



EVALUATION OF CHANGE MANAGEMENT IMPLEMENTATION FOR THE ENHANCEMENT OF THE ELECTRONIC-BASED GOVERNMENT SYSTEM IN THE PROVINCIAL GOVERNMENT OF NORTH SUMATRA

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Abstract

This study aims to evaluate the implementation of change management to enhance the Electronic-Based Government System (SPBE) in the Provincial Government of North Sumatra by integrating the ITIL 4 approach into SPBE change management processes. A descriptive qualitative approach was employed to identify the strengths and weaknesses of the implementation through interviews, surveys, and document analysis. The findings reveal that the effectiveness of change management is influenced by policy readiness in the form of guidelines, the capacity of human resources to manage changes, and the stages of addressing changes supported by technological infrastructure. This study recommends developing a change management guideline that integrates ITIL 4 processes (risk identification, impact assessment, approval, implementation, and evaluation) with SPBE change management stages (planning, analysis, development, implementation, monitoring, and evaluation). Additionally, the establishment of a structured change management team and the development of systematic and iterative Standard Operating Procedures (SOPs) are suggested to ensure effective change management. The collaboration between the ITIL 4 approach and SPBE change management processes is expected to enhance the maturity level of change management, support sustainable digital transformation, and optimize the quality of electronic-based public services in the Provincial Government of North Sumatra.

Keywords : *Change Management, Electronic-Based Government System, ITIL 4*

1. INTRODUCTION

The current developments in information and communication technology have greatly changed the way we live, the way we work and how we interact with the world around us. This development does not occur over a long period of time but can occur at any time in a matter of seconds. Information and Communication Technology (ICT) has provided a lot of evidence in creating media that is not limited by space and time in transforming information and communication methods that have an impact on efficiency and effectiveness in various human activities. With rapid progress in various fields, we have seen and experienced amazing leaps in new innovations. Some of the new innovations that we have seen and put into practice include biotechnology in the health sector which has produced breakthroughs in treatment and how to diagnose disease accurately, work from home (online work) is a solution during the Covid-19 pandemic which is possible because it is supported by connection technology fast internet, artificial intelligence, data analysis, language translation and also the use of ICT in the government sector in realizing good and clean governance.

An electronic-based government system or what used to be called e-government is the use of information and communication technology (ICT) by the government to provide information and

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public services to citizens, businesses and other governments more efficiently, effectively and transparently and is an important step towards government modernization. The main goal of e-government is to improve the quality of public services, speed up administrative processes, and strengthen citizen participation in government processes.

Based on Presidential Regulation of the Republic of Indonesia Number 95 of 2018 concerning Electronic-Based Government Systems (SPBE), what is meant by SPBE is government administration that utilizes information and communication technology to provide services to SPBE users. SPBE implementation also faces several challenges, such as the digital divide, data security and privacy issues, as well as resistance to change from parties involved in traditional bureaucracy. For this reason, one of the focuses in implementing SPBE is the management domain which includes managing the implementation of information security management, risk management and change management.

Referring to the SPBE Evaluation Results Report for the Sumatra Provincial Government in 2023, overall implementation of the SPBE Management Implementation Aspect has been largely fulfilled by the North Sumatra Provincial Government, but is not yet at the perfect maturity level, because on average the indicators do not yet have a review document.

Table 1. SPBE Index Scores of North Sumatra Provincial Government

Index Name	Score		
	2021	2022	2023
Electronic-Based Government System (SPBE)	2,7	2,8	3,2
	7	1	1
Policy Domain	2,5	3,1	4,3
	0	0	0
Internal Governance Policy	2,5	3,1	4,3
	0	0	0
Governance Domain	2,6	2,1	2,4
	0	0	0
Strategic Planning for SPBE	2,0	2,0	2,2
	0	0	5
Information and Communication Technology	3,0	1,7	2,5
	0	5	0
SPBE Implementation	3,0	3,0	2,5
	0	0	0
Management Domain	1,3	1,7	2,2
	6	3	7
SPBE Management Implementation	1,5	2,0	2,6
	0	0	3
ICT Audit	1,0	1,0	1,3
	0	0	3
Service Domain	3,4	3,5	3,6
	4	1	9
Electronic-Based Government Administration Services	3,4	3,4	3,7
	0	0	0
Electronic-Based Public Services	3,5	3,6	3,6
	0	7	7



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From tabel.1 show that the achievement of the SPBE Index scores for North Sumatra Provincial Government over the past three years shows significant improvement. However, weaknesses and shortcomings remain in the SPBE management domain. As shown in Table 1.2, the SPBE Management Domain Index scores were the lowest, with scores of 1.36 and 1.73 categorized as "poor" in 2021 and 2022, respectively. In 2023, there was an improvement to 2.27, categorized as "fair." This indicates that the SPBE management domain of the North Sumatra Provincial Government has not yet met the minimum target score of 2.6, categorized as "good," as stipulated by the Ministry of Administrative and Bureaucratic Reform (PANRB).

There are three indicators within the aspect of SPBE Management Implementation with a maturity level score of 2 in Table 2 below. Change management is one of the supporting indicators in the SPBE management domain, whose score has remained stagnant at level 2 from 2021 to 2023.

Table 2. SPBE Management Domain Index Scores of the North Sumatra Provincial Government

Aspect/Indicator	Management Domain SPBE Indicator Name	Score		
		2021	2022	2023
Aspect of SPBE	Management	1,50	2,00	2,63
Indicator 21	Maturity Level of SPBE Risk Management Implementation	2	2	2
Indicator 22	Maturity Level of Information Security Management Implementation	1	2	2
Indicator 23	Maturity Level of Data Management Implementation	1	2	3
Indicator 24	Maturity Level of ICT Asset Management Implementation	1	2	3
Indicator 25	Maturity Level of Human Resource Competency Implementation	4	2	3
Indicator 26	Maturity Level of Knowledge Management Implementation	1	2	3
Indicator 27	Maturity Level of Change Management Implementation	1	2	2
Indicator 28	Maturity Level of SPBE Service Management Implementation	1	2	3

From previous research conducted by Diyan Anjani. (2023), shows that the implementation process of SPBE has not referred to guidelines from the Ministry of Administrative and Bureaucratic Reform but is based on the experience of the regional government itself. This may be due to the lack of established guidelines or the local government's unpreparedness to adapt to the changes that are occurring so quickly.

This indicates challenges and issues in the implementation of SPBE within the North Sumatra Provincial Government, particularly related to the application of Change Management in the SPBE Management Domain. The maturity level of change management has not yet reached the "good" category, and there is no implementation guideline in place.

The ambiguity in defining procedures for the change process and service testing validation is attributed to the lack of an organizational structure dedicated to managing change, resulting in suboptimal implementation and insufficient availability of competent human resources (Nadra Meisha Putri et al., 2024). Therefore, standardized guidelines are necessary to enhance the quality of information technology services.

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The objective of this research is to formulate policies and technical steps for the effective implementation of change management to improve a minimum criteria score of 3 in SPBE Change Management.

2. IMPLEMENTATION METHOD

This research employs an observational method by conducting observations, recording, and reviewing the evaluation report data on the Electronic-Based Government System (SPBE) of the North Sumatra Provincial Government for the years 2021, 2022, and 2023. A deeper analysis is then carried out on the aspects within the scope of SPBE change management implementation that still have low scores, guided by the Regulation of the Minister of Administrative and Bureaucratic Reform of the Republic of Indonesia Number 59 of 2020.

A descriptive qualitative approach is employed in this research. This approach is chosen to gain an in-depth understanding of SPBE change management through interviews, observations, and document analysis. The research findings are then presented in a descriptive report, providing detailed explanations of policy formulations and technical steps for implementing change management. These findings serve as suggestions and recommendations for improving the index score and optimizing the implementation of SPBE change management in the North Sumatra Provincial Government.

The population of this study consists of all regional agencies within the North Sumatra Provincial Government involved in the implementation of SPBE. The sample or research object is determined using a purposive sampling method, where the selected subjects are those who have a thorough understanding of the research topic (Arikunto, 2003). In this context, the researcher selects regional agencies that are members of the Coordination Team for the Electronic-Based Government System (SPBE) of North Sumatra Province and are willing to participate in this study.

The sources of data in this research consist of primary and secondary data. Primary data refers to information obtained directly by the researcher without intermediaries or directly from the research sample (Sugiyono, 2020). It is collected through discussions, surveys, or interviews with relevant regional offices. Meanwhile, secondary data, according to Sugiyono (2018:456), refers to data not directly provided to the data collector but obtained through document reviews, reports, regulations, literature, and previous research journals.

Data analysis is carried out through several stages. It begins with familiarizing with the data obtained from literature reviews of policy documents and SPBE monitoring and evaluation reports. This is followed by identifying data from interviews and questionnaires. Subsequently, the data is recapitulated by sorting and selecting information relevant to the research objectives. Finally, a report and conclusions are prepared, providing suggestions and recommendations for improvement to optimize SPBE implementation.

3. RESULTS AND DISCUSSION

The analysis of literature reviews related to SPBE change management and the change management process using the ITIL 4 (Aulia et al., 2023) method reveals that its components are more suitable for application in SPBE change management, which is illustrated in Table 3 below.

Table 3. Comparison of Change Components in SPBE Change Management and ITIL 4

No	Process	SPBE Change Management Components	ITIL 4 Change Management Components
1.	Planning	- Establishing change objectives	- Defining the scope of the change - Describing objectives, initial analysis, implementation plans,



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			and expected outcomes
2.	Analysis	<ul style="list-style-type: none"> - Analyzing the impact of the change - Assessing organizational and individual readiness for change 	<ul style="list-style-type: none"> - Risk analysis, including technical, operational, and business impacts - Reviewing change impacts - Involving the Change Advisory Board (CAB) for risk advice and approval
3.	Development	<ul style="list-style-type: none"> - Formulating strategies - Developing a Change Management plan - Communicating the Change Management plan 	<ul style="list-style-type: none"> - Developing necessary technical solutions or procedures for the change
4.	Implementation	<ul style="list-style-type: none"> - Executing the Change Management plan 	<ul style="list-style-type: none"> - Implementing changes as per the plan
5.	Monitoring and Evaluation	<ul style="list-style-type: none"> - Managing the transition period - Sustaining the change 	<ul style="list-style-type: none"> - Monitoring changes in progress or completed to ensure alignment with the plan - Reviewing the effectiveness of changes and identifying areas for future improvement

To gather data on the current state of each process in the implementation of SPBE change management within the North Sumatra Provincial Government, questionnaires were distributed to respondents. The questionnaire questions were grouped into four categories to identify the components of SPBE change management. These questionnaires were distributed to the respondents who constitute the population and sample of this study. A 4-point Likert scale was used for the responses to avoid neutral answers, ensuring that respondents provide definitive opinions. The average score (mean) was used to illustrate the general tendencies of the respondents' answers.

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The author will present the results of the data analysis from the questionnaire as follows:

1. Leadership Commitment and Planning

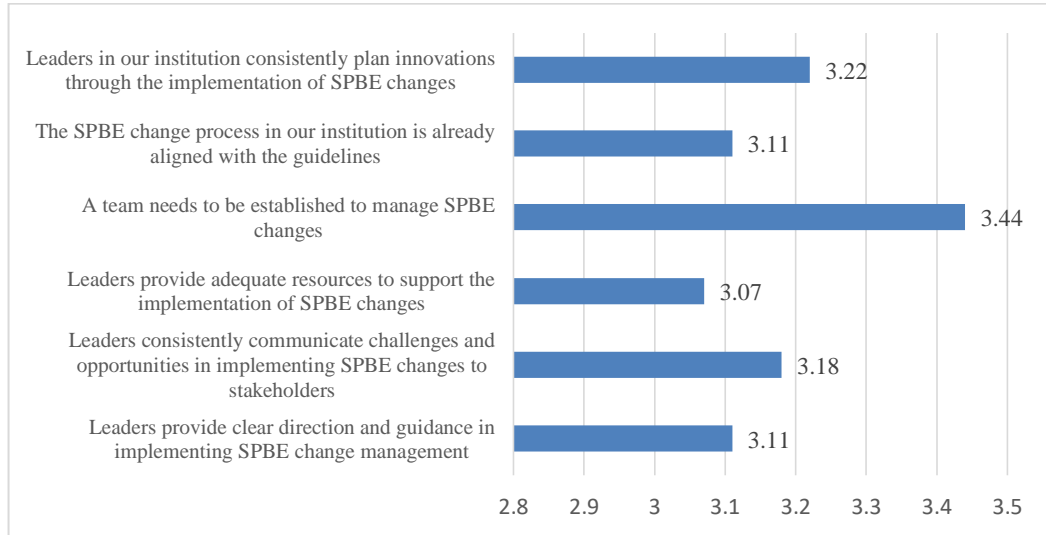


Figure 1. Mean Score of Respondents' - Leadership Commitment and Planning

From the questionnaire results, with a mean score of 3.22, it is evident that each agency within the North Sumatra Provincial Government demonstrates that its leaders have a commitment and clear objectives in implementing change. Overall, respondents perceive the formation of a team to manage SPBE changes as very important, as indicated by the highest mean score of 3.44. Based on the questionnaire results, the majority of respondents assessed that the SPBE transformation process in Pemprovsu aligns with the guidelines, as reflected by a mean score of 3.11. However, these assessments were made based on individual experiences and understanding, indicating that the guidelines are still sectoral in nature. Therefore, it is necessary to align the internal guidelines with the national SPBE guidelines.

2. Change Impact Analysis

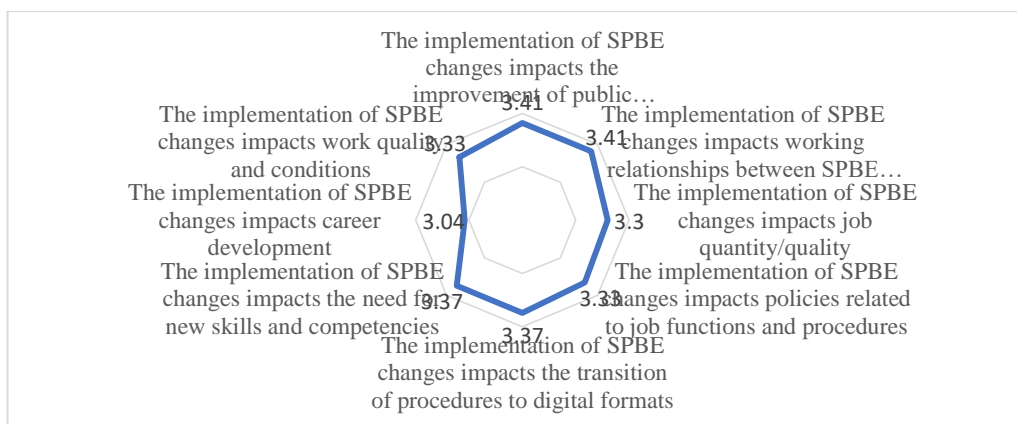


Figure 2. Mean Score of Respondents' - Change Impact Analysis

The impact of SPBE changes implemented in the North Sumatra Provincial Government has generally been positive for both the institutions and individuals involved. With a mean score of 3.41, it indicates that SPBE changes have positively impacted public service quality and strengthened collaboration between institutions. This also affects individuals, as shown by a mean



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score of 3.37, indicating that employees require new competencies to support the changes. However, a mean score of 3.04 highlights the need to integrate career development opportunities into the change plan to prevent employee resistance to change.

3. Change Implementation Readiness

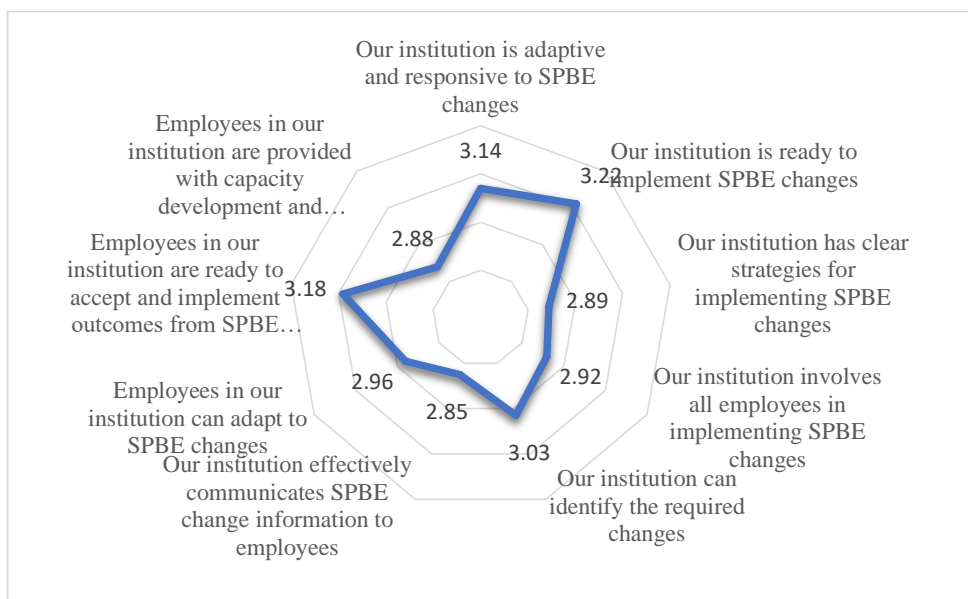


Figure 3. Mean Score of Respondents - Change Implementation Readiness

The organization or institution, as a whole, is reasonably prepared to face changes, as indicated by a mean score of 3.14. However, it still requires strengthening in technical and strategic aspects. The change identification process is adequate, but there is room for improvement to enhance effectiveness and meet organizational needs. Individual readiness, with a mean score of 3.18, still requires further support through training, effective communication, and increased employee engagement.

4. Monitoring and Evaluation

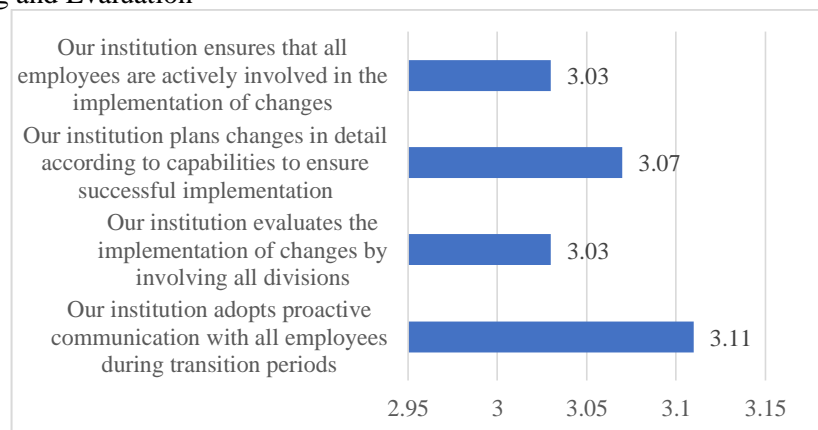


Figure 4. Mean Score of Respondents - Monitoring and Evaluation

Based on the analysis results with a score of 3.11, as shown in Figure 4, it indicates that Pemprovsvu has managed the transition period of change well by implementing proactive

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communication with all employees. However, the negative assessments can be addressed through digital-based communication to deliver real-time information on the transition process. The North Sumatra Provincial Government has also performed quite well in conducting evaluations, with the majority of respondents rating them as 'Good' and 'Very Good,' as indicated by a score of 3.03. This is further supported by detailed change planning to sustain the implementation of changes, reflected by a score of 3.07. However, improvements are necessary to ensure that the plans address the needs of all departments.

4. CONCLUSION

Based on the current conditions identified through an analysis of respondent responses regarding the implementation of Change Management in the Electronic-Based Government System (SPBE) at the North Sumatra Provincial Government, the author proposes the following policy formulation and technical steps to ensure more effective change management. These efforts aim to improve the SPBE index score, particularly in the Change Management indicator:

1. **Develop Comprehensive Change Management Guidelines**
Create change management guidelines that align with the National SPBE Change Management Framework. If such national guidelines are unavailable, adopt alternative guidelines that have been proven effective and successful in other implementations.
2. **Establish a Dedicated Change Management Team**
Form a team responsible for managing change to ensure coordination across units, provide risk-related advice, prevent resistance, and secure approval for changes. This will enable a more effective and sustainable implementation process. The team should operate at both the internal regional level and the provincial level, involving all relevant departments.
3. **Develop Standard Operating Procedures (SOPs) for Change Management**
Initially, focus on developing SOPs for aspects of SPBE implementation that frequently experience changes. This will help ensure that the changes are systematically managed, meeting organizational expectations and operational goals effectively.

These recommendations are expected to optimize change management practices and enhance the overall effectiveness of SPBE implementation.



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REFERENCES

- Anjani, D. (2023), Analisis Kapabilitas Proses pada Domain Manajemen SPBE di Diskominfo Kota Tasikmalaya Berdasarkan PERMENPAN-RB No 59 Tahun 2020, 133 Jurnal Media Infotama Vol.19 No.1 2023.
- Aulia, A., Santosa, I., & Agustika, W. (2023) Asesmen dan Peningkatan Manajemen Layanan Teknologi Informasi Pada Practice Service Request Management dan Change Control Menggunakan ITIL 4 (Studi Kasus : Unit RiYanTI Telkom University).
- Putri, N. M., Santoso, F. A., & Praditya, D., (2024), Implementasi IT Service Management pada Proses Change Management dan Service Validation and Testing Menggunakan Framework ITIL V3 di Diskominfo Kota Bandung, Volume 5 Issue 2 (2024) Pages 752 - 770 Economics and Digital Business Review ISSN : 2614-851X (Online).
- Peraturan Presiden Republik Indonesia Nomor 95 Tahun 2018 tentang Sistem Pemerintahan Berbasis Elektronik.
- Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 59 Tahun 2020 Tentang Pemantauan dan Evaluasi Sistem Pemerintahan Berbasis Elektronik.
- Pedoman Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 6 Tahun 2023 Tentang Tata Cara Pemantauan dan Evaluasi Sistem Pemerintahan Berbasis Elektronik