IMPLEMENTATION OF E-GOVERNMENT SYSTEMS AS DIGITAL COMMUNICATIONS IN THE DEVELOPMENT OF AREA BETWEEN PROVINCE AND DISTRICT IN WEST SULAWESI

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Abstract

Electronic government (e-government) is a system used by governments to improve public services. The purpose of e-government is to make government services easier and faster to access via the internet, disseminating information to the public more efficiently. In several regions, e-government is still not being implemented optimally by the government. This study aims to evaluate how the local government policies of West Sulawesi province in implementing e-government support Regional Development Planning by examining the results, obstacles, planning patterns, and resources in managing e-government. This study used a qualitative approach consisting of interviews, observations about the problem under study, and official documents or archives. The study results show that the government of West Sulawesi has implemented a communication strategy in the area of e-government by categorizing communication elements such as communication policy, communication planning, communication systems, and implementation.

Keywords: e-government, information systems, local government.

1. INTRODUCTION

Information and communication technologies have advanced rapidly over the past few decades, resulting in the creation of new media such as the internet. Everyone can consume or produce information with the assistance of new media (1,2).

The advancement of information and communication technology has changed the paradigm of communication which previously only took place in one direction, namely between the government and the community. However, the development of communication technology provides opportunities for two-way communication between the community and the government and vice versa. Therefore, the government carried out the process of transforming government towards e-government. E-government refers to the delivery of government services and information online through the internet or digital means (3,4).

E-government is an information technology system developed by the Government to improve public services by Providing the public with options for easy access to public information and encouraging the government that is responsive to the needs and aspirations of the community, supporting the utilization of information disclosure, and enhancing the level of public participation in the governance system (5,6).

Arnus, (2017) explains that the purpose of e-government is to form a government service system that is easier and faster by using internet sites, making it easier to disseminate information to the public (7). In an age of open access to public information, the implementation of e-government is essential to the elimination of corruption by establishing public rights to know the performance and accountability of public bodies, thereby ensuring that good governance is implemented in every region through transparency, accountability, participation, effectiveness, efficiency, responsiveness, and legal certainty. Based on the above, the application of e-government in governance is no longer an option but has become a necessity in order to achieve better governance (8,9).

In addition, e-government is not only concerned with public services but also a tool for participation and policy making. This means that e-government is not only related to the use of technology by the government to provide services to the community. Furthermore, e-government can become a communication medium used by the community and the government. The fact that e-government is equipped with competent information and communication technology creates an interactive environment that stimulates participation and community involvement in unprecedented policy-making (10).

Several researchers have explained the performance of e-government in providing satisfaction to the community as recipients of government services (11,12), Some researchers also addressed some of the obstacles regarding the implementation of e-government, as stated by Revyakin and Rocha (2021) (13) who show that internet penetration in Russia is very high for implementing e-government (75.4%). However, the actual level of use of e-government in public is still insignificant (29%), Kamarudin et al. (2021) (14) conducted in Malaysia's findings indicate that there are still imbalances in the implementation of e-government, especially in rural areas. The main challenge faced by the Malaysian government in e-government is that once it is implemented, citizens using e-government services often fail to survive due to the government's failure to consider the expectations of citizens (15,16).

Based on the results of previous research, it shows that there has been a lot of analysis regarding the implementation of e-government in several regions. Still, previous research has focused more on discussing the government's implementation of e-government in providing web-based services for information dissemination. In general, scant attention is paid to researchers attempting to study how to integrate systems of government that directly involve citizens in public discussions and decision-making, especially concerning the process of synchronizing development planning.

Furthermore, the use of e-government tends only to be used to deliver information to the community regarding services, meaning that the focus of e-government is only intended for external parties from the government and only seeks to provide information to the public regarding services. whereas the concept of e-government being able to provide services is not only limited to building external interactions, the accomplishments by the government are then conveyed to external parties (the community) but are more related to increasing community participation in decision-making using electronic communication, strengthening management, especially related to the process development plan synchronization.

According to the West Sulawesi Governor's Regulation Number 9 of 2018, the Electronic-Based Government System of West Sulawesi Province has integrated and interconnected functions, including data access, information disclosure, and the use of information technology in providing governance and development services. Implementation of e-government applications as a form of government adjustment in terms of public services in the digital era, especially in solving development planning problems. Nevertheless, the problem is that often in West Sulawesi there is a large gap between the level of development achieved and the level planned when implementing e-government. Obstacles encountered, such as Data presented on the website, especially the data from the Community consultations on development planning (Musrenbang) which come from villages, sub-districts, districts, and local government agencies within the West Sulawesi Provincial Government, are not yet available in full. This condition has led to a website that is managed by the Local Development Planning Agency of West Sulawesi displaying data that has not been updated.

Taking into consideration these problems, research was carried out in West Sulawesi Province which aimed to find out Local government policies in supporting regional development planning, and patterns of e-government in synchronizing regional development planning between districts and provinces in West Sulawesi; Results and constraints obtained in the last 5 years after implementing e-government; and in which sector the most optimal can be achieved in encouraging planning synchronization; along with the capability of human resources in implementing e-government in the regional development planning of West Sulawesi Province.

2. METHODS

This research was conducted at the provincial development planning agency using the qualitative approach including interviews, observations related to the problem under study, and official data in the form of documents or archives used to analyze symptoms holistically-contextually by gathering information from the natural environment as a direct source (17). Using the technique of triangulation to test its validity (18).

Data collection was conducted by direct observation at the offices of the Provincial Development Planning Agency and districts throughout West Sulawesi. Interviews were conducted with leaders of the community who were the target of the direct or indirect research object. Data were collected through documentation studies or filling out information that was not obtained from interviews and observations. Meanwhile, the data analysis technique uses the Miles and Huberman analysis model which consists of data collection, data reduction, data presentation, drawing conclusions, and verification. In the meantime, for data validity analysis using four methods, namely (1) Credibility test by means of triangulation of sources, technical triangulation, and member checks, (2) Transferability which is carried out by describing the results of the research in detail and clearly about the context that becomes the focus of the research, (3) Dependability test to audit the entire research process, using an independent auditor or supervisor, and (4) Confirmability performed by the supervisor and involving an

independent auditor to assess the quality of research results by tracking data and information submitted.

3. RESEARCH RESULTS AND DISCUSSION

Research and Evaluation of E-Government Communication Planning Patterns

One of the stages in developing the right policy is evaluation and research to improve the current policies to reduce existing problems. Policy evaluation aims to identify the value of a problem and find a solution that can be perfected through an objective, systematic, and empirical examination of the effect of the policies and public programs of an organization or government that wants to be achieved. Evaluation is also an analytical process that emphasizes value creation from an assessment of the formulation of policies or policy programs (19).

Based on data obtained from the Communication and Informatics Office of Mamuju Regency, West Sulawesi Province, it is known that the local government has researched the linkages of policies implemented earlier. Design patterns for communication and e-government implementation reveal that there are still discrepancies between different applications, such as business procurement of goods and services, which must comply with the Electronic Procurement System, and regulatory readiness for implementation patterns is not optimal.

This indicates communication design and implementation patterns of e-government in West Sulawesi are not yet standardized by the province for all districts in West Sulawesi. This is because the application of electronic government as a communication system is relatively recently introduced. Several things need to be considered after the communication policy has been implemented, namely the importan ce of the communicator as an introductory or connecting message to the communicant.

Communicators in Communication Planning Against E-Government

Communications plans need to take into account several things, namely the role of the communicator as an introductory or connecting message to the communicant who can be a person or a group that consumes messages from the communicator. Additionally, the communicator is also a key actor in the continuity of communication. They should understand the content or intent of the actual message for the communicant to absorb the message as the actual message effectively. Furthermore, communicators must have credibility, attractiveness and power (20). Following the research analysis, it was found that there are similarities between the concept of a theory and the realization in the field of determining communicators carried out by the Provincial Government of West Sulawesi, especially the Communication and Informatics Office in determining communicators.

The communicator selected from the Communication and Informatics Office of West Sulawesi is responsible for identifying the target to be addressed in the message. In other cases, the communicators may also be responsible for designing a message so that it can be understood immediately by the communicant. In addition, it is imperative that the communicator

determines a method of spreading the message. In this way, communicators can accomplish their tasks more effectively.

The data obtained by the scientists revealed that the message conveyed by the Provincial Government of West Sulawesi, especially the Communication and Informatics office, used messages in general, namely verbal and non-verbal and specifically used the nature of messages that were informative, educative, and persuasive in conveying messages to introduce the implementation of e-government in West Sulawesi Province. The message will be disseminated through several media and networks in the future, especially messages that encourage the success of e-government. In order to ensure that the information obtained is accessible to all groups, including those with disabilities, as stated by Uchjana, 2014 (21) stated that messages could take the form of symbols, motions, paintings, and gestures.

Communicant Planning as Target and Feedback in Society

The communicant is a person or group who receives messages or information from communicators through various media and channels. Communicants can be categorized as media. There are two categories of communicants that can distinguish them, namely active communicants and passive communicants. Passive communicants are communicants who only receive or respond to a message from one direction and do not provide a response or feedback to a communicator. While active communicants are communicants who receive information, respond to messages, and provide feedback on a message presented by the communicator.

In research conducted by the Provincial Government of West Sulawesi, placement of targets is one way to ensure that the message is directly directed at parties or audiences that feel they share a connection or things that really intersect with the message. The West Sulawesi Provincial Government has a target audience, namely the general public and civil servants. There is also an arrangement by which the Government of West Sulawesi conveys messages so that the communicator can be redirected to the message later.

However, researchers found a gap between the message that wants to be conveyed and the communicant to be targeted. The data obtained show that the Provincial Government of West Sulawesi has not been specific about delivering the message to the public. This is because the government of West Sulawesi has not yet classified the age and occupation of the communicants who will be given it. As a result, the message appears very general and has not yet reached the target audience, such as school children, late adolescents, and parents.

As a result of the researcher's analysis, the feedback management plan created by the Provincial Government of West Sulawesi may be considered appropriate in dealing with feedback that can become evaluation material or even undermine a program. The researcher suggests that in feedback management, especially if there is negative feedback in running the program, the West Sulawesi Provincial Government places more emphasis on the public understanding the message. On the other hand, the team from the Communication and Informatics office that is responsible for the message is expected to be able to respond quickly, so there is no problem regarding the perception of a shallow level of responsiveness being associated with the performance of government institutions.

Forms of E-government Communication Systems in West Sulawesi Province

The success of an organization or institution in achieving its goals is not based on economic conditions alone. It also depends heavily on the communication techniques used within the organization or institution to connect the wishes of interconnected institutions or communities. Data findings from research aimed at the Provincial Government of West Sulawesi found that a particular pattern of communication is applied to the e-government system. West Sulawesi Province expressly states that it uses open and closed communication systems to distribute messages or communicate en masse between leaders and employees or local government agencies (SKPD). The open communication pattern built by the Provincial Government of West Sulawesi includes messages that can be immediately accessed and consumed by the public, as well as messages that are intended to be published on a large and wide basis throughout the region. This is in the hope that all citizens can obtain this information directly and understand it. That is an example of the disclosure of the information provided by the Provincial Government of West Sulawesi, as well as the pattern of open communication with the wider community that includes disseminating information and messages. Some examples given by the Province of West Sulawesi in building an open communication pattern are when a person with the initials A processes news and then sends the information to party B in the form of clear text, which is an open communication pattern developed by the Provincial Government of West Sulawesi in running e-government.

In General, the communication system used by the Provincial Government of West Sulawesi and the theory outlined by Deddy Mulyana 2014 (22) is generally correct because it is a horizontal pattern of communication that has been repeated successively within the Provincial Government of West Sulawesi to the community authorities. Vertically, the government has implemented a pattern of institutional-to-institutional communication by implementing a closed communication pattern technique.

The researcher found information that all civil servants who are within the scope of the service office or those who work for departments in the government must manage and participate in open communication, one of which is by managing open communication in the field of internet-based mass media such as the Web, and other social media. Additionally, civil servants with qualifications in handling encrypted messages can be entrusted to these messages in managing closed communications.

Patterns of E-government Implementation in Synchronizing in West Sulawesi Province

Governance concerns all mechanisms, processes, and institutions where citizens and community groups express their interests, exercise legal rights, fulfill obligations, and bridge differences among communities implemented in electronic-based government management in the form of a website. Under government policies regarding the implementation and implementation of e-government. The information application in website form has begun to be developed by several districts within the administrative area of West Sulawesi Province. One of them is in the Mamuju district.

The role of website was developed as an information medium related to good governance attributed to services and activities in the City of Mamuju. The www.mamujukab.go.id. Website is the only means of information as concern with the existence of districts and the existing government system. However, the information facilities developed by the Mamuju City Government on the www.mamujukab.go.id website are still limited, even very lacking, and not yet feasible to be used as a reference for information to the people of Mamuju City and the general public who need information. This is because the information given is still limited to media delivery of the roles and main tasks and functions within the Mamuju City Government and government activities and still relies on information systems from the central government.

Centralized information systems like the local tax regulation and salary information systems are still desktop-based and have yet to be used massively in various SKPDs in the Mamuju city government environment. On the other hand, the carrying capacity of infrastructure has yet to be well developed. This can be seen in the integration of data and information that has not been carried out. The result is that data and information are still owned by SKPD and have yet to be distributed and used together, and a network infrastructure within the City Government of Mamuju is still partial, and there is not even any intention to develop a network. The implementation of e-government in West Sulawesi Province is like a glimmer of hope for the emergence of governance that is transparent, credible and accountable and free from corruption, collusion and nepotism that is able to respond effectively to demands for change, where people require public services that meet the interests of the wider community in throughout the province of West Sulawesi, reliable and trustworthy, and easy to reach interactively.

Nevertheless, e-government in West Sulawesi Province still raises several questions, such as how e-government works at local government agencies or other related institutions, especially in supporting the creation of transparent public services. At the same time, reality shows that e-government has not been implemented as well as the objectives. Further, the implementation of e-government in the Provincial Government of West Sulawesi will bring about organizational change that demands a sustained level of adaptation, so its success is largely determined by the political officials' support in providing a legal framework that is highly influenced by the vision and mission, the policy structure and the strategic plans, as well as the continuity that is shown through socializing implementation.

Results Obtained in the Last 5 Years after the Implementation of E-government

The rapid development of the times has had an impact on the advancement of technology and information in various fields, including the development of communication network infrastructure where information or news is obtained rapidly and in no time. Physical infrastructure development is a way for an area to improve the economic processes and institutions to achieve a prosperous life.

One of the infrastructures that affect the e-government program is network infrastructure. So that, to increase the application of e-government, The network infrastructure of the West

Sulawesi Provincial Government must be built properly in the work environment such as in institutions or agencies.

Based on the results of the study it was found that The Provincial Government of West Sulawesi has built communication infrastructure surrounding the service office, namely the construction of fiber optic around the service office which is intended to maximize the performance of employees in e-government work program along with the construction of Wifi-corner for the public to enjoy cheap internet access.

The implementation of e-government in the Mamuju Islands Regency began in 2004 with the development of electronic infrastructure which included the procurement of computer and intranet networks within the Mamuju Regency Government. During an initial observation at Information Communication, Statistics and Encryption of Regional Secretariat Mamuju, the researcher gained information regarding how e-government fits the government's understanding and to what extent e-government activities are implemented at the district level. There haven't been any regional legal products, whether Regional Regulations or related Regent Regulations e-government since the beginning of its implementation in 2004. Institutionally or organizationally, there has been no Regional government agency engaged in e-government activities as should have been done at the Transportation, Communication, and Informatics Office in 2016 or in 2017 -the government partially built infrastructure in Section Communication, Informatics, Statistics, and Encryption because it follows the activities mentioned in the local government budget. Websites and applications are also developed without interconnection in an e-government concept.

Challenges faced in the last 5 years after the implementation of e-government

There has been a striking change as the term e-government is applied in government circles in Indonesia. One of them is the increasing number of local government sites and institutional sites that have sprung up on the internet, starting at the provincial, and district and city levels. According to data from the Ministry of Communication and Information Technology, the number of local government sites has reached 472 sites. Some local government websites still have sketchy home pages and provide little information. In addition, news content is outdated, and sometimes the layout and design of the local government website seem monotonous. Currently, many government agencies claim that they have implemented e-government, while in reality, they are only in the process of developing a web presence. There is yet no visible implementation of e-government that is actually carried out in depth. Therefore, many say that the implementation of e-government is not optimal because genuinely some of the services provided by the government still use manual methods, such as the process of making ID cards, birth certificates, family cards, and so on.

According to the Development Economics and Administration Bureau of West Sulawesi government (H. Masriadi Atjo) explained that there were still many obstacles in finding information, including the financial problem in searching for news. Insufficient funds resulted in the limited mobilization of the public relations department in seeking information about activities carried out by each Local government work unit (SKPD) within the scope of West

Sulawesi government. According to the author, this funding constraint has made the e-government's homepage displays old news instead of current news. The data and information presented on the site also still display a lot of data from several years ago. There are even some parts of the site that are empty (no data is displayed). In public relations theory, it is critical that the public relations department in the organizational structure has a direct line of command with the highest leadership so that the department can access information faster for leaders and the public.

The Bureau of Economics and Development Administration (H. Masriadi Atjo) also said that the barrier to the implementation of e-government in West Sulawesi Province is that the penetration of hardware and providers of information and communication technology (ICT) services has not been evenly distributed to all regions in West Sulawesi, so it is not just a problem with the superstructure but also in the infrastructure which is still inadequate. The high cost of ICT facilities and infrastructure greatly exacerbates this problem. In some remote areas of West Sulawesi, there are still no telecommunication lines or even electricity.

Substantially, most of the local government offices already have a Local Area Network (LAN) connection and a small number have a Wide Area Network (WAN) connection. Even though the local government office has a LAN connection, there isn't much data exchange through data communication because the expected data and information are still limited. This is because the culture of documenting is not common. Even personal archives or documents have not been properly managed, so this is also an obstacle to data integration and exchange.

Readiness of Human Resources in implementing E-government

One of the key factors in implementing e-government in Mamuju City is the availability of human resources. Therefore, the presence of high-qualified human resources is crucial to the implementation of e-government in Mamuju City. The availability of adequate human resources will encourage the development and implementation of e-government. On the other hand, the implementation of e-government will be hindered if existing human resources do not meet standards. In addition, in various cases, it was found that the implementation of e-government sometimes encountered obstacles due to a lack of information and communication technicians who could run and manage e-government proficiently.

According to the results of the survey and interviews, West Sulawesi had a limited number of individuals with expertise in the field of information technology. This indicates an insufficient amount of resources. On the other hand, often, there are multiple tasks for employees causing the implementation of the system to be constrained. This condition is caused because the number of civil servants is not directly proportional to the availability and completion of existing work. Other obstacles exist, such as employees who lack an understanding of information technology, because they received very scant training related to this field. This has an impact on the utilization of applications provided by the center.

Based on the explanation above, it can be seen that

1) Knowledge of information technology is still very low among provincial government officials. This is evidenced by the use of computers, most of which are intended as a typewriter and only fulfill the need for reports and correspondence,

2) Civil servants in the Mamuju Provincial Government are not equipped with technical training in information technology. As a result, management information systems provided by the center are not managed optimally,

3) Information technology operators also lack the expertise and skills to maintain existing applications and computers. The consequence of this is if there is interference with the application and existing computers, then applications will be abandoned, therefore updated computers will need to be procured,

4) There are human resources who do not understand the use of information technology. This matter can be an obstacle to the implementation of e-government at the level of City/District, and

5) Most local government agencies do not have human resources in technology information. Consequently, information technology is not being implemented optimally.

Based on the above explanation, if these obstacles are not anticipated, then in the future, they will become a separate threat to the Provincial Government of West Sulawesi. This also impacts the presence of human resources who can manage the application system. Referring to the explanation above, as executors of control over the implementation of e-government in cities/regencies in West Sulawesi, it is appropriate that the human resource development process be considered. This is due to the inaction of human resources in the field of information technology, so it will impact the readiness of the West Sulawesi Provincial Government to implement e-government.

4. CONCLUSION

Based on the research results, it can be concluded that the government of West Sulawesi has implemented a communication strategy related to the E-government program by classifying communication elements such as communication policy, communication planning, communication systems, and implementation of the program. Additionally, the government of West Sulawesi uses an open and closed communication pattern. Within the human resource management scope, the West Sulawesi government identified employee activities, assisted experts for employees, and increased knowledge for staff. The West Sulawesi government has also constructed fiber optic cables and Wi-Fi areas for the community as part of the communication system. Furthermore, the West Sulawesi government also standardizes communication systems. However, it is not yet an international standard and there is still a lack of competence in human resources in the field of information technology.

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