

ANALYSIS OF THE ROLE OF GOVERNMENT IN PROMOTING TECHNOLOGICAL INNOVATION TO IMPROVE DIGITAL GOVERNANCE

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Abstract. *The government plays a crucial role in promoting technological innovation to enhance digital governance. While innovation can improve the quality of public services and government efficiency, challenges such as a shortage of human resources remain. Collaboration between the government, academia, and the public is necessary to enhance innovation within the government system; therefore, the government must play a significant role in developing technological innovation to improve digital governance. This study uses a literature review method by collecting information from journals, books, and theses relevant to the research title. The purpose of this study is to determine the role of the government in digital innovation for the development of digital governance.*

Keywords: *Digital Governance, Innovation, and Technology.*

1. INTRODUCTION

The work systems of organizations, including government agencies, have changed due to advances in information and communication technology. The use of information and communication technology in government agencies can accelerate policy-making because it enables easier and faster data collection and analysis. Studies show that the application of this technology can improve the quality of work between organizations and their employees. Currently, various public services utilize information and communication technology as a result of government institutions (Konseptual et al., 2021).

Governance is considered an innovation that improves the government system because it utilizes information and communication technology to increase efficiency and provide better services. Additionally, governance enables the public to collaborate in policy-making and service delivery. In terms of governance, it is considered capable of promoting open government or transparent governance. Furthermore, it is believed to enhance public access to government services through the use of information and communication technology. It is stated that governance can be described as a One-Stop Service that allows all services to be accessed through a single portal (Konseptual et al., 2021).

One of the most important information technologies for the Indonesian government to provide public services is governance. As a modification of changes and developments in global information technology, this has prompted the Indonesian government to build a digital system that will assist and facilitate governance in the future. Continuous developments in information and communication technology drive efforts to keep changing. One of the steps taken by the government to address changes in the provision of public services is the implementation of governance (Tasyah et al., 2021).

The Electronic-Based Government System Regulation, also known as SPBE, regulates digital governance (Presidential Regulation No. 95, 2018). This system is built using information and communication technology available in public services. The public will find it easier to access services with the digital governance system. Digital

Governance emerged as a way for bureaucratic systems to become more accurate, responsive, and open in their implementation. This is in line with transparency, which is one of the requirements of Good Governance. Because there is transparency in government administration, people have the opportunity to find out about government policies that will be and have been made (Setyawati & Fitriati, 2023).

Additionally, transparency also helps the public provide feedback or results regarding government policies. One of the outcomes of digital management is digital information services. The Public Information Disclosure Regulation (Law No. 14 of 2008) governs public information disclosure. This regulation states that public information disclosure is a way to allow the public to see more closely how the government conducts its affairs. One of the characteristics of a democratic country that upholds the freedom of the people in the administration of public information is the right to obtain information, which is a human right (Setyawati & Fitriati, 2023).

Services can be improved by increasing their flexibility, enhancing user satisfaction, and benefiting the public and government. The implementation of a governance system will clarify government operations and processes, making them more transparent and efficient for the public and businesses. This will yield numerous benefits for the public, including shorter service times and easier access to government information (Tasyah et al., 2021).

The ability of regions to utilize information technology to support governance influences various innovations implemented to accelerate development and public services. The use of information technology is expected to be key in realizing effective governance, with a focus on community participation, transparency, accountability, effectiveness, and efficiency (Teknologi & Vol, 2020). Therefore, digital technology can make it easier for the public to obtain simple and clear services, as well as simplify document processing and accelerate services, which in turn can improve the quality of public services (Publik et al., 2023).

2. RESEARCH METHODS

This research utilizes a literature study approach, a method that aims to gather information from various written sources. This method involves analyzing previous similar research results and using reference books to build a theoretical foundation related to the issues being investigated. According to several experts, a literature study is a theoretical study that refers to references and scientific literature discussing culture, values, and norms relevant to the social context of the research. This approach also involves collecting data through a review of various sources such as books, literature, notes, and reports relevant to the research problem. (Aris Dwi Cahyono, 2021).

3. RESULTS AND DISCUSSION

3.1 Definition Of Digital Governance

Digital governance refers to the use of information and communication technology by national governments to improve public services. It also helps to increase transparency and accountability in public management. Around the world, there are different models for digital management. These differences are influenced by history, socio-economic conditions, and national administrative systems. To implement digital governance, a comprehensive system of principles is needed to enhance behavior in the digital world through public values. To achieve the goal of digital integration, there must be mechanisms for cooperation and collaboration. This cooperation is necessary to promote digital services to the public (Setyawati & Fitriati, 2023).

Digital governance is an approach to regulating the roles, accountability, and decision-making authority of individuals who use websites, mobile phones, social media, and additional products and services accessed via the internet. Digital Strategy, Digital Policy, and Digital Standards are the three primary metrics that must be considered when implementing Digital efficiently and effectively. The three indicators mentioned will help

in determining the strategies, policies, and standards related to the implementation of Digital Governance (Setyawati & Fitriati, 2023).

The World Bank states that “the use/application of information technology by government agencies to improve services to the public and businesses, while facilitating cooperation with other government agencies” is the definition of “e-government.” The World Bank also states that the goal of e-government is to provide the public with broad access to information. E-government requires changes to business processes (Reengineering Business Process) and organizational structures before it can be implemented. Many authors and consulting firms have attempted to create new organizational models. However, none of these models can be fully implemented across all government organizations at present. This is because each organization is unique in terms of structure, core business, and stakeholders (Lenak et al., 2021).

3.2 Impact of Digital Governance

Presidential Regulation No. 95 of 2018 on the Electronic-Based Government System regulates the e-governance system in Indonesia. This regulation assigns the BPPT the task of overseeing the implementation of the Electronic-Based Government System (SPBE) (Amane et al., 2023). The objectives of the SPBE are to:

- 1) Improve digital access and infrastructure, and accelerate the provision of internet services at public service points
- 2) Accelerate the development of the National Data Center.

In (Amane et al., 2023) One of the impacts of digital governance, also known as digital governance, is as follows:

- 1) Improving people's ability to identify and verify their identity as citizens. Proper targeting of social protection programs reduces leakage and lowers government costs and increases uptake, increasing inclusion
- 2) Stronger data and better analysis opportunities. Since gaps in the process can be fixed, this will help run current policies more efficiently. Plus, the info will show which programs and policies work to help shape or change future policies.
- 3) Better tracking of workflows and government services as a whole. Since digital data is available, which will increase visibility for all stakeholders, the government and each department will become more accountable.

3.3 The Role Of Government In Technological Innovation

In addition to contributing to sustainable economic growth, innovation can improve the quality of the state and provide added value and advantages to a country's governance system. By using innovation, digital governance can produce better, more efficient, and more environmentally friendly products or services to meet the increasingly diverse needs and preferences of consumers. Therefore, governments and academics must understand how innovation enhances government competitiveness. They have the ability to formulate appropriate policies to promote innovation across various economic sectors, such as education, R&D, and financial support. As a result, the country has the capacity to enhance digital governance competitiveness and achieve better government growth (Aidhi et al., 2023).

Therefore, governments and academics must recognize the importance of innovation in enhancing the competitiveness of governance systems. Governments can support innovation by implementing innovation policies that enable businesses to access the networks and resources needed for innovation. The government can also increase innovation by investing in research and development and collaborating with universities and other research institutions. In addition, the community can increase innovation by enhancing creativity and improving technological skills. Overall, increasing the competitiveness of the government system is aided by innovation (Aidhi et al., 2023).

3.4 Obstacles to Improving Digital Governance

One additional challenge is the lack of adequate manpower to manage websites

created by the central government, some local governments, and provincial governments. The situation is such that it forces things beyond the capabilities of existing human resources. Workers only create new websites without paying attention to the maintenance or improvement of the quality of existing websites. Technological problems will become more complicated than the shortage of manpower. In addition, this shortage of human resources is caused by a lack of training and understanding of how to manage existing information systems and technology (Tasyah et al., 2021).

Furthermore, these obstacles indicate that the government is not ready to meet the demands of digital governance. The central, provincial, and local governments are still in the process of developing and improving e-government systems to be used during this pandemic because e-government is a new system. Public services during the pandemic appear to be slow from the government. This shows that the government still does not support the improvement of existing websites. During this pandemic, the government's pace has become a major obstacle to implementing digital governance in Indonesia (Tasyah et al., 2021).

The existence of cybercriminals who can carry out cybercrime activities is one of the threats that could potentially hinder the implementation of this governance. The security of the digital government system will be threatened if personal data is easily accessible to anyone on the internet. Digital governance involves the collection and management of public data such as personal identity, address, telephone number, medical records, and property information. Hackers can misuse this information for personal or group interests. In addition, low data security levels can reduce public trust in the public service system. Therefore, access to personal data must be secured with at least a username, password, and other information needed to create an account (Tasyah et al., 2021).

Social and technological factors also pose barriers. The digital divide, where many people lack internet access, renders e-government systems ineffective. Many remote and isolated areas in Indonesia struggle to achieve the infrastructure needed for technology and information system development, not all regions in Indonesia have telecommunications networks or electricity. As a result, there is a digital divide. This makes it difficult for people in these areas to access information, even though the internet is an important component for communicating and sharing information quickly and easily. To accelerate the implementation of this system, good technological standards are also needed. This is also due to the costs required to provide the infrastructure and equipment necessary to implement information and technology systems. It is clear that the implementation of e-government systems requires significant financial investment, such as the procurement of computers, network infrastructure, socialization activities, workforce training, and other aspects. In addition, the budget is also allocated for the maintenance and development of the system after the initial installation (Tasyah et al., 2021).

One additional factor is limited budgets and inadequate infrastructure. This situation is influenced by the fact that the equipment and facilities needed to implement information and technology systems are costly. Implementing e-government systems requires significant financial investment to access computers, network infrastructure, workforce training, and outreach activities. In addition, budget allocation is not only limited to these facilities and infrastructure, but is also needed for other purposes. Furthermore, not all regions in Indonesia have adequate access to telecommunications networks or electricity supply. This is especially true for remote and isolated areas that are difficult to reach by the infrastructure needed for technology and information system development. As a result, there is a digital divide that makes it difficult for the surrounding community to access information, even though the internet is an important element in fast and easy communication and information exchange (Tasyah et al., 2021).

There are also other challenges, where the level of public understanding of e-government is still lacking, especially among the lower-middle economic class and the elderly. As is well known, knowledge about technology and information systems continues to evolve, especially since the start of the pandemic. As a result, the older

generation may not have an adequate understanding of technology and information systems because their education in these fields was limited in the past (Tasyah et al., 2021). In this case, the government should be more courageous in creating technological innovations to improve digital governance. The government also needs to increase its contribution so that technological innovations can run well and according to plan. This can enhance the development of digital governance in Indonesia.

CONCLUSION

The government has an important role in encouraging technological innovation to improve digital governance. Although innovation can improve the quality of public services and government efficiency, there are still obstacles that need to be overcome, such as a lack of human resources, the threat of cybercrime, the digital divide, high infrastructure costs, and a lack of public knowledge about e-Government. Cooperation between the government, historians, and the community is needed, as well as efforts to overcome these obstacles so that the implementation of digital governance in Indonesia can run smoothly.

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