai nilai dan reformasi birokrasi sebagai organisasi modern lebih optimal dalam implementasinya.

Keywords: Lembaga perekonomian; Birokrasi; SPBE.

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BACKGROUND

The acceleration of state apparatuses undergoes a transformative process through a bureaucratic reform program outlined in (Pemerintah, 2010), addressing the Grand Design for Bureaucratic Reform for the period 2010-2025. The primary goal is to establish a world-class bureaucracy characterized by increasingly effective, efficient, transparent, and accountable government governance (Herawaty, 2017). Additionally, the program aims to enhance the quality of public services, making them more accessible, expeditious, and cost-effective. Leveraging Technology 4.0, the bureaucratic reform program is propelled by the implementation of State-Owned Enterprises (SPBE), which involves the utilization of information and communication technology to deliver services to government agencies, civil servants, businesses, and the public. SPBE, as a comprehensive effort, supports various facets of change, serving as a fundamental component in accelerating the development of the state apparatus toward achieving a world-class bureaucracy. Specifically, SPBE focuses on transforming management systems, processes, and work procedures into transparent, effective, efficient, and measurable structures.

An electronic-based government system (SPBE) is a system that alters the manner in which governments engage with citizens and provide services by utilizing information and communication technology (ICT). The digitization of government procedures is facilitated by this technology, which improves the efficacy and accessibility of services. Various activities, including the submission of permit applications, the retrieval of public data, and the payment of taxes, could be conducted by individuals through online platforms. The necessity for in-person visits to government establishments is reduced, and administrative processes are simplified. Governments could improve service delivery by adapting it to the needs of the populace, making it more efficient and convenient, through the digitization of these interactions.

In addition, SPBE enhances accountability and transparency in public management. Citizens are empowered to monitor the progress of their requests and obtain information regarding government activity, as digital records and online platforms enhance transparency in government operations. Enabling citizens to hold authorities accountable for their actions and decisions, transparency fosters trust between the government and the people. Furthermore, E-Government technologies can limit the potential for corruption by standardizing procedures and limiting in-person encounters, thereby ensuring the equitable and consistent delivery of services. From an operational perspective, SPBE has the potential to lead to significant cost savings and efficiency enhancements for the government. Digital technologies can reduce the risk of errors and fraud and reduce operational expenses by reducing the reliance on physical infrastructure and documentation. In addition, the data generated by SPBE initiatives can be assessed to gain valuable insights for policy formulation and to improve the integrity of public services. Governments are enabled to make well-informed decisions, optimize

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resource allocation, and enhance governance using data in decision-making. A modern approach to public administration, an Electronic-Based Government System is distinguished by its enhanced responsiveness to the needs of citizens, transparency, and efficiency.

The query is, how will SPBE be beneficial to the government? Government administration is enhanced by the SPBE through the implementation of numerous strategies, which ultimately lead to more accountable, transparent, and effective governance.

Initially, the advantages of cost-effectiveness and efficacy are substantial. Digitization enables governments to optimize their operations and services, thereby reducing their dependence on physical infrastructure and documentation. In turn, this leads to substantial cost reductions. This involves reduction of expenditures associated with paper printing, storage, and postage. In addition, the automation of repetitive operations reduces the likelihood of human errors and expedites processing times, allowing government personnel to focus on more complex and strategic tasks.

In addition, SPBE solutions substantially improve the processes of data management and decision-making. Quantities of data are generated by digital platforms, which can be meticulously collected, analyzed, and employed to inform policymaking. The application of data-driven methodologies enables governments to make decisions that are more precise and timelier. Through the rapid identification of patterns, the assessment of the repercussions of policies, and the effective allocation of resources, this is accomplished. To facilitate disaster response preparation and monitor public health trends, real-time data analytics can be implemented.

Openness and citizen engagement are significantly enhanced by SPBE. Transparency in government operations is improved by digital systems, which allow citizens to readily access information and track the status of their requests. Trust between the government and the public is fostered and accountability is ensured through transparency. In addition, the utilization of technologies such as e-consultations, online surveys, and feedback mechanisms by Internet platforms facilitates increased citizen engagement in governance. The alignment of government policies and services with the requirements and preferences of the population is facilitated by this engagement. Therefore, SPBE is a highly effective tool for government administration, as it facilitates operations, improves the utilization of data for decision-making, and encourages transparency and citizen engagement.

To gauge the success of the SPBE implementation program within the broader context of bureaucratic reform, and in compliance with the mandate of (BAB & UMUM, 2018) concerning SPBE, monitoring and evaluation mechanisms are in place. The monitoring and evaluation of SPBE aim to assess the extent to which the implementation, both by central agencies and regional governments, contributes to the progress of bureaucratic reform. This assessment is conducted by measuring the maturity level of SPBE implementation,

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represented by the SPBE index value (Janureksa et al., 2022).

International research on SPBE has been conducted by experts from various institutions. One such study, conducted by (Fath-Allah et al., 2014) in their research titled "E-Government Maturity Models: A Comparative Study," sought to determine the maturity level of SPBE by comparing 25 SPBE models from different countries. The findings revealed variations in the features used among different e-government models and identified instances where features became obsolete and were replaced with new ones. Another study (Andersen & Henriksen, 2006) focused on the reorientation of the e-government maturity model, emphasizing the application of information technology to enhance investment services in the future. The proposed e-government maturity model was derived from Layne and Lee's model, which includes four stages: catalog, transaction, vertical integration, and horizontal integration. A recent study by (Susilo, 2021) titled "Transformation of the Electronic-Based Government System of the Ministry of Energy and Mineral Resources through Optimizing Integrated Information Technology" highlighted that Indonesia's e-government development lags behind other UN member countries at both global and ASEAN levels. Despite the existing gap, the government remains committed to enhancing national e-government, albeit with challenges that have yet to meet expectations.

From various studies conducted by SPBE researchers in various countries, including in Indonesia, so far, we have not been able to find any SPBE research with an institutional and bureaucratic perspective as a key factor in the success of SPBE transformation. Thus, it is deemed necessary to conduct research on the maturity level of SPBE Indonesia with an institutional perspective as a value and bureaucracy as a modern organization.

METHOD

Quantitative Data

The data used comes from the Decree of the Minister of Administrative Reform and Bureaucratic Reform Number 108 of 2023 on the System of Supervision and Evaluation of Results, 2023 (Keputusan Menteri Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi Nomor 108 Tahun 2023 Tentang Sistem Pengawasan Dan Evaluasi Hasil, 2023) about the Outcomes of Monitoring and Evaluation of SPBE in Central and Regional Agencies in the year 2022.

Quantitative Analysis Techniques

The analysis technique used is based on the provisions of Appendix I to the Decree of the Minister of Administrative Reform and Bureaucratic Reform Number 108 of 2023 on the System of Supervision and Evaluation of Results, 2023 (Keputusan Menteri Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi Nomor 10Tahun 2023 Tenng Sm Pengawasan Dan Evaluasi Hasil, 2023) concerning Monitoring and Evaluation of SPBE. The formula used to evaluate the aspect index, domain index, and SPBE index is as follows:

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$$Aspect\ Index\ = \frac{1}{BA_i} \sum_{j=m}^{n} NI_{ij} \times BI_{ij}$$

$$Domain\ Index\ = \sum_{j=m}^{n} ND_j \times BD_j$$

$$SPBE\ Index\ = \frac{1}{BD_i} \sum_{j=m}^{n} NA_{ij} \times BA_{ij}$$

Information:
$Aspect\ Index$: the index value;
$Domain\ Index$: domain index value;
$SPBE\ Index$: composite index of four SPBE domain;
BA_i : weight value of aspect;
NI_{ij} : maturity value of the jth indicator in the ith aspect;
BI_{ij} : weight value of the jth indicator on the ith aspect;
ND_{ij} : index value of the jth aspect in the ith domain;
BD_i : domain weight value;
NA_{ij} : index value of the jth aspect in the ith domain;
BA_{ij} : weight value of the jth aspect in the ith domain

RESULT AND DISCUSSION

Prior to explaining the results of the research, several important variables were used as analytical tools for this research.

Electronic Based Government System

An Electronic-Based Government System, abbreviated as SPBE, denotes the governance of a government administration utilizing information and communication technology to deliver services to central agencies, regional governments, state civil servants, individuals, communities, business actors, and other entities. This is achieved by employing the concept of a maturity level model to gauge the evolution and sophistication of SPBE services.

According to Regulation of the Minister of Administrative Reform and Bureaucratic Reform Number 59 of 2020 concerning Monitoring and Evaluation of Electronic-Based Government Systems," 2020, the maturity level model is elucidated as a measurement model assessing the progression of organizational capabilities within a specific domain, denoted by the maturity level. Each maturity level is characterized by specific criteria, and these criteria serve as a measuring tool to evaluate the advancement of organizational capabilities in each field. The concept implies that the higher the maturity level an organization attains, the more elevated its capabilities are deemed to be (Paulk et al., 1993).

The maturity level models that have been widely practiced are (a) the Capability maturity integration model and (b) the e-Government maturity model. The capability maturity model was built by the Software Engineering Institute. This model measures the maturity level of the software development process. Apart from that, it is also the basis for developing various other maturity level models, such as ICT governance maturity, SPBE architecture maturity, risk management maturity, knowledge management maturity, data management maturity, and information security management maturity. On the other hand, e-government maturity models are maturity-level models that measure the stages of SPBE development from the aspect of SPBE service capabilities. This model was developed by many parties,

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including (Layne & Lee, 2001), (Andersen & Henriksen, 2006), (Kim & Grant, 2010), and the (United Nations Department of Economic and Social Affairs, 2012) at the United Nations.

Derived from these fundamental principles, the SPBE maturity level model was constructed as a tool for evaluating the advancement of processes and services. The maturity level of a process serves as an organizational metric and will be utilized to assess SPBE policy, governance, and management through five benchmarks: pilot, managed, defined, integrated measurable, and optimum. The pilot level benchmark signifies the implementation of SPBE without meticulous planning and can occur at any time. At the managed level, SPBE implementation aligns with management functions and is applied to specific work units within the organization. The defined level benchmark indicates that SPBE is systematically executed by management functions and is applied across all work units in the organization (Sukarsa et al., 2020). The integrated and measurable level benchmark suggests that the implementation of SPBE is both integrated and contributes to organizational performance, while the optimum level benchmark indicates that the SPBE implementation process involves continuous improvement in process quality based on the outcomes of reviews and evaluations.

The maturity level of services serves as an assessment of organizational capabilities within a service context and will be utilized to gauge the maturity level of electronic-based government administration services and electronic-based public services, categorized into five levels: information, interaction, transaction, collaboration, and optimum. The information level measurement indicates that SPBE services entail one-way information provision (Hartanto & Fauziati, 2023). The interaction level measurement implies that SPBE services involve two-way interactions, fostering engagement. The transaction level measurement signifies that SPBE services are executed through a single operational transaction utilizing multiple SPBE resources. The collaboration level measurement denotes that SPBE services are delivered through integration or collaboration with other SPBE services, showcasing a cooperative approach. Lastly, the optimum level measurement signifies that SPBE services have undergone enhancements, improving the quality of services in alignment with evolving needs in both the internal and external environment.

Economic Institutional Theory

(Yustika, 2010) and (Acemoglu, 2003) posit that institutions influence the advancement in the economic trajectory of a nation is posited by Yustika as contingent upon institutional dynamics. Yustika expounds that institutions unlike human resources, natural resources, population, and technology factors in production that can be disentangled from societal realities constitute a distinct variable that not only exists but actively operates within the societal fabric. In parallel, Acemoglu contends that institutions, encompassing both formal and informal structures, wield substantial influence over the economic performance of bureaucratic systems. This assertion is substantiated by three pivotal

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attributes intrinsic to institutions: (1) the exertion of ownership coercion, (2) the imposition of constraints on the actions of politicians and influential elite factions to procure economic advantages, and (3) the institution's ability to create equal opportunities for individuals to participate in programs and activities to enhance individual competence by their respective fields of expertise, enabling them to carry out SPBE transformation.

(North, 1995) also contends that institutions are the most crucial element in achieving the economic performance of a country. This implies that favorable geographical conditions, quality population, abundant natural resources, and adequate technology are the only potential factors for economic growth. However, as potential factors, they cannot serve as triggers for prosperity unless guided by a sound economic institutional system. Conversely, poor institutions can also lead to the wasteful utilization of all resources to support SPBE transformation in a country (Yeni et al., 2023). According to Nort, this phenomenon is prevalent in many developing countries.

Bureaucratic Theory

(Von Mises, 2007) asserted that bureaucracy is a fundamental aspect of modern government administration, serving as a crucial facilitator for governmental operations and the democratization process. According to him, the existence of bureaucracy is imperative, as no government or democracy can effectively function without it. This perspective aligns with the understanding that the driving forces behind the necessity of bureaucracy in contemporary society are rooted in economic dynamics, capitalism, and the prevalence of large-scale organizations. Such notions resonate with bureaucratic theory, as articulated (Weber, 1947) theory expounded in 1947, bureaucracy is considered the most rational approach for imperative control over the actions of the state apparatus. The objective is to attain the utmost level of technical efficiency by applying principles inherent to bureaucratic systems.

Weber outlines the essential components of a proficient bureaucracy, encapsulated within the construct of rational-legal authority, encompassing five fundamental principles: (a) standardization and formalization, (b) division of labor and specialization, (c) hierarchy of authority, (d) professionalization, and (e) the utilization of written documentation., according to Weber, constitutes the foundation for a well-functioning bureaucratic system, enhancing organizational efficiency and contributing to the overall success of governmental functions.

1. Principles of Standardization and Formalization

The principle of standardization encompasses four key aspects, namely work processes, work outcomes, worker skills, and the standardization of values or institutions utilized to regulate work activities (Tompkins, 2005). In contrast, formalization pertains to the extent to which rules, procedures, instructions, jobs, rights, and obligations, as well as the authority and responsibilities of individuals within an organization, are standardized. Instances of formalization in governmental entities encompass regulations or policies, frames of reference for work, procedural manuals,

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organizational charts, and technical instructions for assessment and control, as articulated by (Barnwell & Robbins, 2002).

2. Specialization and Labor of Division

The labor of division involves breaking down tasks into simplified components that can be repetitively executed. Alternatively recognized as job specialization, this practice forms groups of specialists within an organization. Specialization implies that individuals are assigned distinct tasks, fostering expertise among workers in their respective fields, even if their responsibilities comprise only a fraction of the organization's comprehensive activities. In bureaucratic contexts, labor of the division represents the delineation of official jurisdiction areas among officials, to prevent unclear and unsystematic tasks. This delineation is crucial as vague and unsystematic tasks have the potential to hinder the development of State-Owned Enterprises (SPBE). As a result, the classical public administration literature includes the principle of division of labor and specialization as foundational elements of administrative principles, as emphasized by (Hummel, 2000).

3. Hierarches of Authority

Max W. articulated the notion that individuals within an organization adhere to the authority of officials exclusively in their role as members of the organization, and their compliance is aligned with legal principles. On a personal level, an employee retains autonomy but yields to authority concerning the non-personal obligations inherent in their role. Obedience is not directed towards specific officials; instead, it is directed towards orders based on the law, establishing an impersonal directive. Beyond this form of authority, officials necessitate additional powers, such as the authority to oversee budgets, allocate material resources, execute contracts, and select organizational members. This is intended to ensure the effective implementation of office functions.

4. Professionalization

Professionalization is a process designed to promote and protect the interests of individuals holding office. Conversely, professionalism pertains to the development of the requisite knowledge and skills, both in type and level, necessary for professional conduct, applicable to both those entering a profession and those already within an organization. The roots of bureaucratic administrative superiority derive from technical knowledge, technological progress, business methodologies, and the production of essential goods, bureaucratic administration can be characterized as a form of knowledge-based control, thereby imbuing bureaucracy with rational attributes. To nurture professional bureaucrats, prospective bureaucratic officials are selected based on their technical qualifications, free from any political interference. This indicates that administrative positions are reserved exclusively for individuals with sufficient technical expertise.

5. Documentation of the Written

(Tompkins, 2005) explains that bureaucracy requires written documentation to ensure operational continuity. In a bureaucratic system, all actions, decisions, and regulations must be formulated and documented, covering aspects such as discussions, decision proposals, and various

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directives. The task of managing these written documents is assigned to a unit specific. The recording of administrative decisions in written form serves to guarantee ongoing operational continuity, allowing new decisions to be guided by preceding ones despite changes in officials and administrators. Written documents serve as tools for higher authorities to evaluate the performance of subordinate units, fostering accountability. Additionally, they provide a guide for subordinates and take responsibility for their actions. Conversely, bureaucrats facing allegations can use written documents to demonstrate adherence to rules and responsible execution of their roles. Thus, written documentation serves as a protective measure for both subordinates and superiors.

Utilizing the institutional economic theory presented by (Yustika, 2010), (Acemoglu, 2003), (North, 1995), and the bureaucratic theory articulated by (Weber, 1947), (Barnwell & Robbins, 2002), as well as (Hummel, 2000), one can deduce that the success of the SPBE transformation in Indonesia hinges significantly on institutional factors, which must be guided by values, and bureaucratic factors, given that modern organizations serve as spaces for implementing institutional values.

Aspect Index SPBE

Based on Appendix Referring to ("Peraturan Menteri Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi Nomor 59 Tahun 2020 Tentang Pemantauan Dan Evaluasi Sistem Pemerintahan Berbasis Elektronik," 2020), on Monitoring and Evaluation of SPBE, it is elucidated that SPBE encompasses eight dimensions. These include internal policies governing SPBE, strategic planning for SPBE, information and communication technology for SPBE, SPBE organizational structure, SPBE management implementation, information and communication technology (ICT) audits for SPBE, electronic-based government administration services, and electronic-based public services. Each dimension is further delineated with specific indicators: 10 indicators, 4 indicators, 4 indicators, 2 indicators, 8 indicators, 3 indicators, 10 indicators, and 6 indicators, summing up to a total of 47 indicators. Presented below is the calculation of one of the SPBE aspect indicators, specifically focusing on the maturity level of SPBE strategic planning.

Calculation of the maturity level of SPBE strategic planning aspects. The SPBE strategic planning aspect consists of the level of architectural maturity, planning, process integration, and process innovation. The value of each indicator is 3, except for the planning maturity indicator which gets a value of 2. The total weight of the indicators and the result of multiplying NI x BI are 10.00 and 27.50 respectively. Based on these data and using the aspect index formula, an aspect index value of 2.75 was obtained. A value of 2.75 means good.

$$Aspect\ Index = \frac{1}{BA_i} \sum_{j=m}^{n} NI_{ij} \times BI_{ij}$$

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$$Aspect\ Index\ 2 = \frac{1}{10} \times 27{,}50 = 2{,}75\ (Good)$$

Table 1. SPBE Strategic Planning Aspect Index Calculation

No. Aspect	**Name Aspect**		**Aspect Weight (%)**	
2	**SPBE Strategic Planning**		10	
No. Indicator	Indicator Name	*Maturity Value NI*	Indicator Weights *BI* (%)	*NI* x *BI* (%)
11	Kindergarten Architectural Maturity	3	2,50	7,50
12	Kindergarten Plan Maturity	2	2,50	5,00
13	Kindergarten Cohesive Maturity	3	2,50	7,50
14	Kindergarten Process Innovation Maturity	3	2,50	7,50
	Amount *NI x BI*		10,00	27,5

Source: Analysis Results

SPBE Domain Index

According to the Me Appendix to ("Peraturan Menteri Pendayagunaan Aparatur Negara Dan Reformasi Birokrasi Nomor 59 Tahun 2020 Tentang Pemantauan Dan Evaluasi Sistem Pemerintahan Berbasis Elektronik," 2020), regarding Monitoring and Evaluation of SPBE, it is delineated that SPBE comprises four domains: SPBE internal policies, SPBE governance, SPBE management, and SPBE services. These domains include 1 aspect, 3 aspects, 2 aspects, and 2 aspects, totaling 8 aspects. Presented below is the calculation for one of the SPBE domains, specifically focusing on the SPBE governance maturity level domain.

Calculation of the maturity level for the SPBE governance domain involves three maturity level aspects: SPBE strategic planning, information and communication technology (ICT), and SPBE organizers. Each aspect index is assigned a value of 3, except for the ICT aspect, which is assigned a value of 4. The cumulative weight of the aspect indices and the product of NA x BA are 25.00 and 85.00, respectively. Based on this data and utilizing the domain index formula, a domain index value of 3.40 is derived. A value of 3.40 indicates a good level of maturity.

$$Indeks\ Domain = \sum_{j=m}^{n} ND_j \times BD_j$$

$$Indeks\ Domain\ 2 = \frac{1}{25} \times 85{,}00\ 3{,}40$$

Table 2. Calculation of SPBE Governance Domain Index

No. Domain	**Name Domain**		**Domain Weight *BD* (%)**	
2	SPBE Governance		25,00	
No. Aspect	Name Aspect	Aspect Index Value *NA*	Aspect Weight *BA* (%)	*NA* x *BA* (%)
2	SPBE Strategic Planning	3,00	10,00	30,00
3	Information and Communication Technology or ICT	4,00	10,00	40,00

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13	Implementation of SPBE	3,00	5,00	15,00
	Amount *NA x BA*		25,00	85,00

Source: Analysis Results

SPBE Index

The SPBE index value serves as a comprehensive indicator reflecting the overall maturity level of SPBE implementation. This value is computed by summing the multiplication results of the domain index value and its corresponding domain weight. The cumulative outcome is then divided by the total domain weight, with the result multiplied by 100 percent, yielding an SPBE index of 3.28. A value of 3.28 indicates a favorable level of maturity.

$$SPBE\ Index\ = \frac{1}{BD_i} \sum_{j=m}^{n} NA_{ij}\ \times\ BA_{ij}$$

$$SPBE\ Domain\ Index\ = \frac{1}{100}\ \times\ 328{,}20\ = 3{,}28$$

Table 3. SPBE Index Calculation

No. Domain	Name Domain	Domain Index Value *ND*	Domain Weight *BD* (%)	*ND* x *BD* (%)
1	SPBE Policy	3,70	13,00	48,10
2	SPBE Governance	3,40	25,00	85,00
3	Implementation of SPBE Management	3,00	16,50	49,50
4.	SPBE Services	3,20	45,50	145,60
	Amout *ND x BD*		100,00	328,20

Source: Analysis Results

By using the SPBE aspect index formula, SPBE domain index, and SPBE index, the SPBE value at the central government, provincial government, and national levels can be known. The mean SPBE index value for the central government is presented in Table 4, and the average index value for provincial governments is detailed in Table 5. The national-level average index is determined by adding the central government's average index to half of the provincial government's index (2.49 + 2.37)/2, resulting in a national-level SPBE index of 2.43. A value of 2.43 indicates an adequate level.

Table 4. Average SPBE Index Values for Central Level Agencies 2023

No.	Name of Central Agency	Amount	Index	Predicate
	Coordinating Ministry and Ministries	26	3,12	Good
	Non-Ministerial Government Institutions	14	2,88	Good
	State Intelligence Agency	1	3,13	Good
	state Secretariat	1	2,30	Enough
	General Secretariat	8	2,37	Enough
	Nonstructural Institutions	15	2,20	Enough
	Pancasila Ideology Development Agency	1	2,32	Enough
	Indonesian Republic Television	1	2,09	Enough
	Radio Republik Indonesia	1	2,01	Enough
	Average	8	2,49	Enough

Source: Kemenpan-RB, 2023

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Table 5. Average SPBE Index Value at Provincial Government Level 2023

No.	Name of Provincial Government	Regency/ City	Index	Predicate
	Aceh Provincial Government	11	2,32	Enough
	North Sumatra Provincial Government	25	2,21	Enough
	Riau Provincial Government	8	2,09	Enough
	Riau Islands Provincial Government	6	2,23	Enough
	West Sumatra Provincial Government	19	2,73	Good
	Jambi Provincial Government	12	2,09	Enough
	South Sumatra Provincial Government	15	2,23	Enough
	Provincial Government Kep. Bangka Belitung	8	2,61	Enough
	Bengkulu Provincial Government	10	2,32	Enough
	Lampung Provincial Government	11	2,24	Enough
	DKI Provincial Government	1	3,67	Very good
	West Java Provincial Government	25	2,82	Good
	Banten Provincial Government	9	2,56	Enough
	DIY Provincial Government	3	2,94	Good
	Central Java Provincial Government	30	2,99	Good
	East Java Provincial Government	36	2,56	Enough
	West Kalimantan Provincial Government	13	2,39	Enough
	Provincial Government Central Kalimantan	11	2,04	Enough
	Provincial Government South Kalimantan	11	2,59	Enough
	East Kalimantan Provincial Government	9	2,31	Enough
	North Kalimantan Provincial Government	3	2,14	Enough
	North Sulawesi Provincial Government	13	2,07	Enough
	Gorontalo Provincial Government	4	2,35	Enough
	Central Sulawesi Provincial Government	7	1,98	Enough
	South Sulawesi Provincial Government	19	2,32	Enough
	Southeast Sulawesi Provincial Government	8	2,09	Enough
	West Sulawesi Provincial Government	4	2,58	Enough
	Bali Provincial Government	10	2,91	Good
	Provincial Government West Nusa Tenggara	9	2,39	Enough
	Provincial Government East Nusa Tenggara	18	2,02	Enough
	Maluku Provincial Government	4	2,23	Enough
	North Maluku Provincial Government	3	2,17	Enough
	West Papua Provincial Government	7	1,66	Enough
	Papua Provincial Government	5	1,85	Enough
	Average	387	2,37	Enough

Source: Kemenpan-RB, 2023

Based on quantitative analysis techniques, it can be seen that the national SPBE index is 2.43. This index signifies that the maturity level of SPBE process capabilities is at the managed level, while the maturity level of SPBE service capabilities in Indonesia is at the interaction level. The managed level indicates that SPBE Indonesia has been implemented in alignment with management functions but has not been comprehensively adopted across work units within an organization. The level of interaction means that the Indonesian SPBE service is provided in the form of two-way interaction but has not yet achieved a unified operational transaction service using several SPBE resources. The results of this analysis show that the

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transformation of SPBE Indonesia, both the maturity level of process capabilities and the maturity level of service capabilities are still far from the optimal category.

Based on qualitative descriptive analysis, government organizations do not have the right function and size (right sizing). Certain laws and regulations within the realm of state apparatus exhibit persistent issues characterized by overlapping provisions, inconsistencies, ambiguity, and susceptibility to multiple interpretations. Furthermore, conflicts persist not only between regulations of the same hierarchical level but also between higher-level regulations and subordinate ones, as well as between central regulations and regional enactments. Moreover, numerous legal provisions have yet to be adapted to the dynamic changes in government administration and evolving societal demands. This state of affairs contradicts the tenets of the theory of economics at the institutional put forth form (North, 1995), (Yustika, 2010), and (Acemoglu, 2003). According to these theories, institutions, being values, should not be susceptible to multiple interpretations or conflicting stipulations. Such occurrences could weaken the enforcement of statutory regulations or laws, consequently affecting the transformation of SPBE.

Based on the explanation (Pemerintah, 2010) concerning the Grand Design of Bureaucratic Reform 2010-2025, it can be seen that in the bureaucracy there is a main problem, namely the allocation of state civil servants or ASN in terms of quantity, quality, and distribution, both between the center and regions and between one region and another in Indonesia are not balanced. In addition, there are other prevailing issues, including the persistently low productivity level of civil servants (ASN), a salary system not aligned with job or position evaluation outcomes but rather based on class or rank, lacking a comprehensive reflection of the associated duties and responsibilities. Moreover, performance allowances are not fully contingent upon work performance, and pension benefits fail to ensure welfare. Instances of authority abuse in government administration processes persist, public services fall short of accommodating the diverse interests of all societal strata, and the execution of public services does not meet expectations to effectively navigate intensifying global competition. Furthermore, the bureaucratic work culture remains incongruent with the principles of service, efficiency, effectiveness, transparency, accountability, productivity, and professionalism. This situation deviates from the tenets of bureaucratic theory articulated by (Weber, 1947), (Von Mises, 2007), (Tompkins, 2005), (Barnwell & Robbins, 2002), (Hummel, 2000). Such discrepancies have the potential to impede the attainment of maturity levels in process capabilities and service capabilities within the State-Owned Enterprises (SPBE).

CONCLUSION

Based on the main research problem and the results of analysis using quantitative analysis techniques and qualitative descriptive analysis techniques regarding the maturity level of SPBE process capabilities and the maturity level of SPBE service capabilities, conclusions can be drawn as follows: 1) The achievement of

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the SPBE process capability maturity level index is at the managed stage, while the SPBE service capability maturity level is at the two-way interaction or information stage; and 2) The attainment of the index, encompassing both the maturity level of SPBE process capabilities and the maturity level of SPBE service capabilities, is influenced by institutional and bureaucratic economic performance factors. Other influencing factors were not explored in this instance.

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