The Analysis of E-Government Policy in Supporting of Public Information Transparency of the Wajo Regency Government

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Abstract--The analysis of E-government policy in supporting public information transparency of the Wajo regency government. This study aims to study and analyze the application of E-Government policies in Wajo Regency in terms of institutional, policy, planning, application and infrastructure aspects. The type of research used in this study is qualitative, which will provide a factual description of the E-Government policy in Wajo District. The results of this study indicate that: In the implementation of Wajo District Head Regulation No.13 of 2018 Concerning General Policies on the Implementation of E-Government in Local Government Environments within the scope of government Not yet effective in its implementation. based on the aspects used in this study shows the implementation of E-Government in the institutional, policy, planning, application and infrastructure aspects still Wajo District Government presents PINDU as a forum for the public to easily reach out and obtain the information needed, and participate to encourage quality improvement public services by implementing systems based on on-line and supported by modern technology devices. The interests of Wajo community members will be provided and served well in a simple, easy and effective way

Key words--Analysis, E-Government Policy, Public Information Openness.

I. INTRODUCTION

The development of science and technology encourages the government, including the regional government, to race to realize the latest innovations that are more effective and efficient. One model of the approach to be achieved is the development of information systems that are effective and efficient in realizing public information disclosure.

Information system development is defined as the process of extracting ideas, analysis, design, and implementation of an information system (D.E Avison & Fitzgerald, 2006; Galliers & Land, 2002). The development of computer-based information systems is a complex activity, it consumes relatively large costs and resources, and is an essential activity in every organization (Hoffer, Geoge, & Valacich, 2011). According to Samiaji Sarosa, the complexity of developing information systems arises due to several things, that is:

a.   Diverse stakeholders with diverse wants, needs, and agendas;

b.   The complexity of the structure and business processes in the organization where the information system is developed;

c.   The complexity and duration of the process of developing the information system itself;

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d.   The scale of the information system developed.

The positive impact of the development of the information flow we feel with the ease of obtaining information from various parts of the world that we can enjoy in seconds. But it is not only individuals who are affected, but many modern organizations also use this information technology in management to move the wheels of their organizations including government agencies.

The government also develops many public services through communication and information technology that we know as e-government or E-Government. As a developing country, E-Government applications in Indonesia lag behind those of neighboring countries such as Singapore and Malaysia. There are many factors that influence this delay, and of course the most decisive is the lack of commitment to reducing our digital divide with developed countries such as the quality of human resources, infrastructure and difficult geographical conditions.

However, the application of good governance must be driven along with the development of digital technology. Good governance has implications for better quality public services to the community. So for the sake of this achievement, the government established Presidential Instruction (Inpres) No. 3 of 2003 concerning National Policies and Strategies for e-Government Development by instructing each Governor, Regent, and Mayor to take the necessary steps in accordance with their respective duties, functions and authorities in order to carry out national E-Government development including in Wajo Regency.

The implementation of E-Government in Wajo Regency is expected to create a work that is more efficient, participatory, just, democratic and promotes transparency. Therefore, the policy must be supported by the use of good information systems by all existing work units. Information systems are not made haphazardly. In making the required principles and mature concepts so that the system runs according to expectations in its application. The information system is intended to help the organization perform its main functions to be more effective and efficient. (Romney & Steinbart, 2012) divides information systems into two, namely Non-formal information systems consisting of gossip, issues, and others while formal information systems are information systems that are developed specifically to support the course of the organization.

Etymologically, information is a word or term derived from information (Old French, 1387). Whereas in Latin, information comes from the word Information which has a meaning as a concept idea or outline. While the system according to Murdick, R. G (1991: 27) is a set of elements that form a collection of procedures or processing charts that look for a part goal or joint goal by operating data and / or goods at a particular reference time to produce information or energy and or goods.

From these two meanings, it can be concluded that information is a knowledge that can be communicated by certain methods. The implementation of the system is expected to provide space for the community to be directly involved in the process of planning, implementing and monitoring public policies with all regional authorities based on their authority. E-Government is expected to shorten the service bureaucracy, effective, efficient and transparent

II.   RESEARCH METHOD

Research sites

This research will be conducted in Wajo Regency, South Sulawesi Province. This is because Wajo District is the focus area of research and is the area where E-Government Policies are implemented in supporting the public information disclosure of the Wajo district government. The location of data collection in the office and agency that already has a Website including the Community Empowerment Agency

Research Type

This study uses a qualitative approach in which this study has the characteristics of describing a real situation, but the report is not just a report but an event without a scientific interpretation and understanding or gaining an understanding of phenomena or symptoms raised for in-depth study.

Data source

Primary data are obtained directly from the source, namely the informant who is the object of research by the researcher. Wherever these informants are, researchers come and conduct face-to-face interviews to get results or data that are valid from informants directly in order to describe the results of younger research. To obtain data for the purposes of this research, an informant is needed.

Secondary Data Is data obtained by studying the literature relating to the object of study in the form of books, written documents, operational rules, and other data relating to reclamation and partnership with the private sector in the implementation of policies. Secondary data in this study can come from previous studies related to research problems as well as online data search using internet facilities.

III. RESULT AND DISCUSSION

Institutional

On the institutional dimension, the implementation of ICT or E-Government in Wajo Regency has been carried out by the Office of Communication and Information Technology, the PMD Office and the Wajo District Tourism Office. In the institutional dimension of ICT or E-Government organizers in the three offices, the ICT institutions in the Office of Communication and Information Technology have a more complete structure compared to the Office of PMD and the Office of Tourism. Weaknesses in the Wajo Regency Communication and Information Agency that can affect the implementation or implementation of E-Government in other agencies are the limitations of Human Resources who have background or experience in the field of ICT. So as to maximize ICT institutional performance there are two elements in the organizational structure of an E-Government organizer that has an important role, that is:

Governance structures related to leadership To ensure the leadership capacity of ICT management at the district level, the Wajo Regency Government is expected to be able to appoint a Chief Information Officer (CIO). The CIO is tasked with coordinating the planning, realization, daily operations and internal evaluation of ICT in the Wajo Regency, in collaboration with the ICT management work unit and other user work units.

The governance structure is related to the synergistic relationship between DPOs within the scope of Wajo Regency. To ensure a synergic relationship between DPOs within the scope of Wajo Regency in terms of managing ICT initiatives, the Wajo Regency government must form a District ICT Board. The ICT Council accommodates the interests of ICT management work units and ICT user work units, coordinating the planning and operation of district ICT initiatives

The establishment of CIOs and ICT Councils at the district level is a very important need, in addition to the existing ICT governance entities:

a. Government Institution Executives - namely the Bupati as head of government institutions at the Regency level.

b. ICT Management Work Unit. OPD which is tasked with managing ICT at the Regency level. The structural position of the ICT management work unit at the Regency level should ideally be in the echelon II position and at least at the echelon III level.

c. Business Process Owner Work Unit - namely the work unit outside the ICT management unit (Diskominfo) as the business process owner (Business Process Owner).

Thus, the institutional dissemination of information that is the Information and Documentation Acting Officer (PPID) has a clear organizational structure based on its main tasks and functions in accordance with Wajo District Head Regulation Number 23 the Year 2017

Table 1 Regional Device Servers

No.	Application Server	Specification	The Location
1	Web dan Aplication Server	Merk IBM, Memory 4 GB, 320 MB, Ubuntu Server	Communication And Information Service
2	Simda Goods / Finance	Merk IBM , Memory : 8GB , SO : Ubuntu Server	Financial Institutions And Regional Assets
3	simda Wild charges	Merk HP, Memory 8 MB, 1 TB, Ubuntu Server	Inspectorate
4	simda planning	Merk : - ,HDD : 1 TB Memory : 4 GB , SO : -	Regional Revenue Agency
5	SIMRS	Merk : HP , HDD : 320 x 4 GB Memory : 16 GB, Proc. XEON 2 X, SO : Ubuntu Server dan Merek : IBM HDD 4 GB, HDD 320 GB, SO : Ubuntu Server	Lamaddukelleng Hospital Sengkang
6	SIMRS	Merek HP HDD, 320 x 1 GB Memory 8 GB Proc. XEON SO : Windows Server	Shiva Hospital

Regarding the dissemination of public information, the Wajo District Government has established an institutional structure for Information and Documentation Management Officers throughout the OPD. The organizational structure chart contains information and documentation service mechanism to the Wajo District Government in accordance with the Decree of the Wajo Regent Number 23 the Year 2017 dated 11 April 2017. For more details, the PPID structure is shown in the following figure:
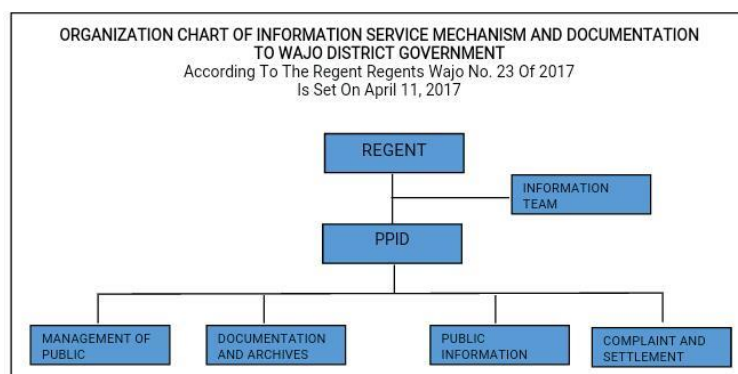
Picture 1 Wajo Regency PPID Organizational Structure

Source: Wajo Regency Communication and Information Agency, 2019

Based on the PPID's organizational structure, structurally as per Wajo Regent Regulation Number 6 of 2016, the person in charge of the Main PPID at the Communication and Information Agency is part of the main tasks and functions of the Head of the Public Information Services Section.

The job descriptions of the Head of the Public Information Services Section are as follows:

a. Plan the work program preparation activities and Public information service budget section in accordance with the organization's strategic priorities plan;

b. Dividing the implementation of the duties of the Public Information Services section based on the authority and considering resources so that the implementation of the tasks runs and is successful;

c. Guiding subordinates in carrying out their duties and functions in accordance with their authority as patrons and references in carrying out program activities to obtain satisfactory results;

d. Checking the results of the implementation of subordinates' tasks as a material for evaluating performance improvement and at the same time providing better work motivation;

e. Carry out distribution service policies, dissemination, socialization through activities (exhibitions, seminars, workshops, workshops, etc.), advocacy, documentation, publications, local government information service products, utilization and development of community information groups and facilitation and supervision strengthening institutional management of regional information ;

f. Carry out the preparation of norms, standards, procedures, and criteria for distribution services, dissemination, dissemination through activities (exhibitions, seminars, workshops, workshops, etc.), advocacy, documentation, publications, local government information service products, utilization and development of community information groups and facilitation and supervision of institutional strengthening of regional information management officials;

g. Carry out technical guidance and supervision, distribution services, dissemination, socialization through activities (exhibitions, seminars, workshops, workshops, etc.), advocacy, documentation, publications, local government information service products, utilization and development of community information groups and facilitation and supervision of institutional strengthening of regional information management officials

h. Reporting the results of the implementation of duties in accordance with applicable procedures as material for evaluation and accountability to the Head of Public Communication Information; and

i. Carry out other official tasks that are ordered by the leadership both verbally and in writing.

Based on the results of field research with the Wajo Regency government, the main tasks and functions of officials related to the implementation of E-Government in accordance with Regent Regulation Number 3 of 2008 are as follows:

Head of the Office of Communication, Information, and Statistics. Main tasks: The Head of Service has the main task of formulating the concept of targets, coordinating, organizing, fostering, directing, evaluating and reporting the results of the implementation of the duties of the Office of Communication, Information and Statistics.

The job description of the Head of Office is:

a. Formulate secretarial work programs, information and public communication fields, information fields, coding fields, and statistics fields and functional officials in organizational relations;

b. Coordinate the formulation of technical policy programs and secretarial activities, information and public communication, information technology, coding, and functional statistics and communication in both internal and external relations;

c. Fostering, guiding and directing secretarial tasks, Public information and communication, information technology, coding, and statistical and functional officials in accordance with their duties, functions, and authorities to run optimally;

d. Formulating policies in the field of managing public opinion and aspirations in the scope of local government, managing information to support national and local government policies, providing cross-sectoral content and managing public communication media, public information services, media relations services, strengthening the capacity of public communication resources and providing information access, basic data center infrastructure services, disaster recovery center & ICT, intranet development services and internet access usage, e-Government information and data management services, integration of public and government services, e-Government information security services, intra-government communication system services Regional, service development and management of generic and specific applications and integrated supplements, implementation of the Smart City ICT ecosystem, domain name and subdomain services for institutions, public services and activities, government Government Chief Information Officer (GCIO) district, development of ICT resources for regional government and district scope communities, control of telecommunications service businesses and determination of tariffs on telecommunications tower levies, and facilitation and cooperation in the implementation of sectoral statistics;

e. Carrying out policies in the management of public opinion and aspirations in the scope of local governments, managing information to support national and local government policies, providing cross-sectoral content and managing public communication media, public information services, media relations services, strengthening the capacity of public communication resources and providing information access, basic data center infrastructure services, disaster recovery center & ICT, intranet development services and internet access usage, e-Government information and data management services, integration of public and government services, e-Government information security services, intra-government communication system services District, integrated and generic and specific application development and management services, integrated ICT Smart City ecosystem services, domain name and subdomain services for institutions, public services and activities, Government Chief Information Officer (GCIO) district government, development of

ICT resources for regional governments and district-wide communities, telecommunications service business control and tariffs for telecommunications tower levies, and facilitation and cooperation in the implementation of sectoral statistics;

f. Preparing materials and or stipulating the compilation of norms, standards, procedures, and criteria for service delivery of policies in the field of management of public opinion and aspirations within the scope of local government, information management to support national and local government policies, provision of cross-sectoral content and management of public communication media, information services public, media relations services, strengthening the capacity of public communication resources and providing information access, basic data center infrastructure services, disaster recovery centers & ICTs, intranet development services and internet access usage, e-Government data and information management services, integration of public services and governance, e-Government information security services, intra Local Government district communication system services, integrated and specific application development and management services and integrated supplements, the implementation of the Smart City ICT ecosystem, domain name and sub domain services for institutions, public services and activities, the administration of the Government Chief Information Officer (GCIO) of the district government, the development of ICT resources for local governments and the district scope of society, the control of the telecommunications service business and the determination of the tariffs for telecommunication tower levies, and the facilitation and cooperation in the implementation of sectoral statistics;

g. Carrying out technical guidance and supervision of policy implementation services in the field of opinion management and public aspirations in the scope of local governments, information management to support national and local government policies, provision of cross-sectoral content and management of public communication media, public information services, media relations services, strengthening public communication resource capacity and providing information access, basic data center infrastructure services, disaster recovery center & ICT, intranet development services and internet access usage, e-Government information and data management services, integration of public and government services, e-information security services Government, district intra-government communication system services, integrated and specific generic and application development and management services, the implementation of the Smart City ICT ecosystem, domain name and sub domain services for institutions, public services and activities, the administration of the Government Chief Information Officer (GCIO) of the district government, the development of ICT resources for the regional government and the district scope of society, control of the telecommunications service business and the determination of tariffs on telecommunications tower levies, and the facilitation and cooperation in the implementation of sectoral statistics;

h. Evaluating secretarial activities programs, information and public communication, information technology, coding, and statistics and functional officials in the scope of the organization based on performance results and as a correction material for future performance improvement;

i. Reporting the results of the implementation of tasks based on authority and mechanisms that apply as material for evaluation and accountability to the Regent through the Regional Secretariat;

j. Carry out other official tasks that are ordered by the leadership both verbally and in writing.

1) Public Communication Information Sector

The Public Communication Information Sector is led by a Head of Division who has the task of assisting the Head of Service in formulating and implementing policies, coordinating, monitoring and evaluating and reporting including the formulation of policies on the management of public opinion and aspirations within the scope of local governments, information management to support national and local government policies, providing cross-sectoral content and managing public communication media, public information services, media relations services, strengthening the capacity of public communication resources.

For more details, the job description of the Head of Public Communication Information Division is:

a. Planning operations in the field of public communication information based on the strategic priorities of the organization so that it is right on target;

b. Plan the implementation of technical policies in the field of public communication information based on technical considerations and the provisions of the applicable laws and regulations;

c. Dividing the implementation of tasks in the field of public communication information based on the authority and considering resources so that the implementation of the task runs and is successful;

d. Guiding and directing subordinates in accordance with their duties so that the implementation of tasks is right on target and the optimal results;

e. Preparing materials for implementing service policies for managing public opinion and aspirations within the scope of local government, managing information to support national and local government policies, as well as public information services in districts, providing cross-sectoral content and managing public communication media, public information services, media relations services, strengthening the capacity of public communication resources;

f. Preparing materials for the preparation of norms, standards, procedures and service criteria for the management of public opinion and aspirations in the scope of local governments, information management to support national and local government policies, and public information services in the district, provision of cross-sectoral content and management of public communication media, services public information, media relations services, strengthening the capacity of Public communication resources;

g. Preparing materials for providing technical guidance and supervising services in managing public opinion and aspirations within the scope of local government, managing information to support national and local government policies, as well as public information services in the district, providing cross-sectoral content and managing public communication media, public information services, media relations services, strengthening the capacity of public communication resources;

h. Evaluating program activities in the field of public communication information based on performance achievements as a material for further improvement of the work program;

i. Reporting the results of the implementation of tasks based on the authority and mechanism applicable as material for evaluation and accountability to the Head of Service; and

j. Carry out other official tasks that are ordered by the leadership both verbally and in writing.

2) Public Information Services Section.

The Public Information Services Section is led by a Section Head, whose task is to assist the Head of the Public Communication Information Section to prepare material for the formulation and implementation of policies, drafting norms, standards, procedures, criteria and providing technical guidance and supervision, as well as monitoring, evaluation, and reporting related to the implementation of distribution services. , dissemination, socialization through activities (exhibitions, seminars, workshops, workshops, etc.), advocacy, documentation, publications, local government information service products, the utilization and development of community information groups and the facilitation and supervision of institutional strengthening of management officials regional information.

Related to the institutions in the three work units as a locus of research, the Office of Communication and Information as the central administration of E-Government in Wajo Regency has a very strategic role. This can be seen from the implementation of the main tasks and functions of the ICT Institution in the Communication and Information Agency compared to the two ICT management work units namely the PMD Office and the Tourism Office. The purpose of the institution can be seen from the model of the organizational structure of the e-Government management unit in the Information Sector of the Office of Communication and Information and Wajo Regency Government Statistics.
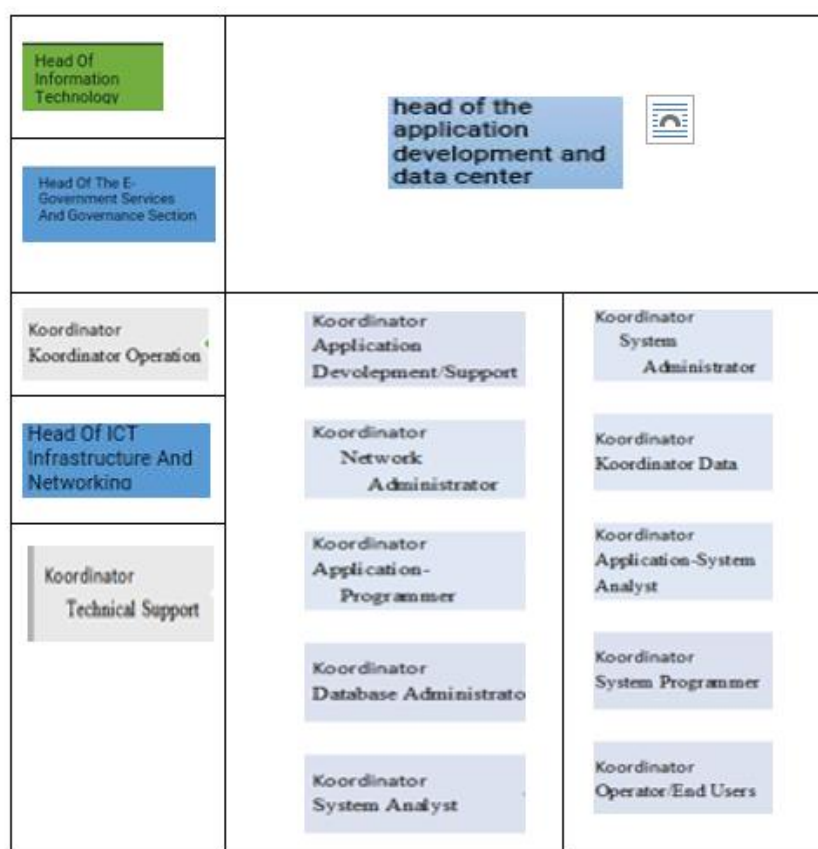
Figure 2 Organizational Structure of ICT Management Work Unit

Source: RITIK Document of Wajo Regency Communication and Information Agency

By looking at the structure above, the Section Head of application development and data center processing has a very complex field of tasks. It takes human resources who have the competence to support the

implementation of the main tasks and functions. Whereas the other two sections only require operational competency support and technical support. The description, main tasks, and competencies in this section will be explained in general, as well as the main tasks of each position from the Organizational Structure Model of the e-Government Management Unit, based on mapping ICT processes to the organizational structure of the e-Government management unit. It also outlines the expertise and competencies needed for each position in order to be able to carry out its main tasks, in which there are technical competencies and non-technical components.

Policy

E-Government implementation must be supported by approval support. To support the implementation of ICT or E-Government policies, the Wajo District Government has issued four supporting agreements. The membership of the Regulation is the Information and Communication Technology Master Plan Policy (RITIK) which regulates through Wajo Regent Regulation Number 60 Year 2017, Wajo Regent Regulation Number 21 Year 2015 concerning Wajo Regency official procurement service (LPSE), Regent Decree Number 80 Year 2015 concerning Wajo Regency LPSE and Regent Regulation Number 23 Year 2017 concerning Establishment of Organizational Structure, and Appearance of Information Managers and Licensing Managers.

But to maximize the implementation of E-Government to be more directed and sustainable from the Wajo District Government to create E-Government governance policies that guarantee the synergy of system planning, ICT expenditure/investment management, planning systems, planning systems, and maintenance systems to be more optimal.

To achieve harmony in the development of Information and Communication Technology or E-Government in Wajo Regency, it must be supported by the implementation of regulations supporting the implementation of the policy. From the results of the study, the Wajo District Government has formulated several strategic policies in the implementation of E-Government itself. The Wajo District Government has established four E-Government development policies as follows:

1) Information and Communication Technology (RITIK) Master Plan Policy which is regulated through Wajo Regent Regulation Number 60 the Year 2017.
2) Wajo Regent Regulation Number 21 the Year 2015 concerning electronic procurement services (LPSE) of Wajo Regency.
3) Regent Decree Number 80 the Year 2015 concerning the Establishment of the Wajo Regency Electronic Procurement Management (LPSE) service.
4) Regent Regulation No. 23 of 2017 concerning the determination of the organizational structure, and the appointment of information and documentation management officials as well as information management officers and supporting documentation.

Of the four policy regulations set by the Wajo District Government, points (2), (3) and points (4) have been implemented well since 2017. While points (1) are related to the Information and Communication Technology Master Plan (RITIK) not implemented optimally. One obstacle is that there is no regulation which is the elaboration of the Wajo Regent Regulation Number 60 the Year 2017. The regulation or policy referred to is the regulation related to the administration of information systems and electronic transactions and information security within the Wajo Regency Government.

In addition, the development of E-Government based on Wajo District Head Regulation No. 13 of 2018 must be supported by regulations that govern several strategic policies. Some of the strategic policies are strategic policies that contain the determination of the role of ICT, ICT planning, operational policies in the field of third-party services, operational policies in the management of ICT services, management of ICT security, management of ICT human resources, risk management, and operational policies in monitoring and evaluating the implementation of ICT.

NO	COMPONENT	YEAR				
		2017	2018	2019	2020	2021
2	Policy	Making regional regulations / regents regulations concerning; - the master plan for information and communication technology development - governance of the implementation of information systems & electronic transactions and information security in Wajo local government	- Strategic policy making in the field of determining the role of ICT in the Wajo district administration - strategic policy making in the field of ICT planning - making operational policies on third party services	-Operational policy making in the field of ICT service management - making strategic policies in the field of ICT security management	- making strategic policies in the management of ICT resources - making strategic policies in the field of risk management	- Operational policy making in the field of monitoring and evaluation of ICT performance

Figure 3 Government E-Government Policy Road Map Wajo Regency, 2017 2021

From the picture above, it can be seen that the stages of implementing policies or regulations in supporting the implementation of E-Government in Wajo Regency are very clear based on the year. The development of E-Government in Wajo Regency was carried out in stages, as did the supporting regulatory policies. From this picture, the formulation of E-Government development policies is carried out within five years from 2017 to 2021. From the results of the study, the Office of Communication and Information and Statistics has completed the Wajo Regent Regulation Number 60 of 2017 concerning the Information and Communication Technology Master Plan. However, the implementation phase as intended in the Master Plan must have an implementation guideline governing E-Government Governance within the Wajo District Government. ICT governance is intended to regulate relations between government agencies (G2G), relations between government and society (G2C), relations between governments and business process owners (G2B) and relations between governments and their employees (G2E).

The E-Government governance policy also regulates that each regional device must share its digital data and information with other regional instruments. Data must be shared based on the agreement of the parties, conformity with the SOP or by the Regent's order. In addition, E-Government governance regulates the Regional Apparatus in maintaining the security, confidentiality, renewal, accuracy, reliability, and integrity of the data and information that it has.

ICT Applications and Infrastructure

The development of ICT applications and infrastructure in Wajo District refers to the blueprint for application and infrastructure development. The infrastructure utilized by the regional apparatus of Wajo Regency consists of:

a.   Data Center and Disaster Recovery Center;

b.   Backbone network between Regional Instruments;

c.   Public IP and bandwidth;

d.   Routing;

e.   Information security system

f.   Placement of information system server; and

g.   Data/information repository.

For ICT infrastructure management, the Wajo Regency Government has been generally well managed. The Wajo district government has used a data center, a computer network, and uses contemporary storage media so that it will make it easier for implementing employees to carry out their work in the field of Information and Communication Technology.

Development of e-Government Applications in the Wajo Regency Government must be in accordance with the objectives and can be integrated with other e-Government Applications or can meet the following requirements:

a.   Is an open-source code (open source); and

b.   Meet interoperability standards, information systems security standards, and other standards set by authorized officials.

a.   Application

Making an application by the regional apparatus refers to the District Government's e-Government master plan. The e-Government application created by PSE must be utilized according to its purpose and can be integrated with other e-Government applications.

E-Government can be integrated through the construction of Fiber Optic infrastructure in all regional devices. In addition, ICT Master Plan documents in Wajo District, specifically related to application development, must be grouped according to a matrix approach between service function orientation and the nature of the application system function. Through this approach, application systems are grouped in 3 (three) groups as follows:

1)   Application system groups whose orientation functions directly to provide services to users (front office applications)

2)   Application system group whose function orientation is more aimed at providing assistance in government administrative work, as well as official and institutional functions (back-office applications).

3)   A group of application systems whose basic and general service functions are required by each user, or other more specific application systems. The basic nature of application services is usually back-office.

b.   Information Technology Infrastructure

Information technology infrastructure is a technology resource that is used together as a platform for certain information system applications within companies or governments. Information technology infrastructure includes hardware, software, and services that are shared within the company. Technology infrastructure as a foundation or framework that supports a system or organization.

Data from the results of research and interviews, most of the regional apparatus still complained about the high cost of developing ICT infrastructure in the regional apparatus. In addition, the Wajo Regency Government Regional Office offices are separated from each other with a considerable distance that requires the Wajo Regency Government to use some of the existing computer network technologies in the formation of an integrated computer network infrastructure including the Virtual Private Network (VPN). Conditions of office locations that are far apart, special planning and strategies are needed so that the data communication that occurs, can run with good availability and reliability.

Establish a Local Area Network (LAN) per OPDIn order to fulfill one of the Wajo Regency government programs that has been outlined in the RPJMD, namely Wajo online with the ultimate goal is to connect all OPDs in one intranet network, to realize this it is necessary for the Wajo Regency Government to build a local network infrastructure that connects between fields in one OPD and the network that connects between OPDs, as an initial step to support Wajo Online, the development of local network or LAN of each OPD is a priority in achieving it because LAN is one of the backbones of the need for Information Technology Infrastructure to be able to integrate. LAN required for each OPD does not have to be too complex and complicated enough to use a simple topology according to the needs of each OPD

Intranet or Integration of Computer Networks between OPD The concept of intranet or integration of computer networks between OPD Wajo Regency scope is to build a local network that connects between fields in OPD using a cable with a simple network topology, while for networks that will connect between OPDs using Virtual Private Network Internet Protocol technology or VPN IP from facilities software called Private Network Securit Box or PNS Box which is one of the results of software development by the Ministry of Communication and Information based on FreeBSD, this device is a complete or multipurpose network support tool that can be installed on a normal computer or PC with a platform 64-bit CPU.

Storage media (Storage) using the Network Attached Storage (NAS) system The Wajo Regency Government in the next 5 (five) years will have super large data from information stored in its owned storage media, to anticipate in meeting these needs, the Wajo Regency Government must have a reliable storage system with transfer speeds good data, therefore a storage system was chosen such as Network Attached Storage and not a Storage Area Network (SAN) storage system even though this system is much better and reliable, this is because SAN management is more complicated while the Wajo District Government does not have adequate resources for the management of SAN. Network Attached Storage (NAS) is a server with an operating system that is dedicated to serving the needs of data files. NAS can be accessed directly through a local network with protocols such as Transfer Control Protocol / Internet Protocol (TCP / IP). NAS has advantages in system recovery, i.e. if one host is damaged it can do automatic backups. NAS itself is not burdened with just one server, NAS also has a high transfer rate using gigabyte ethernet, and a large enough storage capacity by having multiple hard disks. NAS itself is different from servers in general, namely, NAS can only be used for storage (data storage) only.

IV. CONCLUSION

The implementation of E-Government policies in Wajo Regency in terms of institutional, policy, application and infrastructure aspects are as follows:

Institutional

On the institutional dimension, the implementation of ICT or E-Government in Wajo Regency has been carried out by the Office of Communication and Information Technology, the PMD Office and the Wajo District Tourism Office. In the institutional dimension of ICT or E-Government organizers in the three offices, the ICT institutions in the Office of Communication and Information Technology have a more complete structure compared to the Office of PMD and the Office of Tourism. Weaknesses in the Wajo Regency Communication and Information Agency that can affect the implementation or implementation of E-Government in other agencies are the limitations of Human Resources who have background or experience in the field of ICT. So as to maximize ICT institutional performance there are two elements in the organizational structure of an E-Government organizer that has an important role, namely:

Governance structures related to leadership

To ensure the leadership capacity of ICT management at the district level, the Wajo Regency Government is expected to be able to appoint a Chief Information Officer (CIO). The CIO is tasked with coordinating the planning, realization, daily operations and internal evaluation of ICT in the Wajo Regency, in collaboration with the ICT management work unit and other user work units.

The governance structure is related to the synergistic relationship between DPOs within the scope of Wajo Regency. To ensure a synergic relationship between DPOs within the scope of Wajo Regency in terms of managing ICT initiatives, the Wajo Regency government must form a District ICT Board. The ICT Council accommodates the interests of ICT management work units and ICT user work units, coordinating the planning and operation of district ICT initiatives. The establishment of CIOs and ICT Councils at the district level is a very important need, in addition to the existing ICT governance entities:

Government Institution Executives - namely the Bupati as head of government institutions at the Regency level.

ICT Management Work Unit - i.e. OPD which is tasked with managing ICT at the Regency level. The structural position of the ICT management work unit at the Regency level should ideally be in the echelon II position and at least at the echelon III level.

Business Process Owner Work Unit - namely the work unit outside the ICT management unit (Diskominfo) as the business process owner (Business Process Owner).

Nevertheless, the institution for information dissemination, namely the Information and Documentation Acting Officer (PPID), has a clear organizational structure based on its main tasks and functions according to Wajo District Head Regulation Number 23 the Year 2017.

Policy

The implementation of E-Government must be supported by strengthening regulations. To support the implementation of ICT or E-Government policies, the Wajo District Government has issued four supporting regulations. The four regulations are the Information Technology and Communication Master Plan Policy (RITIK) regulated through Wajo Regent Regulation Number 60 Year 2017, Wajo Regent Regulation Number 21 Year 2015 concerning electronic procurement services (LPSE) of Wajo Regency, Regent Decree Number 80 Year 2015 concerning Establishment of Wajo Regency Electronic Procurement Service Management (LPSE) and Regent Regulation Number 23 Year 2017 concerning the determination of the organizational structure, and the appointment of information and documentation management officials as well as information management officers and supporting documentation.

But to maximize the implementation of E-Government to be more targeted and sustainable the Wajo District Government should create an E-Government Governance Policy that guarantees the synergy of system planning, ICT expenditure/investment management, system realization, system operation, and system maintenance to be more optimal.

ICT Applications and Infrastructure

The development of ICT applications and infrastructure in Wajo District refers to the blueprint for application and infrastructure development. The infrastructure utilized by the regional apparatus of Wajo Regency consists of:

1. Data Centers and Disaster Recovery Centers;
2. Backbone network between Regional Devices;
3. Public IP and bandwidth;
4. Routing;
5. Information security system
6. Placement of information system server; and
7. Data/information repository.

For ICT infrastructure management, the Wajo District Government has been well managed in general. The Wajo district government has used a data center, a computer network, and uses contemporary storage media so that it will make it easier for implementing employees to carry out their work in the field of Information and Communication Technology.

Development of e-Government Applications in the Wajo District Government must be in accordance with the objectives and can be integrated with other e-Government Applications or can meet the following requirements:

a. Is an open-source code (open source); and
b. Meet interoperability standards, information systems security standards, and other standards set by authorized officials.

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