

Portrait Archipelago Government In Implementing E-Government (Implementation System Government based Electronics in Provincial Government - Riau Islands, Indonesia)

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Abstract. Revolution technology information and communication (ICT) provides an opportunity for the government To do innovation development state apparatus through the application System Government based Electronics (SPBE) or E-Government, that is, maintenance government using ICT to _ give service to agency government, apparatus state civil servant, perpetrator business, society, and parties others. However, SPBE implementation is not always smooth Because of various influencing factors _ and a slow implementation rate. Method research used is approach qualitative with technique data collection used is with analyze and study document. The documents to be analyzed are document study literature, news, and related regulations. Maintenance System Government-based electronics in the Province Riau Islands Known that achievement target maintenance government-based technology integrated information can be measured from indicator Index System Government based Province Electronics (SPBE). Riau Archipelago. In 2022, the SPBE Index will be obtained from the results evaluation using the SPBE instrument. Structure SPBE assessment is divided into four domains, eight aspects, and 47 indicators respective assessment given weight. Evaluation of Government SPBE index Province Riau Archipelago in 2022 is summation weight each domain. From the results summation weight, each domain got a Government SPBE index Province Riau Archipelago of 2.68 (Good).

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1 Introduction

Governments are under pressure today to raise the standard of public services and actively engage in informing the general public. More effective services also need to be provided. For this reason, E-Government or electronic-based government is increasingly becoming important for decision makers. Traditional governments that use paper-based administration are being abandoned [1].

The implementation of E-Government can be done through four stages that can be achieved in stages. These stages include: Preparation, which includes creating information sites in each institution, preparing human resources, preparing easy access facilities, and socializing internal and public information sites. Maturation, which includes the creation of interactive public information sites and the creation of interfaces connected with other institutions. Stabilisation, entails the development of public service transaction websites as well as the interoperability of applications and data with other organisations. Utilisation, which entails the development of integrated G2G, G2B, and G2C applications[2].

The implementation of E-Government initiatives in Indonesia has spread with varying degrees of success. However, in order to achieve the ultimate goal of implementing this concept, it is necessary to pay attention to two things, namely: the process of electronic transformation in organizations, and the impacts caused. In Indonesia, E-Government refers to the use of computers in service procedures by government organizations, and the transformation from traditional government to E-Government is a growing public policy issue. While in the international context, E-Government refers more to internet technology that has been widely available in developed countries[1].

In many literatures, E-government is also associated with the concept of digital e-government or online e-government, and is usually discussed in the context of transformational e-government, namely the use of internet technology which is expected to be a vehicle in the process of exchanging information, providing means of services and transaction activities with the public, business people and the government itself. In this case, the priority is the concept of transformation, where e-government is not just utilizing technology, but the existence of a policy-making system and public services in a better direction.

Indonesia is ranked 88th for developing and implementing an electronic-based government system (SPBE) according to the United Nations (UN) E-Government Survey 2020. The 2020 results, which were made public in July, indicated a rise of 19 positions from the 107th rank in 2018 and the 116th place in 2016. And saw an improvement, moving up to rank 77 for its work on creating and implementing the Electronic-Based Government System (SPBE). As a result of the poll, Indonesia moved up 11 spots from 88th in 2020 and 107th in 2018[3].

The implementation of SPBE has four goals, including building a professional, independent, and integrity supervisory system and transparent and responsible performance management of government entities. After that, achieving impeccable public services and raising the standard of administrative reform management.

The use of the Electronic-Based Government System (SPBE) or E-Government, which is government management that uses ICT to provide services to government agencies, the state civil apparatus, business people, the community, and other parties, offers the

government opportunities to innovate the development of the state apparatus. The SPBE offers opportunities to advance and realise open, participatory, innovative, and accountable governance, to increase cooperation between government agencies in carrying out government affairs and tasks in order to achieve common goals, to raise the calibre and reach of public services to a wider community, and to lower the level of abuse of power in the form of collusion, corruption, and nepotism.

However, because of a number of issues that contribute to the implementation's slow speed, SPBE implementation is not always easy. There are a number of things that, according to Prof. Ir. Achmad Djunaedi, MURP, Ph.D.'s presentation at the Digital Expert Talks #13 event held on Thursday, July 21, 2022 by the Centre for Digital Society (CfDS) FISIPOL UGM, obstruct the advancement of SPBE implementation. These include: 1) unfavourable government policies; 2) inconsistent implementation; 3) a shortage of skilled workers and training programmes; 4) a lack of change management initiatives; and 5) a lack of data integration. Lack of standards for ICT infrastructure, a lack of information security, a lack of ICT due to inadequate funding for E-Government implementation efforts, the absence of CIO or CDO positions at the government level, and an uneven distribution of E-Government and internet development in Indonesia are all factors[4].

Indonesia as an archipelagic region has significant differences with non-archipelagic regions. First, archipelagic regions have different characteristics so that the archipelagic regional development model must be treated differently from the regional development model in general. Second, the cycle of governance in archipelagic regions must be different from the cycle of governance in non-archipelagic areas. Third, the shift in community services must be centered on the island because the people of the archipelago have indications of low mobilization of life. Fourth, there are obstacles in terms of the development of existing facilities and infrastructure in the archipelago. Fifth, especially the outer islands are in dire need of improving the quality of life and security[5].

The Archipelago Province Cooperation Agency[6] lists the empirical phenomena that can be directly linked to the characteristics of the archipelago as having very little in the way of sea and air transportation infrastructure, very little in the way of facilities and infrastructure for basic services, very little in the way of regional financial capacity, very high transportation costs as part of government services, and limited accessibility for the general public, and poor level of human resources quality.

One of the Islands Provinces in Indonesia is Riau Islands Province which is a province that has a very strategic position because it is directly adjacent to neighboring countries, namely Singapore and Malaysia. Riau Islands Province is an archipelago consisting of oceans and islands spread from the Strait of Malacca to the Natuna Sea. The territory of Riau Islands province is dominated by water areas with an area of 9,982.88 km² (2.35%) in the form of land and 415,231.79 km² (97.65%) in the form of ocean.⁵ Riau Islands Province has 2,408 islands. The number of islands that have been inhabited is 385 islands, 19 islands are the leading islands that are directly adjacent to other countries. Riau Islands Province consists of 5 (five) regencies and 2 (two) cities, including Bintan Regency, Karimun Regency, Lingga Regency, Natuna Regency, Anambas Islands Regency, Tanjungpinang City, and Batam City[7].

Riau Islands as a Provincial Government which of course carries out government administration in order to provide public services turned out to have only developed the implementation of electronic-based government in 2017 through Riau Islands Governor Regulation Number 50 of 2017 concerning the Implementation and Development of E-

Government of Riau Islands Province. The regulation states that the implementation of E-Government includes; Electronic-Based Government System (SPBE), Human Resources, Network Infrastructure, Information System, Planning, Supervision and Control and Funding[8].

2 Research Methods

The research method used is a qualitative approach with data collection techniques used by analyzing and studying documents. The documents to be analyzed are the study of related literature, news, and regulatory documents.

3 Discussion

According to the findings of studies and research from the Harvard JFK School of Government, there are three success factors that must be acknowledged and treated seriously if digitalization concepts are to be successfully applied to the public sector. These three components Support, Capacity, and Value are essential to success [9].

3.1 Support

The willingness (intent) of various public and political leaders to genuinely execute the notion of e-Government, not only follow the trend or even oppose projects connected to the principles of e-Government, is the first and most important component that the government must possess[9]. The e-Government framework that is set as a succession of vision and mission is the issuance of Riau Islands Governor Regulation Number 50 of 2017 concerning the Implementation and Development of E-Government of Riau Islands Province. The purpose of the guidelines for the implementation and development of e-government is to increase efficiency, effectiveness, transparency, accessibility and accountability in governance, development and society in the implementation of an electronic-based government system. Then for the benefit of law enforcement, protection and enforcement of state sovereignty in the implementation of e-government and providing convenience for local governments to provide electronic-based public services.

In addition to the issuance of the governor's regulation, the purpose of e-government development is also contained in the regional medium-term development plan of Riau Islands Province for 2021-2026 in which the regional government of Riau Islands Province by maximizing the application of e-government to strengthen institutions and governance[10].

Even though it already has regulations and regional planning in its implementation, so far e-government is still not implemented adequately where its implementation is still carried out partially and has not been integrated so that it has not brought up improvements and services. This is influenced by:

1. The absence of an ICT Master Plan and an electoral-based Government System architecture
2. Do not yet have an electoral-based Government System Road Map

3.2 Capacity

This second element is the existence of an element of ability or empowerment from the local government in realizing the "dream" of e-Government related to becoming a reality. There are three minimum things that must at least be owned by the government with respect to this element, namely:

3.2.1 Availability of Funds

It is known that from a financial point of view, it is based on the accountability report on the performance of government agencies where the implementing agency is the Communication and Information Service of Riau Islands Province. In 2022, the budget allocated is Rp. 2,444,977,304.00 which is used for the Management of Local Government Data Centers, Development of Electronic-Based Government Applications and Business Processes, Monitoring, Evaluation and Reporting Development of the SPBE ecosystem, Implementation of Government Service Liaison Systems, and Coordination and Synchronization of Electronic Data and Information[11]. Funds intended for the development of the E-government Program are lower than in 2021 of Rp. 7,609,092,355 which are intended for Domain and Subdomain management, procurement of ICT Network Facilities and Infrastructure, Maintenance of ICT Network Facilities and Infrastructure, Development of Public Information Systems and government and evaluation of the Electronic-Based Government System. This can then be seen that there is a decrease compared to the previous year in the context of developing E-Government in Riau Islands Province.

3.2.2 Availability of information technology infrastructure

According to the Digital Society Index from the Ministry of Communication and Information Technology (Kominfo)[12], Kepri Province is the province with the 3rd best digital infrastructure and ecosystem nationally in 2022. To assess the pillars of digital infrastructure and ecosystem, the indicators used are the level of access and use of information and communication technology (ICT), ICT adoption in the business sector, the number of schools with internet access, and the number of university faculties in the ICT field. Then based on data from the 2022 Indonesian Telecommunications Statistics, internet penetration in the Riau Islands is one of the provinces with the highest internet penetration rate[13]. Furthermore, based on the Information and Communication Technology development index in 2021, Riau Islands Province occupies the ICT Development Index category with a moderate value. Applications developed by the Riau Islands Provincial Government through the Communication and Information service in 2022 totaled 22 Applications consisting of Public Service Applications and Government Services[11]. More an increase compared to 2021 only 12 applications. Furthermore, based on sectoral statistical data from Riau Islands Province in 2022, the procurement of ICT network facilities and infrastructure is the provision of internet bandwidth to be accessed by OPDs within the Kepri Provincial Government with a target of 34 regional devices to be achieved by 38 regional devices.

From these data, it shows that Riau Islands Province as an archipelago is able to compete with other regions on the mainland in terms of infrastructure availability so that technological accessibility can be felt.

3.2.3 Availability of human resources

The Riau Islands Provincial Communication and Information Service is an agency as the spearhead of the success of the implementation of E-Government in the Riau Islands Provincial Government. Of course, the competencies and expertise needed so that the implementation of e-Government can be in accordance with the principle of expected benefits. Based on data from the 2023 Riau Islands Provincial Government Work Plan (RKPD) in terms of e-Government management within the scope of the Riau Islands Provincial Government, this activity has been supported by several adequate human resources at the Communication and Information Service[14]. Furthermore, based on the 2022 Regional Government Implementation Report, the percentage of ICT management ASNs who are certified for competence under the management of the Communication and Information Agency with an achievement of 81.4%.

3.3 Value

The benefits of implementing e-government in Riau Islands Province with the condition of separate areas between one island and another can be seen from the use of e-government in Information and Documentation Management Officer services, where this website-based public service provides extraordinary benefits in terms of public information disclosure, especially among students and academics who need data without having to carry out face-to-face service processes. Furthermore, there is the Gema Ekraf Kepri service, a digital application platform for marketing products/services and directories of actors/businesses in the creative economy sector in Riau Islands Province. Besides there are services that can directly benefit the community, based on the collection of information at the Riau Islands Provincial Communication and Information Office, it turns out that there are still applications that are taken down and not integrated so that the value of the benefits obtained is not optimal. And the e-government distribution in Riau Island Province is still at the level of interaction, not yet entered the level of transaction maturity or collaboration.

The portrait of the development of E-Government in Riau Islands Province based on the three elements above is not much different from the results of the Monitoring and Evaluation of the Electronic-Based Government System where the measurement of the implementation of the electronic-based Government System is reviewed from the process capabilities and technical function capabilities. The indicators are SPBE policy, SPBE Governance, SPBE Management and SPBE services. The following is the track record of SPBE assessment in Riau Islands Province.

Table 1. Development of SPBE Index of Riau Islands Province

Year	SPBE Index	Predicate
2020	2,80	Good
2021	1,96	Enough
2022	2,68	Good

Source: Riau Islands Province Document

From the data above, it shows the ups and downs of the SPBE index in Riau Islands Province, and it can be seen that the predicate in 2022 has increased from 2021, but not higher than in 2020.

4 Conclusion

Portrait of E-government in Riau Islands Province through an Electronic-Based Government System described through three elements of success can be seen that:

1. The Riau Islands Provincial Government has prepared the implementation of E-government through the Governor's Regulation and Regional Medium-Term Plan. Even so, the regulation will be difficult to implement because the Riau Islands Provincial Government does not yet have a Master Plan for Information and Communication Technology and an electronic-based Government System architecture and does not yet have an electronic-based Government System Road Map.
2. The Riau Islands provincial government has a good digital infrastructure, although funding for E-Government development has decreased. However, human resources at the Communication and Information Agency have received training and competency certification.
3. The impact of the implementation of E-Government has been felt, especially on public information disclosure.

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