Electronic-based Governance System Risk Management in Serang District

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ABSTRACT : *This study examines the risk management of electronic-based government systems in Serang District by examining empirically the implementation. The data collection technique used is Library Research on secondary data. Literature study was conducted to obtain secondary data in examining in depth the object of study. Data analysis was carried out using the content analysis approach. The results of the research on the Implementation of Electronic-Based Government System Risk Management began with the preparation and establishment of an Electronic-Based Government System Risk Management framework that is integrated with work processes in Regional Work Units. The framework for Electronic-Based Governance System Risk Management includes principles, leadership and commitment, the Electronic-Based Governance System Risk Management process, and the governance of Electronic-Based Governance System Risk Management and adapted to the conditions of each work unit within the Serang Regency Government. Based on the research results, it can be concluded that the participation of all parties, both internal employees of the State Civil Apparatus and other stakeholders, is very much needed. Good coordination and collaboration with all elements including the system that has been running in the Regional Government of Serang Regency is the key to the successful implementation of Electronic-Based Governance System Risk Management.*

KEYWORDS: risk management, e government, digital service, e governance

INTRODUCTION

The momentum for implementing the Electronic-Based Government System has started since the issuance of Presidential Instruction Number 3 of 2003 concerning the National Policy and Strategy for the Development of e-government in which ministers, heads of institutions, and heads of regions are instructed to carry out SPBE development according to their duties, functions, authorities, and resource capacities. the power it has. Various implementations of SPBE have been produced by both the Central Government and Regional Governments and have contributed to the efficiency and effectiveness of government administration. However,

the results of SPBE development show a relatively low level of maturity and high disparities between Regional Governments.

Based on the results of the 2018 Electronic-Based Government System evaluation of 616 Regional Governments, the National SPBE index reached a value of 1.98 with a Sufficient predicate from the target SPBE index of 2.6 out of 5 (five) levels with a Good predicate. Judging from the achievements of the Regional Government, the average SPBE index for Central Agencies is 2.6 with a Good predicate, while the average SPBE index for Regional Governments is 1.87 with an Adequate predicate. In terms of the distribution of target achievements, 13.3% of Regional Governments have achieved or exceeded the SPBE index target of 2.6, while 86.7% have not reached the SPBE index target of 2.6. This shows that there are problems in developing SPBE nationally.

The first problem is that there is no integrated Electronic-Based Governance System governance at the national level or at the Regional Government level. Based on its study, the National Information and Communication Technology Council found that 65% of software (application) spending was used to build similar applications between government agencies. In addition, based on a survey of Data Center infrastructure including server rooms conducted by the Ministry of Communication and Informatics, there are 2,700 data centers and server rooms in 630 Regional Governments, which means that on average there are 4 (four) data centers and server rooms in each Regional Government. The average national average utilization of data centers and server rooms is only 30% of available capacity. Based on the data above, it shows that there are sectoral egos and the difficulty of coordination within and between Regional Governments, causing duplication of spending budgets and capacity that exceeds needs.

The next problem is that there has not been optimal implementation of integrated Electronic-Based Government System services. As it is known that the processes of planning, budgeting, procurement, financial reporting, monitoring and evaluation, and performance accountability are interrelated between one process and another. Currently, the implementation of planning, budgeting, procurement, financial reporting, monitoring and evaluation, and performance accountability services realized in the form of different application systems in most Government Agencies. The condition of the stand-alone application system also applies to personnel services, archives and other public services. This resulted in SPBE services not being integrated and could result in the quality of the implementation of government activities being less effective and less efficient.

The last problem in developing SPBE nationally is the limited number of State Civil Apparatus (ASN) employees who lack competence in Information and Communication Technology (ICT) to support the implementation of an Electronic-Based Government System. Currently there is a gap between the competency standards for ASN functional positions related to ICT such as the Computer Staff Functional Position and the Functional Position with the ICT occupational competency standards recognized by the ICT industry. Efforts to increase the capacity of ASN employees through training in the ICT field have also not been fulfilled due to limited budgets. On the other hand, the demand for ICT Human Resources (HR) in the labor market, including in Government Agencies, is not matched by the availability of ICT HR itself. This can result

in disruption of application operations, ICT infrastructure, and security to provide the best SPBE services.

On the other hand, on the external factor, namely the development of the ICT trend is an impetus to realize the implementation of an integrated Electronic-Based Government System and improve the quality of SPBE services, in order to make it easier for users to access government services. Several ICT trends that are developing include: first, mobile internet technology can be used to facilitate access to government services through the user's personal device which is free to move without time and location restrictions; second, cloud computing technology provides high effectiveness and efficiency for carrying out ICT integration; third, internet of things (LoT) technology is able to provide services that are adaptive and responsive to the needs of service customization desired by users and expand the supply of government service channels; fourth, big data analytics technology is able to provide decision-making support and policy formulation for the government; and fifth, artificial intelligence technology can assist the government in reducing administrative burdens such as translating documents in written form and helping the public in solving complex problems such as health and finance, (Prawira, 2023).

The existence of problems in the implementation of Electronic-Based Government Systems and the ICT revolution trend gave rise to a number of risks that could affect the achievement of SPBE objectives. Problems with SPBE implementation can contribute to negative risks which in turn can hinder the achievement of SPBE objectives. Meanwhile, the ICT revolution trend can contribute to positive risks that can increase the chances of success in achieving SPBE goals. Therefore, the various risks that arise in the implementation of an Electronic-Based Government System must be properly managed by the Regional Government as the organizer of the SPBE. To ensure the continuity of SPBE implementation. This has become an impetus for the Government of Serang Regency to prepare Guidelines for Risk Management for Electronic-Based Government Systems which are carried out by the Regional Government Work Unit in achieving SPBE goals as mandated in Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems.

The Office of Communication, Informatics, Encryption and Statistics of Serang Regency is a Regional Working Unit in charge of information dissemination, development and utilization of ICT as well as coding and statistics which are required to be able to provide services to the public in a fast, precise, transparent and accountable manner. With these services efforts to distribute information and fulfill the public's right to information can be carried out. It is hoped that the community will be quicker in obtaining and utilizing information, which can improve their welfare, while for government officials the complete e-government can be realized which is the goal and guideline in carrying out a program/activity, (Warman, et. al., 2022).

The current implementation of Regional Autonomy has provided an opportunity for the Government of Serang District to exercise a wider range of authorities in managing regional households. At the same time, the community is given greater opportunities to develop their aspirations and initiatives in the framework of regional development. These situations and conditions will bring about various risk impacts from the implementation of related Electronic-

Based government systems, both internal and external, which must be anticipated and handled as well as possible. In anticipating and overcoming this, the role of the Office of Communication, Informatics, Encryption and Statistics of Serang Regency is very important, which must be able to guarantee a harmonious communication process with the community. Regional Governments cannot work alone in developing their regional potential if they are not supported by the community. Vice versa, the community will not support the government, if they do not have sufficient knowledge of the policies issued by the government, a Risk Management Guideline for Electronic-Based Government Systems for the Government of Serang Regency has been prepared, (Bisma, 2022).

The Electronic-Based Governance System Risk Management framework is a description of the basic components used as the basis for implementing Electronic-Based Governance System Risk Management in Regional Governments. The purpose of the Electronic-Based Governance System Risk Management framework is to assist Regional Governments in integrating Electronic-Based Governance System Risk Management into the implementation of the duties and functions of the Regional Government. This is intended so that Electronic-Based Government System Risk Management can be implemented properly. The basic components of this framework consist of principles regarding value enhancement and protection, leadership and commitment, as well as processes and governance of Electronic Governance System Risk Management, (Taufikurochman et. al., 2023).

Figure 1. Electronic Governance System Risk Management Framework

METHOD

This risk management research uses two different approaches in examining aspects of regulatory legitimacy in a comprehensive manner, namely normative legal research and empirical research. Normative legal research is mainly used to examine aspects of philosophical and juridical legitimacy through two stages. First, carry out an inventory of various laws and regulations that have relevance to regional regulations regarding peace and public order, (Manan, 2019). Second, the statutory regulations that have been inventoried will then be analyzed by relying on two aspects, namely the philosophical aspect and the juridical aspect. An analysis of the philosophical aspects is carried out on the content of laws and regulations, (Supranto, 2018). The study of the juridical aspect is carried out on the norms of

laws and regulations that provide the basis for regional authority as well as those that determine the regulatory substance that must be accommodated in the preparation of a Regional Regulation concerning the Implementation of an Electronic-Based Government System. While empirical studies are used to describe aspects of sociological legitimacy. The empirical studies are carried out through team studies and Focus Group Discussions on studies related to the vision and mission; goals and objectives of implementing risk management in the implementation of government in Serang Regency.

The data collection technique used is Library Research on secondary data. A literature study was conducted to obtain secondary legal material by conducting a review of books related to the object of preparation (Narbuko et. al., 2017). Primary data was obtained through field studies (field research), namely by conducting interviews and Focus Group Discussions (FGD). An interview is a conversation with a specific purpose carried out by two parties, namely the interviewer (interviewer) who asks questions and the interviewee (interviewee) who provides answers to the questions. while FGDs are also commonly referred to as qualitative data collection methods and techniques by conducting group interviews, (Maleong, 2017). FGD can be defined as a method and technique in collecting qualitative data in which a group of people discuss a focus on a particular problem or topic guided by a facilitator or moderator.

Data analysis used is qualitative analysis. Qualitative analysis is a way of analyzing data sourced from law based on concepts, theories, laws and regulations, doctrines, legal principles, expert opinions or the views of the researchers themselves. Sources of data in risk management research in the implementation of government in Serang Regency, contain primary materials, secondary legal materials, and tertiary legal materials, (Soekamto, 2018).

FINDINGS AND DISCUSSION

The Electronic Governance System Risk Management process is the systematic application of policies, procedures and practices to communication and consulting activities, setting context, risk assessment (risk identification, risk analysis, risk evaluation), risk handling, monitoring and review, as well as recording and reporting. Electronic-Based Government System Risk Management Process.

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Figure 2. Risk Management Process

Communication and consultation is an ongoing and iterative process to provide, share or obtain information and create dialogue with stakeholders regarding the risks of the E-Based Government System. Communication is carried out to increase awareness and understanding of the risks of Electronic-Based Government Systems. While consultations are conducted to obtain feedback and information in order to support decision making. Determination of Risk Context of Electronic-Based Governance System aims to identify the basic parameters and scope of implementation of Electronic-Based Governance System risks that must be managed in the Electronic-Based Governance System Risk Management process.

Inventory of general information aims to obtain a general description of work units implementing Risk Management Systems of Electronic Governance. The information included includes the name of SPBE's Risk Owner Unit (UPR).

Table 1. General Information Form

General Information	
Name of UPR SPBE	Structural Bureau and Administration Affair
Duties of UPR SPBE	Organizing the formulation of policies as well as coordinating and synchronizing the implementation of policies in the field of government institutions and management
Function of UPR SPBE	1. Formulation of policies in the field of government institutions 2. Formulation of policies in the field of government management, administration of government, and development of the implementation of electronic-based government systems
Time Period	1 January– 31 December

Identification of the targets for the Electronic-Based Government System which aims to determine the targets for the Electronic-Based Government Systems along with their indicators

and targets that support the work unit's goals as UPR SPBE. UPR SPBE targets, filled with work unit targets as UPR SPBE contained in strategic plan documents, work plans, performance determinations, or other planning documents; SPBE target, filled with SPBE target that supports SPBE UPR target; SPBE Performance Indicators, filled with SPBE performance indicators that describe the achievement of SPBE targets; and SPBE Performance Targets, filled with SPBE performance targets that describe the size of performance indicators for achieving SPBE targets. SPBE target information is poured into the form as shown in the table below.

Table 2. The Fulfiment of the Information Form

Targets of UPR SPBE	Target of SPBE	Performances Indicators of SPBE	Targets Performances of SPBE
Realization of Increasing Electronic Based Government Index	creasing the quality of implementing Electronic-Based Government Systems	Electronic Based Government System Index	2.1
		Number of work units that achieved the "Good" SPBE rating	35 SKPD

Determination of the implementing structure of Electronic-Based Government System Risk Management aims to determine the work unit responsible for the implementation of Electronic-Based Governance System Risk Management. Determination of the implementing structure of Electronic-Based Government System Risk Management including: SPBE Risk Management Unit; SPBE Risk Owner; SPBE Risk Coordinator; and SPBE Risk Manager. Information on the structure of the implementation of Electronic-Based Governance System Risk Management.

Table 3. The Example of the Fulfiment of the Information Form

Structure of Implementation of SPBE	
Risks Users of SPBE	Name .... Position ....
Risks Coordinators of SPBE	Name.................. Position ....
Risks Regulator of SPBE	Name .... Position..............

The determination of the SPBE Risk Category aims to ensure that the process of identifying, analyzing and evaluating SPBE risks can be carried out in a comprehensive manner.

Table 4. Risk Categories

No.	Risks Categories of SPBE
1.	Main Frame on National SPBE
2.	Arcitecture of SPBE
3.	Mapping Plans of SPBE
4.	Business Process

The determination of the SPBE Risk Impact Areas aims to find out which areas are affected by the SPBE risk in the Regional Government. The determination of the SPBE Risk Impact Area begins with identifying the impact of the SPBE risk. SPBE Risk Impact Area.

Table 5. Influenced Areas

No.	Risks Categories of SPBE
1.	Finance
2.	Reputation
3.	Performances
4.	Organization services

The SPBE Risk analysis matrix contains a combination of likelihood and impact levels to be able to determine the amount of SPBE risk which is represented in numbers and assigned to a risk level.

Table 6. Matrix of Risks Analysis and Level of the Risk Management

	Risks Level	Risks Interval	Notes
1.	Very low	1 – 5	Blue
2.	Low	6 – 10	Green
3.	Average	11 – 15	Yellow
4.	High	16 – 20	Purple
5.	Very High	21 – 25	Red

SPBE Risk Appetite aims to provide a reference in determining the minimum threshold for the amount of SPBE risk that must be handled for each SPBE risk category, both positive SPBE risk and negative SPBE risk. The determination of SPBE's Risk Appetite can be adjusted to the complexity of SPBE risks and the internal and external context of each Regional Government.

Table 7. Risks Tasted

Risks Categories		Minimum Risks Handed	
		SPBE Risks Positive	SPBE Risks Negative
1	Budget Planning	16	**6**
3	Supplies and Services	18	**11**
4	Human Resources	20	**14**

SPBE Risk Appetite aims to provide a reference in determining the minimum threshold for the amount of SPBE risk that must be handled for each SPBE risk category, both positive SPBE risk and negative SPBE risk. The determination of SPBE's Risk Appetite can be adjusted to the complexity of SPBE's risks as well as the internal and external context of each Regional Government. The amount of risk handled in each SPBE risk category is then carried out by an assessment and analysis process, then handling and monitoring and review and recording and reporting are carried out and preparing monitoring documents and reporting.

Electronic-Based Government System Risk Management (SPBE) is a shared responsibility at all levels within the Local Government of Serang Regency. In order for the processes and measurements in SPBE Risk Management to be carried out properly, SPBE Risk Management governance is needed which regulates the duties and responsibilities of the SPBE risk management structure, and an SPBE risk awareness culture that can motivate ASN employees to implement SPBE Risk Management.

CONCLUSION

The implementation of Electronic-Based Governance System Risk Management begins with the preparation and establishment of an Electronic-Based Governance System Risk Management framework that is integrated with work processes in Regional Work Units. The Electronic Governance System Risk Management framework includes principles, leadership and commitment, the Electronic Governance System Risk Management process, and the governance of Electronic Governance System Risk Management. In its implementation, the Risk Management framework for the Electronic-Based Government System can be adapted to the conditions of each work unit within the Serang Regency Government. The participation of all parties is required, both internal employees of the State Civil Apparatus and other stakeholders. Good coordination and collaboration with all elements including the system that has been running in the Regional Government of Serang Regency is the key to the successful implementation of Electronic-Based Governance System Risk Management.

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