

IMPLEMENTATION E-GOVERNMENT IN SUPPORTING OF ONLINE-BASED SERVICE QUALITY AND ACCESSIBILITY

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Abstract: In the development of Revolution 4.0, the application of information technology is a must for state administrators (government). And also, the use of information technology in governance (e-government) is also one way to realize bureaucratic reform in improving the quality of public services to make them more effective, efficient, and transparent and accountable. The research method used is qualitative with a descriptive verification approach and in-depth interviews with various informants relevant to the study. The results of the research show that the government needs to adapt quickly to support people's needs in a more effective and efficient way. Namely by implementing an E-government system or government that utilizes technology for a transparent, effective, efficient and accountable service to the public. This digital gap can be seen from one of the factors, namely whether or not internet access is evenly distributed and the extent of local people's knowledge regarding digital use. Between these gaps, sometimes we feel irritated when a digital-based service is arguably of good quality in a government agency, but the gap comes from the humans themselves who have not been able to properly utilize their digital infrastructure. Therefore, the government needs more attention to monitor the ability of human resources or ASN to be more consistent with e-government based services. If the HR capabilities are still not able to utilize the e-government system properly, then the funds spent will be in vain. Apart from digital infrastructure funding, there are things that are more urgent than that, namely repairing damaged roads in the regions which of course provide direct satisfaction to the community rather than pouring digital infrastructure funds into the readiness of human resources itself which is low or cannot yet implement e governance over e government.

Keywords: E-government; public service; digital; government; quality.

INTRODUCTION

Fundamentally, the industrial revolution 4.0 has resulted in changes in how humans think, live, and relate to one another in various activities carried out by humans in various fields. The ease of access to the internet and technology because it is all digital finally makes people's behaviour slowly shift from being wholly manual or traditional to turning into a digital system (Morra, 2017; Khan & Turowski, 2016; Amalia, 2018; Manda & Dhaou, 2019). Therefore, activities carried out manually/traditionally are no longer effective. With these changes, the government must keep up with existing developments by utilizing information technology. One of them is by implementing eGovernment. Therefore, as a developing country, Indonesia needs to operate and enforce e-government in facing challenges and demands for progress and creating good governance. Based on Presidential Instruction Number 3 of 2003 concerning National Policy and Strategy for the Development of Electronic Government, the work process within the government in utilizing information technology (e-Government) includes two related activities, namely: (1) Data management, information management, management systems, and work processes electronically; and (2) Utilize advanced information technology to access public services quickly and cheaply by people throughout the country. Thus, to face challenges and demands for progress and create good governance, the government needs to utilize information technology by implementing and developing Electronic

Government (Amalia, 2018; Fuadi & Marom, 2016; Indrajit, 2007).

In its implementation, Electronic Government has several development targets as outlined in the Blueprint for the Electronic Government Application System (Indrajit, 2007; Khan & Turowski, 2016; Manda & Dhaou, 2019; Wulansari & Inayati, 2019), namely:

1. Establishment of quality and affordable public service information and transaction networks
 2. Formation of interactive relations with the business world to improve and strengthen the ability of the economy to face changes and international trade competition
 3. Establishment of a communication mechanism between government agencies and the provision of facilities for community participation in the governance process;
 4. Establish a transparent and efficient management system and work process and facilitate transactions and services between government agencies. Presidential Regulation Number 95 of 2018 concerning the Electronic-Based Government System (SPBE) has been issued to explain the mechanism for implementing e-government. Presidential Regulation Number 95 of 2018 concerning the Electronic-Based Government System (SPBE) explains that the Electronic-Based Government System (SPBE) is a government administration that utilizes information and communication technology to provide services to SPBE Users.
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Since the enactment of the SPBE Presidential Regulation, the implementation of the Electronic-Based Government System or e-government carried out by the government in Indonesia has shown an increase yearly. The e-Government Development Index (EGDI) survey conducted by the United Nations shows that overall. Indonesia scored a score of 0.6612 in the High E-Government Development Index (EGDI) group in the UN E-Government Survey 2020, successfully placing Indonesia in the top 100. world ranking at position 88 out of 193 countries previously in 2018, it was ranked 107.

In the Blueprint for the Electronic Government Application System (Internet: Indonesia, 2009), there are several governments functions whose implementation can be assisted through the electronic system, namely: 1) Community service, 2) Staffing, 3) Regional finance, and 4) Asset management. One example of a financial data management application system to implement SPBE or e-government in government agencies is the application of e-government at the Secretariat General of the MPR RI through the Billing Control Information System (SINTAG). The Billing Control Information System (SINTAG) is a modern information system that focuses on the operational efficiency of government agencies' financial management services at ministries/agencies that is very flexible with the size and condition of the organization (Manda & Dhaou, 2019; Morra, Arman, & Mousa; 2017; Indrajit, 2007; Pratiwiti & Alfirdaus, 2018).

SINTAG was built and developed in

2009, which was first implemented at the BPK RI Head Office in 2011—then followed by the BPK RI Education and Training Centre, which also implemented the SINTAG application. This information system complements the mandatory information system that must be operated by every work unit in the ministry/institution environment. Because all company activities or activities are related to obtaining working capital funding, using or allocating funds, and managing assets owned to achieve the company's main goals and government institutions. Before using SINTAG, financial management was manual. As in preparing financial reports where bookkeeping is done with paper or books or recording through software (Microsoft Excel or the like). With this manual recording, the data obtained is recorded separately from one unit to another, and manual double entry must be used as a ledger until it becomes a report. So every year towards the end of the year, it is necessary to do data matching between data sources with one (Prabawati et al., 2020; Khan & Turowski, 2016; Kurniawan & Atmojo, 2020; Rachman & Noviyanto, 2017).

The Billing Control Information System (SINTAG) is applied to implement e-government in the government, especially in financial management at the Secretariat General of the MPR RI. In addition, this method also takes much time because it has to match one data with another. Then in the filing/billing process where the file that has been given to the finance department can only be known by asking directly the party concerned (financial officer) regarding the position of the

file/document. Sometimes there are cases of missing files because the records between officers are still different. As noted, one of the file officers still needs to enter or register with the finance department, while another officer has seen (corrected) the file/document or vice versa. Therefore, this is considered less effective and needs to reflect good governance.

Create to simplify the accounting process for financial files to become more effective and efficient. At the Secretariat General of the MPR RI, this application only began to be implemented at the end of 2019, precisely in September. The implementation of e-government through the Billing Control Information System (SINTAG) is an effort to improve the administrative process in financial management at the Secretariat General of the MPR RI. In principle, SINTAG is a development that standardizes each invoice document's settlement/payment process in a workflow. It applies the 'Single Entry Principal' concept to maintain data integrity and avoid inputting the same data more than once (repeated inputting) to prevent discrepancies. Then other benefits that are felt from using SINTAG are file tracking and billing data recapitulation.

However, during one year of its implementation, the SINTAG application still has several obstacles. The most common problem is a network error. When an error occurs on the network, the filing process cannot be carried out. Even the mistake can last for an entire day (Samsudin & Muslihudin, 2018; Suharyana, 2017; Prabawati, 2020). Then some employees still need to be more reliable or understand SINTAG. So, the benefits of the

application have yet to be felt complete. Network connectivity that still uses a LAN / local network limits access and can only be done at the office.

This study explores what obstacles exist in applying the Billing Control Information System (SINTAG) to implement e-Government at the Secretariat General of the MPR RI. So that when employees do work from home or Work from Home (WFH) during the Pandemic, the SINTAG cannot be accessed. Things that are still often before SINTAG are delays in the Contractual. File process where the deadline for processing the Contractual file is 14 working days until it is reported to the KPPN, so the filmmaker needs to pay attention to the time given to process the file, so there is no delay. The obstacles can certainly hinder employees' work, so the primary goal of implementing e-government is inappropriate. Therefore, to implement e-government in Government Agencies, it is necessary to know its readiness from various aspects.

Literature review

E-Government Application System

The development of e-government covers a national scale. Therefore, there is a need for a communication framework between e-government systems to interact and cooperate. In addition, the scope of function of the e-government system is also quite large, so in its development, it almost certainly involves many vendors, and a standard communication mechanism is needed between systems. So, in building an e-government application system, standardization of application system

development needs is required, ensuring that any system developer vendor can communicate between these systems. In the e-Gov Blueprint (Basuki, 2018; Rusli, 2019; Said, 2007; Sedarmayanti, 2009), it is stated that to develop an e-Government application system, and there are standard application system requirements that must be met, namely: 1) Reliable The application system will run reliably, robustly against data entry errors, operating system changes, and bug-free; 2) Interoperable Ensure that application systems will communicate with each other and exchange data and information with other application systems to form system synergies; 3) Scalable, Ensure that the application system can be easily upgraded, especially new features, additional users, and excellent data management capabilities; 4) User Friendly Ensuring that the application system will be easy to operate with a user interface commonly used in government and following its users' language and cultural habits; and 5) The integrate able, Ensuring that the application system has features for easy integration with other application systems, especially for conducting data and information exchange transactions between e-government application systems, both within the scope of one local government with other local governments (Rusli, 2019; Samsudin & Muslihudin, 2018).

Billing Control Information System (SINTAG)

The Billing Control Information System (SINTAG) is a modern information system that focuses on the operational efficiency of government agency financial management services at the

ministry/institution, which is very flexible with the size and condition of the organization.¹⁸ This information system complements the mandatory information system that must be operated by every work unit in the ministry/institution environment. Because all company activities or activities are related to obtaining working capital funding, using or allocating funds, and managing assets owned to achieve the company's main goals and government institutions. The principles in developing SINTAG are to standardize each invoice document's settlement/payment process in the form of a workflow. Furthermore, apply the concept of 'Single Entry Principal' so that data integrity can be maintained and avoid inputting the same data more than once (entering the same data more than once), focusing on the operation of financial management services. This information system is expected to encourage the creation of efficiency and effectiveness of financial management in ministries and central government institutions.

MATERIALS AND METHODS

This study used qualitative research methods with a purposive sampling technique to determine informants (Ahmadi, 2015; Fuad & Nugroho, 2014; Fitrah & Luthfiah, 2017). Qualitative methods are methods that focus on in-depth observations. Therefore, the use of qualitative methods in research can result in a more comprehensive study of a phenomenon. The secondary data is data taken through intermediaries or parties who have collected the data previously, in

other words, researchers do not directly take their own data into the field. Data collection techniques through:

1. Interviews will be carried out in this study by asking structured questions using interview guidelines arranged wholly and systematically to collect data and information regarding the Implementation of SINTAG at the Secretariat General of the MPR RI. Interviews in this study were conducted with the Head of the Treasury Subdivision of the Assembly (Financial Treasurer), Finance Staff (Financial Bureau PPK Staff, File Verifier, Budget Verifier), Staff of the Secretariat General of the MPR RI (application users). All interviews were used by zoom cloud meeting (FGD).
2. Documentation. In this method, data collection is carried out using existing documents, such as research journals and articles related to the application of e-government, which are recorded to improve the existing data from the interviews.
3. Observation. In this study, the researchers' statements were collected by reviewing or directly visiting the Secretariat General of the People's Consultative Assembly of the Republic of Indonesia, especially the Finance Bureau.

RESULTS AND DISCUSSION

Telecommunication Infrastructure

The SINTAG application as an e-government telecommunications infrastructure has been running well for one year of its implementation. Evident from several opinions which are satisfied with the SINTAG application. The telecommunication element emphasized here is the tracking of the file's position, which is indirectly the result of the interaction of the administrator, file verifier, treasurer, and budget verifier. In addition, the amount of the budget that has been absorbed has also fulfilled these elements. However, there are still some obstacles in its application, such as some users' need for more understanding. One of the factors is the appearance of the SINTAG application, which is considered less user-friendly or confusing. In the future, SINTAG will need to develop related to the main display and features that can help other work.

In addition to being the main foundation and one of the conditions for accelerating digital transformation, telecommunication infrastructure is also a driver of digital economic growth. The arrangement of telecommunications infrastructure requires stakeholder synergy to realize the national economy. *Telecommunications infrastructure* is a physical structure that forms the basis of communication networks and supports long-distance communication activities. Telecommunications infrastructure itself consists of two words; infrastructure and telecommunications.

Infrastructure means buildings, and

telecommunications means transmitting information in pictures, writings, signs, or signals from one party without restrictions. The crucial meaning of communication is to convey ideas or ideas so that others can understand them. Humans need telecommunications to convey and receive messages over long distances. However, humans have limited time and distance, creating technology to extend their abilities. Therefore, telecommunication infrastructure has an essential meaning in communication activities that connect the sender and receiver of messages without any distance and time limitations. Telecommunication infrastructure in the international world is closely related to globalization. Globalization resulting from the development of telecommunications is capable of revolutionizing international communication. Such as the convergence of media, television, computers, and the media industry, where much information is digitally connected. In essence, the operation of telecommunications is defined as an effort to strengthen national unity, facilitate the activities of the government of a country, promote economic activities, support the creation of development goals, and establish good relations with various countries.

Level of Connectivity and Use of IT by Government

After observing several interviews, the level of connectivity and use of IT still needs to be improved and developed, especially in overcoming network errors and ease of access—opinion Indrajit (2005:8) related to the level of connectivity and used IT. By observing the extent to which the current

government has utilized various information technologies in assisting daily activities, it will be seen how far their readiness to apply the concept of e-government will increase. Moreover, development needs to be done. Networks and ease of access are essential in implementing e-government because they can be a factor in the effectiveness of an information technology system.

Implementing e-government can be adequately achieved. For this reason, to overcome obstacles such as network errors and ease of access, building or creating a data centre or data server specifically for e-government must remain stable because the centre is no longer the server computer, the data server. Furthermore, the owned capacity will be even more significant because the limited capacity will cause access to take longer due to the lack of free space to access this application for an extended time. Of course, with the establishment of this server data centre, it is necessary to have server officers who have competencies related to information technology to overcome network error problem's goal quickly.

Information technology is a tool (tools) in communicating and increasing knowledge in this era of globalization and the information age. Mastery of information technology in this era has become a necessity. More specifically for institutions, including the need to facilitate service administration work in government. Public services provided by government agencies (Central, Provincial Government, Regency, City, and District) to the community manifest the state apparatus's function as a public servant. In terms of

regional autonomy, the function of public services is one of the focuses of attention in improving the performance of local government agencies. Performance improvement can be made through the facilities used, one of which is utilizing the development of Information and Communication Technology (ICT).

Information technology is needed to solve the problems faced by society. The use of information and communication technology (ICT) in public services can increase employee productivity in providing services to the community. The role of information technology in public services is likely to increase work productivity with a high level of accuracy, speed, and convenience. The use of information technology then produces new relationships such as G2C (government to citizen), G2B (government to business), and G2G (government to government). The public's demands for good governance are very urgent to be implemented by the apparatus. One solution that is needed is integrating the government administration system through an online network between government agencies, both central and regional, to access all information data, especially those related to public services.

Readiness of Human Resources in Government

An essential aspect in developing eGov in Indonesia is skilled human resources in the field of information technology (e-Skills) and competence in implementing electronic-based service concepts. Several previous studies have focused on the availability of e-Skills. They have yet to pay attention to how these e-Skills contribute

to eGov, so it is necessary to study further how to increase the role of e-Skills so that they can accelerate development in Indonesia. The e-Skills needed are not only at the technical level but also various aspects related to the skills needed to encourage the implementation of eGov.

The Indonesian National Work Competency Standardization System (SKKNI) is an arrangement of linkages between components of national work competency standardization that is comprehensive and synergistic to achieve the goal of standardizing national work competencies in Indonesia. The Indonesian National Work Competency Standard, abbreviated as SKKNI, is a workability formulation that includes aspects of knowledge, skills, and expertise, as well as work attitudes that are relevant to the implementation of duties and job requirements stipulated under the provisions of the legislation.

HR's readiness to implement SINTAG at the Secretariat General of the MPR RI has been said to be good. However, some obstacles exist, such as some employees needing more understanding, so they tend to be reluctant to use this application. If this happens, the effectiveness of an information technology system, in this case, SINTAG, cannot be achieved because some users still need to fully utilize it, especially users or users from the external Finance Bureau. Therefore, further socialization or counselling related to the procedures for using this application needs to be carried out. Then employee training on understanding the technological era also needs to be carried out so that the HR in the Secretariat General of the MPR RI can

follow and adjust existing developments.

Availability of Funds and Budget

From the interview results, funds, and budget, the availability of funds and funding is sufficient and strongly supported by the Budget User Authority. In addition to the availability of application procurement funds, the Secretariat General of the MPR RI also holds a budget for developing the SINTAG application every year. The availability of sufficient funds and funding for changes during this application needs to be considered. Because in government, the budgeting plan is carried out for one-year, careful planning regarding the budget for this application is needed so that there are no obstacles.

Presidential Instruction (Inpres) No. 3 of 2003 concerning national policies and strategies for the development of E-government makes e-government very feasible to be implemented as a form of support for the development of services to the community. Changing from a conventional model to e-government certainly has its challenges, especially to start. The government often needs clarification about where to start because of the lack of human and natural resources. However, initial steps must be taken immediately, for example, showing regional tourism potential, general information related to the government (photo and name of the governor, office addresses), and commercial information such as chili prices today. In addition, educational information is also vital to convey, such as study hours, school profiles in certain districts, and other educational information.

Legal Tool

The legal instruments used as the basis for implementing e-government through SINTAG at the Secretariat General of the MPR RI are still in the form of circulars. Only by using the circular can this application run well but not optimally. So, there is a need for more vital legal instruments such as the Secretary General's Regulation or the like to regulate the mechanism for implementing SINTAG to run in a conducive manner. Of course, in these legal instruments, it is necessary to have an SOP for SINTAG, which contains procedures for use, time limits for processing, and a factual basis for using this application. Legal solid instruments are also needed to regulate the use of this application so that there is a basis for employees required to use it. D.6. A paradigm shifts in e-government, the essence of the paradigm is a change in the basic assumptions where there is a change in management that requires a desire to change the paradigm and way of thinking. Paradigm change refers to the need for self-awareness to change working, behaving, and daily habits. Paradigm change can be one of the factors in implementing good governance because it is dynamic and refers to current developments. Thus, the application of e-government in a government agency is needed.

Based on the interviews with several sources, it is known that the paradigm shifts at the Secretariat General of the MPR RI had a good impact on supporting employee performance. Supporting performance here, employees get convenience in tracking files and recapitulating billing

data. In addition, a neat and complete recap of billing data also supports the version for reporting finances at the end of the year faster before using SINTAG. The problem is related to several other components, such as connectivity and the use of IT. Some employees are still reluctant to use this application because they need help understanding its use. Then in terms of infrastructure, the appearance of this application also needs to be changed so that ordinary users more easily understand it.

Moreover, the last obstacle is that the legal instruments used are not vital, and there are no regulations that require employees to use this application. So, it is undeniable that there are still employees who think this application needs to be more influential in a financial filing. Therefore, readiness in all fields also needs to support a paradigm shift.

Dilemma e-government in Indonesia

The dilemma when talking about what is an obstacle to an e-government implementation, especially in the current situation, namely the existence of covid 19 which requires people to maintain distance and fast public services. This digital gap is caused by the distribution gap of internet access, the unequal distribution of digital infrastructure, the lack of funds due to the high cost of digital infrastructure or what is worse, the human resources themselves are not ready to face the demands of the digital world. We do not deny that there is a digital divide in various regions or city/district government agencies. This digital gap can be seen from one of the factors, namely whether or not internet access is evenly

distributed and the extent of local people's knowledge regarding digital use. Among these gaps, sometimes we feel irritated when a digital-based service that can be said to be of good quality is in a government agency, but the gap comes from the humans themselves who have not been able to make good use of their digital infrastructure. Therefore, the government needs more attention to monitor the ability of human resources or ASN to be more consistent with e-government based services. If the HR capabilities are still not able to utilize the e-government system properly, then the funds spent will be in vain. Besides digital infrastructure funding, there are things that are more urgent than that, namely repairing damaged roads in the area which of course gives direct satisfaction to the community rather than pouring digital infrastructure funds to the readiness of its human resources itself is low or has not been able to implement e governance over e-government.

The existence of this regional autonomy policy has consequences in the administration of government. The advantages and disadvantages of regional autonomy are that politically the existence of regional autonomy is a step towards democracy because the government can become closer to its people so that it can make people feel more about the existence of the government. In addition to political consequences, there are also economic consequences, namely decentralization is expected to create community innovation and motivate people to be more productive. But unfortunately, in reality there are negative impacts brought about by the decentralization policy.

Decentralization in the form of regional autonomy has also become a source of people's injustice due to many local governments acting arbitrarily and abusing their powers. As a result, the standard of living of the people has not been able to increase as expected. This could be a real example of the problem of good governance in Indonesia. With corruption and abuse of office above seem to be the main problems of good governance in Indonesia, finding people with high integrity seems to be a challenge in itself. Choosing a state apparatus that has superior and noble character will of course have a positive impact on the administration of the state with good governance. If corruption and abuse of office still exist, it is almost impossible for good governance to be implemented in our country.

As an effort to realize good governance in Indonesia, taking preventive and countermeasures can be our collective effort. Prevention can be done by guaranteeing legal certainty to create open government. This guarantee is given as a public right, such as the right to observe the behavior of officials, the right to access information, the right to participate in policy making and the right to file an objection if the three previous rights are not fulfilled. In addition, countermeasures can be made by ensuring that violators of the rules receive appropriate punishment, regardless of whether the person is a certain official or a member of a certain group. Thus the discussion this time about the problem of good governance in Indonesia. By understanding the existing problems, it is hoped that together we can

find the best solution for the realization of good governance for clean government and the welfare of the people.

CONCLUSIONS

From the results of the discussion and a series of analyses carried out at the Secretariat General of the MPR RI, it is concluded that the implementation of e-government through the Billing Control Information System (SINTAG) at the Secretariat General of the MPR RI has not run optimally. There are still several obstacles in the government's readiness component for implementing e-government. The problem that often occurs is the Connectivity Level component and the use of IT, where system errors still happen, resulting in delayed work. Indeed, needs to reflect one of the goals of implementing e-government, namely fast and efficient. In addition, using networks that are still local / LAN is also one of the factors that SINTAG still needs to be optimally implemented as an e-government. Access is still limited; it can only be accessed at the office, while outside the SINTAG cannot. Another factor is the HR Readiness component in implementing SINTAG. Some employees need to understand and have sufficient competence in implementing SINTAG, thus making SINTAG not feel its full role and benefits. It was also related to the Legal Apparatus component, where there is a need for legal instruments that regulate the mechanism of use, such as SOPs, officers, and other things that can control the implementation of SINTAG so that it runs well and effectively. Therefore, making legal instruments such as the Secretary General's

Regulation is necessary. Apart from these four components, the Availability of Funds and Budget and Paradigm Changes have been assessed as suitable.

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