

# FACTORS INFLUENCING THE MATURITY LEVEL OF ELECTRONIC-BASED GOVERNMENT SYSTEM MANAGEMENT DOMAIN IMPLEMENTATION

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## Abstract

This study aims to identify the factors that influence the maturity level of the implementation of the Electronic-Based Government System (SPBE) management domain. This study uses a qualitative descriptive approach with a case study on the Provincial Government of North Sumatra. Data were collected through interviews, observations, and document studies. The results showed that there is a gap between theoretical understanding and practical implementation of SPBE risk management. The factors that influence the maturity level of the implementation of the SPBE management domain include: (1) awareness and understanding, (2) human resource competence, (3) budget allocation, (4) leadership support, and (5) participation. This study recommends improving human resource competence, increasing budget allocation, and promoting active participation from all stakeholders.

# Keywords : governance, influencing factors, maturity level, risk management, spbe.

# **1. INTRODUCTION**

Electronic-Based Government System (SPBE) is a strategic step in Indonesia's bureaucratic reform to establish effective, transparent, and accountable governance while delivering quality public services. Presidential Regulation No. 95 of 2018 serves as the foundation for SPBE implementation, emphasizing the importance of governance and risk management to ensure the sustainability of an integrated system. To support this, the Ministry of Administrative and Bureaucratic Reform (Menpan RB) issued Regulation No. 5 of 2020 concerning SPBE Risk Management Guidelines, followed by Regulation No. 59 of 2020 as the basis for assessing the maturity level of SPBE implementation, including the SPBE Management Domain.

The results of the SPBE maturity level evaluations conducted by Menpan RB show an overall increase in the index score from 2.77 (2021) to 3.21 (2023). However, in the SPBE Management Domain, particularly in the risk management implementation indicator, progress has yet to reach the desired level. For instance, indicator number 21, related to the SPBE risk management implementation aspect, has remained at level 2 from 2021 to 2023 can be seen in Figure 1, far below the minimum target of level 3 set by the government. This reflects significant challenges in implementing SPBE risk management strategies, particularly at the provincial government level.

The Ministry of Administrative and Bureaucratic Reform has remain all SPBE maturity level indicators to reach level 3 or higher. However, as of 2023, 34% of the 47 indicators remain below this target, and only 7% have reached the optimum level. Specifically, in the SPBE Management Domain, significant lags persist compared to other components. This issue indicates that despite clear regulations, certain factors continue to hinder achieving the expected maturity level.

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This study aims to identify the factors influencing the maturity level of SPBE Management Domain implementation. By understanding these factors, appropriate solutions can be developed to enhance the effectiveness of SPBE risk management strategies.

## 2. IMPLEMENTATION METHOD

# 2.1 Scope of Research

This research focuses on the implementation of the SPBE Management Domain within the Provincial Government of North Sumatra. The scope includes analyzing aspects such as awareness, human resource competencies, budget allocation, and leadership support that influence the maturity level of SPBE risk management implementation. The study aims to identify inhibiting factors and provide strategic recommendations to enhance the maturity of the SPBE Management Domain.

# 2.2 Type and Sources of Data

This study employs a qualitative descriptive approach with a case study method to provide an in-depth understanding of the existing conditions and challenges. The data collected consists of:

- a) Primary Data: Obtained through in-depth interviews, observations, surveys, and focus group discussions with informants from work units involved in SPBE implementation.
- b) Secondary Data: Collected from official documents such as SPBE evaluation reports, risk management guidelines, regulations, literature, and relevant journals.

#### 2.3 Data Analysis

The collected data will be analyzed using the qualitative data analysis techniques outlined by Miles and Huberman (1994). This involves a three-step iterative process: data reduction, data display, and conclusion drawing/verification.

Data reduction is the process of simplifying and organizing the raw data by selecting, focusing, abstracting, and transforming the information. This includes summarizing, identifying key points, and searching for themes and patterns. The reduced data is then displayed in a way that facilitates understanding, such as through narratives, charts, matrices, or diagrams. This study will present the data using systematic and comprehensive narrative descriptions, supplemented by relevant tables, charts, and figures. Finally, conclusions are drawn and verified by analyzing the displayed data to identify meanings, explain patterns, and discern relationships, similarities, differences, and other significant findings.

# **3. RESULTS AND DISCUSSION**

# 3.1 Respondent Profile

Respondents for this research survey consisted of structural officials, SPBE teams, technical implementer determined by 15 regional apparatuses that had joined the SPBE



coordination team communication group. The respondent profiles were quite diverse, the majority of respondents had a Bachelor's degree (62.1%) and Master's degree (20.7%) and had more than 10 years of work experience (44.8%) can be seen in Tabel 1.

No	Initials	Work Experience	Qualification
1	NN	< 2 years	Bachelor's degree
2	MA	> 10 years	Bachelor's degree
3	AP	> 10 years	Bachelor's degree
4	NN	> 10 years	Bachelor's degree
5	MAL	5-10 years	Bachelor's degree
6	MEI	2-5 years	Master's degree
7	S	> 10 years	Bachelor's degree
8	JS	> 10 years	Bachelor's degree
9	TS	> 10 years	Master's degree
10	RHH	2-5 years	Diploma
11	TBG	2-5 years	Diploma
12	AB	5-10 years	Bachelor's degree
13	SJ	2-5 years	Bachelor's degree
14	RYH	2-5 years	Diploma
15	IAH	< 2 years	Bachelor's degree
16	NN	< 2 years	Bachelor's degree
17	YAS	> 10 years	Master's degree
18	EC	2-5 years	Master's degree
19	SR	> 10 years	Master's degree
20	HM	< 2 years	Bachelor's degree
21	NN	2-5 years	Diploma
22	RS	> 10 years	Master's degree
23	HS	> 10 years	Bachelor's degree
24	DW	> 10 years	Diploma
25	DS	2-5 years	Bachelor's degree
26	JP	> 10 years	Bachelor's degree
27	NN	5-10 years	Bachelor's degree
28	NN	> 10 years	Bachelor's degree
29	JFT	5-10 years	Bachelor's degree

#### Table 1 Respondent Profile

## **3.2 Identification of Factors**

This research employ a systematic methodology, utilizing established scientific management approaches such as field observation, interviews, and documentary studies, to identify the factors influencing the maturity level of e-government management domain implementation. Documentary studies and field observations indicate that the Provincial Government of North Sumatra has undertaken several efforts to implement e-government risk management, including issuing gubernatorial regulations, conducting risk identification, and establishing risk management documentation. However, several shortcomings persist in its implementation. Interviews were conducted with officials or technical staff who are members of the e-government team from the Informatics Application Division, Department of Communication and Informatics, North Sumatra Province. The interview questions explored information regarding awareness, human resource competency, budget, and leadership support related to the implementation of e-government risk management.

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The assessment of respondents' answers to identify factors for 5 important aspects in the implementation of risk management to increase the Management Domain index value includes awareness, human resource competency competence, budget, leadership support and participation, showing the following results:

- a. Understanding and Awareness (questions 1-5) with an average score of 3.61
- Q1: Understanding the importance of implementation (3.93)
- Q2: Awareness of risk impact (4.07)
- Q3: Routine risk identification (3.28)
- Q4: Following procedures (3.34)
- Q5: Actively reporting risks (3.41)
- b. Human Resource Competency (questions 6-10) with an average score of 3.28
  - C1: Understanding basic concepts (3.34)
  - C2: Ability to identify risks (3.45)
  - C3: Ability to assess risks (3.41)
  - C4: Ability to formulate mitigation (3.10)
  - C5: Participating in training (3.07)
- c. Budget (questions 11-15) with an average score of 2.89
  - B1: Availability of specific budget (2.93)
  - B2: Allocation of funds for training (3.03)
  - B3: Budget for implementation (2.83)
  - B4: Funds for supporting tools (2.83)
  - B5: Budget for evaluation (2.83)
- d. Leadership Support (questions 16-20) with an average score of 3.66
  - LS1: Demonstrating commitment (3.69)
  - LS2: Establishing policies (3.62)
  - LS3: Monitoring and evaluation (3.55)
  - LS4: Resource allocation (3.59)
  - LS5: Quick response (3.86)
- e. Participation (question 21) with an average score of 3.34

# Understanding and Awareness



Figure 2. Average Scores per Aspect

The survey results show a gap between theoretical understanding and practical implementation of e-government risk management as seen in Figure 2 average scores per aspect:

- a. Average score for the awareness aspect: 3.61
- b. Average score for the human resource competency aspect: 3.28
- c. Average score for the budget aspect: 2.89

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- d. Average score for the leadership support aspect: 3.66
- e. Average score for the participation aspect: 3.34

Respondents have high scores on understanding (3.93) and awareness (4.07) of risk management, but implementation scores (routine identification, procedures, reporting) are lower (~3.34).

# 4. CONCLUSION

Based on the results of research and analysis results reveal a disparity between theoretical understanding and practical implementation of e-government risk management. Key findings include:

- a. Awareness and Understanding: Respondents demonstrated a high level of understanding (3.93) and awareness (4.07) regarding the importance of risk management and the potential impact of risks. However, scores related to implementation aspects (routine identification, adherence to procedures, and risk reporting) were lower (approximately 3.34). This suggests a gap between theoretical knowledge and practical application.
- b. Human Resource Competency: The average score for human resource competency was 3.28. While respondents exhibited a good understanding of basic concepts (3.34) and the ability to identify (3.45) and assess risks (3.41), their ability to formulate mitigation strategies (3.10) and participation in relevant training (3.07) were comparatively lower. This highlights the need for capacity building in risk mitigation planning and increased opportunities for professional development.
- c. Budget Allocation: Budget allocation was identified as a significant challenge, with an average score of 2.89. Scores for the availability of dedicated budgets (2.93), funding for training (3.03), implementation (2.83), supporting tools (2.83), and evaluation (2.83) were all relatively low. This indicates that inadequate financial resources may be hindering effective risk management implementation.
- d. Leadership Support: Leadership support received a relatively high average score of 3.66. Respondents indicated that leaders demonstrate commitment (3.69), establish policies (3.62), monitor and evaluate (3.55), allocate resources (3.59), and respond quickly to risk-related issues (3.86). Strong leadership support is crucial for fostering a risk-aware culture and facilitating effective risk management.
- e. Participation: The average score for participation was 3.34, suggesting moderate engagement in risk management activities.

The findings of this study underscore the need to bridge the gap between theoretical understanding and practical implementation of e-government risk management in North Sumatra Province. Key recommendations include enhancing human resource competency through targeted training programs, increasing budget allocation for risk management activities, and promoting active participation from all stakeholders. Further research is needed to explore the specific barriers to implementation and develop strategies for overcoming them.

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