








Information Management Based on Digital Government: Experience for Luwu Regency

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Abstract. This study aims to identify, explore and analyze the process of implementing e-government policies in information management in Kab. Luwu. The contribution of this research is to become recommendations and suggestions as well as to improve E-government in information management in the Luwu Regency government and also to realize Good Governance in Luwu Regency. E-government promises in terms of better services, delivery, and more efficient administrative management. Many models for e-government development have been developed for the understanding and improvement of e-government in the last decades. The type of this research is descriptive qualitative with phenomenological research type. The results showed that the implementation of e-government policies in information management in Kab. Luwu measured from 4 e-government models: still not optimal with some shortcomings that need to be addressed such as the installation of internet network towers, employee training, and inadequate budgets.

Keywords: Policy · E-government · Information

1 Introduction

The information system is one of the useful tools for management to process organizational data with a large enough capacity. The advantages and convenience and speed of data processing, this information system is very useful for all agencies, both private and public institutions (Nurmi, 2017). Currently the development of Information and Communication Technology (ICT) has developed very quickly to continue to facilitate human activities, including government activities, both in governance itself and in its services to the public. E-government as a form of modernization of the process of implementing government activities as a whole is also a change in the form of government services to its citizens, not only at the central level but also at the regional level (Resta, et al.,)

E-Government is an information technology system developed by the Government to improve public services by providing options for the public to get easy access to public information. The implementation of good governance (good governance) and the

improvement of effective and efficient public services requires e-government development policies and strategies. These policies and strategies are regulated in Presidential Instruction No. 3 of 2003 concerning National E-Government Development Policies and Strategies in All Government Levels. Nurcahyati and Daru (2011) at the National Informatics Seminar entitled *The Role of E-Government in the Framework of Realizing Good Governance for the Community*, concluded that e-government socialization needs to be carried out consistently,

The advancement of modern information technology, as it is today, has brought considerable demands on the community for government as a service provider to be more open, more effective, and efficient in running its government, and can provide convenience in accessing information, especially information about government.. This encourages the government to implement the concept of good governance which is often referred to as good governance (Cyndika, 2018). In the practice of developing E-Government in Indonesian local government organizations, the stages of development that occur are still different. There are areas that are still very lagging behind in terms of the use of information technology, and some even don't have a website until now (Hutagalung, et al., 2019).

The presence of Presidential Instruction number 3 of 2003 so that; (1) The rapid advancement of communication and information technology and the potential for its widespread use, opens up opportunities for fast and accurate access, management and utilization of large volumes of information; (2) The use of communication and information technology in the process of government (e-government) will increase efficiency, effectiveness, transparency and accountability of government administration; (3) Organizing good governance and improving effective and efficient public services requires e-government development policies and strategies.

With the presence of a website in every district/city in Indonesia in order to have a common understanding, simultaneous action and integrated steps from all elements of government institutions, it is deemed necessary to issue presidential instructions for the implementation of national e-government development policies and strategies. Presidential Instruction No. 3 of 2003 was followed up by Circular of the Minister of Communication and Information No. 65 of 2005 regarding the development of electronic government services at various government agencies, both at the center and in the regions. And the Regulation of the Minister of Communication and Information Number 28/perkom-info/9/2006 regarding the use of the go.id domain for the official website of the central and regional governments.

Luwu Regency is an area that has implemented the Presidential Instruction policy with the presence of the Diskominfo website. Luwukab.go.id. The website serves to provide easy access to information about Luwu Regency. Through the Luwu Regent Regulation Number 21 of 2020 concerning the utilization of websites within the scope of the Luwu Regency government. Utilization of the website within the Luwu district government is to create website organizers who are able to provide and provide data and information for the benefit of local governments and efforts to improve information services to the public through the internet network.

The official portal for Luwu Regency in Perbup Number 21 of 2020 is luwukab.go.id and the SKPD website. The luwukab.go.id website is the government's main website,

which is a website that contains general information regarding the administration of government, development and society in the Luwu Regency area, while the SKPD website contains special information regarding government administration, development and society carried out by the relevant SKPD according to the field. Their duties and powers.

Policy implementation is a very important stage in the overall policy structure. This stage determines whether the policies adopted by the government are truly applicable in the field and have succeeded in producing outputs and outcomes as planned. In order to realize the outputs and outcomes that have been set, public policies need to be implemented because if not, these policies will only become elite records as emphasized by Udoji who said that policy implementation is something important, maybe even more important than policy making. Policies will only be in the form of dreams or good plans that are stored neatly in archives if they are not implemented (Agustino, 2008).

Policy implementation is part of the policy making process. As stated by Hasbullah (2015), that the policy-making process is a political process that takes place in stages of political policy-making, where this political activity is described as a policy-making process, and is visualized as a series of stages that are interdependent on each other, arranged according to the time series., such as agenda setting, policy formulation, policy adoption, policy implementation, and policy assessment. Policy implementation can be obtained from Grindle's (1980: 7) statement that implementation is a general process of administrative action that can be investigated at a certain program level. The implementation process will only start when the goals and objectives have been set.

Previous research conducted by Resta & Reni (2013) with the title The role of the electronic data management section in the implementation of E-Government that the utilization of the official website has reached the stage of interaction through chat and email forums, already has functions and orientations in order to achieve the vision and mission of the City of Semarang. And related sections in the context of good governance and improvement of public services.

E-Government is a form of service application that can improve the quality of public services based on technology and communication in order to answer the demands and needs of the public who want a fast data processing process and accurate information. E-Government is needed to improve efficiency, effectiveness, transparency, and accountability of government administration with the aim of increasing public confidence in the image of government services, especially the bureaucracy.

Hootsuite (We are Social) provides data and trends needed to understand the internet, social media and e-commerce behavior every year on a regular basis. The data presented is comprehensive data in all parts of the world, including Indonesia. Usually Hootsuite publishes data on internet and social media trends in the second month of each year. This is because Hootsuite held a questionnaire at the end of the previous year, and it was collected at the beginning of the year. And in 2022, Hootsuite released data and trends about the internet and social media on 15 February (Fig. 1).

According to what is described in the picture above, the total population (total population): 7.91 billion (in 2021: 7.83 billion/up 1%). Connected mobile devices: 8.28 billion (2021: 5.22 billion/up 2.9%). Internet users: 4.95 billion (2021: 4.66 billion/up 4%). Active Social Media Users: 4.62 billion (in 2021: 4.20 billion, up 10.1%). A simple conclusion from the data.

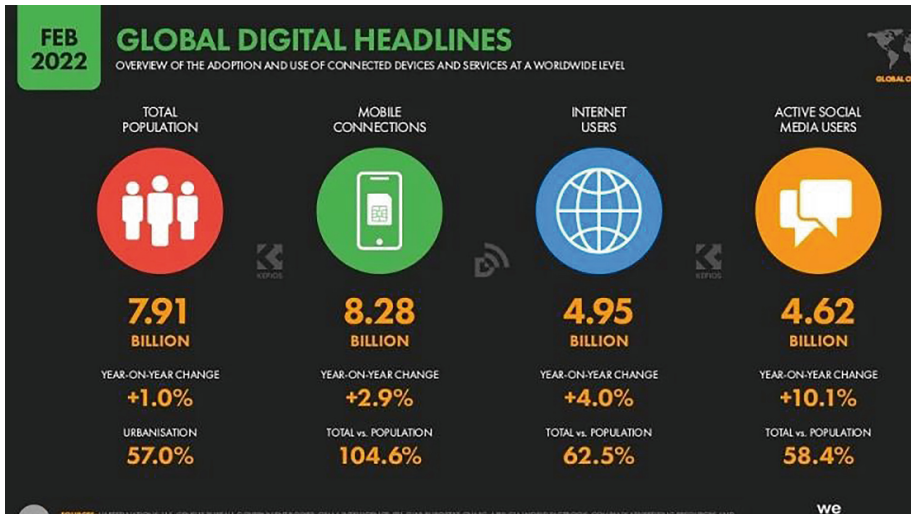


Fig. 1. Internet User Data. Source: Compiled from various sources, 2022

Based on data presented by Hootsuite regarding website/internet accesses worldwide, especially in Indonesia, there are 204.7 million people/2021. This is of course narrowed to all regions in Indonesia regarding the number of website/internet accessors, especially in Luwu Regency. The population in Luwu Regency in 2017 was 356,305 people consisting of 22 sub-districts, 207 villages and the number of civil servants was 5,594 people from 57 regional work units. Looking at the number of registered civil servants according to the BKPSDM Kab. Luwu said that there were 5,594 people who accessed the web within the scope of the government.

Through an integrated website, it will be possible for residents of Kab. Luwu or the business community, youth and student community (i) to complete a transaction with a government agency without having to visit several regional offices or related agencies. In addition, it allows public sector organizations to interact directly and work better with businesses, regardless of their “physical world” location. This includes digitizing procurement services to and from businesses in order to improve their service quality, convenience and cost-effectiveness (Heeks, 2003; McClure, 2000).

2 Research Methods

This researcher uses a qualitative-explorative method with a phenomenological approach (Creswell, J, W, & Poth, 2016). As an in-depth interpretation of the implementation of e-government policies in information management in Luwu Regency. The theory used is the 4 e-government models proposed by (Febriansyah, 2021), with the e-government to citizens, e-government to employee, e-government to business and e-government to government models. The data used are field notes, observations and documents related to the research topic. Technical analysis this research uses interactive analysis techniques as proposed by (Miles, MB et al., 2014), with stages of data reduction, data presentation,

data verification, to produce conclusions in the form of new findings that will be useful for readers.

3 Results and Discussion

3.1 E-Government Implementation Policy in Luwu Regency

Based on INPRES No. 3 of 2003, the Minister of Communication and Information has encouraged the use of IT for government agencies, both central and regional. The implementation of the use of IT nationally based on the National Policy and Strategy for E-Government Development is carried out in several stages, namely: 1. Preparation, namely the creation of a website as a medium of information and communication in each institution. 2. Maturation, namely the creation of an interactive public information web portal. 3. Stabilization, namely the creation of a web portal that is electronic in nature for public service transactions. 4. Utilization, namely making applications for services that are Government to Government (G2G), Government to Business (G2B), Government to Consumers/community (G2C). The following is one of the uses of Electronic Government using a website by the Luwu Regency Government which is managed by the Luwu Regency Diskominfo (Table 1).

Based on the E-Government policy instructed by the president, the government has implemented it, in this case the Luwu District Communication and Information Office. In addition, there are 38 information services that have been provided by the government regarding the implementation of e-government policies. That is, E-Government is one of the government's main priorities to provide services so that Good Governance is achieved.

The Luwu Regency Statistics Informatics and Encoding Communication Service is a Regional Apparatus in charge of statistical information communication and coding. With the efforts to distribute information and fulfill the rights of the public in the field of communication and information, it is hoped that the community will be more participative in utilizing communication and information. Which in turn can improve the welfare of the community as well as the implementation of e-government in the context of realizing bureaucratic reform in the Luwu Regency Government Area.

Dynamics of E-Government Implementation

In the implementation of e-government in Luwu Regency, in this case, Diskominfo as the implementer that provides website features has experienced many dynamics in its application, which is shown in Table 2.

The development of E-Government in Luwu Regency has reached the average level in the Regency/City for several years. Overall, the performance of the district government in managing e-government is still experiencing several challenges that must be evaluated for the realization of good governance through online-based services.

After fulfilling all the dynamics in the implementation of E-Government, it will improve the quality of services from the government to all parties who need relations with the government. With the existence of E-Government, it is hoped that services can be more effective and efficient. Increase transparency, control and accountability of

Table 1. E-Government Information Services

No	App Name	Service	Affairs	Data Service	App Description
1	Local Government Information System (SIPD)	Planning Services; Budgeting Service	Planning	Government-to-Government (G2G)	SIPD can increase efficiency in the planning process
2	Financial Management Information System (FMIS)	Financial Services	Finance	Government-to-Government (G2G)	FMIS can increase efficiency in the Administration/Bookkeeping process
3	Regional Financial Information System (SIMDA) Regional Property	Regional State Property Management Service	Finance	Government-to-Government (G2G)	Simda BMD can be used for the management of Regional Property
4	Inventory Accounting App	Financial Services	Finance	Government-to-Government (G2G)	Applications that manage inventory
5	Health Equipment and Asset Management (ASPAK)	Author Services and Services	Finance	Government-to-Government (G2G)	Applications for Medical Facilities, Infrastructure & Devices

(continued)

Table 1. (continued)

No	App Name	Service	Affairs	Data Service	App Description
6	Regional Public Service Agency Information System (SIMBLUD)	Financial Services	Finance	Government-to-Government (G2G)	Regional Public Service Agency Financial Management Application
7	Electronic Procurement System (SPSE)	Goods and Services Procurement Services	Finance	Government-to-Government (G2G)	Electronic Procurement Services (LPSE) is a work unit that organizes electronic systems for procurement of goods/services which was established by Ministries/Institutions/Universities/BUMN and Local Governments to facilitate ULP/Procurement Officials in carrying out procurement of government goods/services electronically.
8	Population Administration Information System (SIAK)	Resident Service	Citizenship and Civil Registration	Government-to-Citizen (G2C)	Population Administration Information System is an information system that is developed based on population administration service procedures by applying information and communication technology systems in order to organize the population administration system in Indonesia.
9	Online Single Submission System (OSS)	Licensing Service	Capital investment	Government-to-Business (G2B)	Online Single Submission (OSS) is a business license issued by the OSS Institution for and on behalf of ministers, leaders, institutions, governors, or regents/mayors to business actors through an integrated electronic system.

(continued)

Table 1. (continued)

No	App Name	Service	Affairs	Data Service	App Description
10	Performance Electronic Application (E-KINERJA)	Employee Performance Service	Staffing	Government-to-Employees (G2E)	The system used to carry out the process of recording the performance of civil servants, especially in the Luwu District Government Environment
11	ASN Salary Payment Information System (SIMGAJI)	Financial Services	Finance	Government-to-Employees (G2E)	This SIM GAJI application is a form of Taspen's concern for the Regional Government in terms of managing Regional Civil Servants salaries, in supporting the processing of Regional Civil Servants' salaries.
12	Village Financial System (Siskeudes)	Financial Services	Finance	Government-to-Government (G2G)	This application was developed in order to improve the quality of village financial governance
13	Regional Revenue Information System (Smart Bapenda)	Financial Services	Finance	Government-to-Government (G2G)	Android-based application for taxpayers in managing taxes online.
14	Tax Object Information Management System (SISMIOPI)	Financial Services	Finance	Government-to-Government (G2G)	The Tax Object Information Management System (SISMIOPI) is an administrative system that integrates the entire implementation of computer-based PBB activities, from data collection, identification, processing, maintenance, to printing the output.

(continued)

Table 1. (continued)

No	App Name	Service	Affairs	Data Service	App Description
15	Government Agency Performance Information System (e-SAKIP)	Organizational Performance Accountability Service	Government administration	Government-to-Government (G2G)	e-SAKIP REVIU is an application system developed by the Ministry of Administrative Reform and Bureaucratic Reform as an effort to improve the quality of performance accountability implementation within government agencies to increase the effectiveness and efficiency of budget use
16	SIKS-NG app	Social Welfare Service	Social	Government-to-Citizen (G2C)	Management application for the process of improving and proposing a new Integrated Database (BDT) data in which there is also a module for improving and proposing non-PKH Food Social Assistance (BSP) data
17	Electronic Application for Business Entity Data (Edabu)	Social Welfare Service	Social	Government-to-Citizen (G2C)	BPJS Health/PBI Data Management Application
18	Luwu Tower Control Information System (SIPEMALU)	Licensing Service	Communication and Informatics	Government-to-Business (G2B)	This system aims to facilitate data collection, management and dissemination of information on telecommunication tower data in the Luwu district.
19	Personnel Information System (SISKA)	Personnel Service	Staffing	Government-to-Employees (G2E)	Siska is a computer-based system that generates, stores, manages, sends, and/or receives accurate online personnel data and information.

(continued)

Table 1. (continued)

No	App Name	Service	Affairs	Data Service	App Description
20	ASN Attendance Information System (e-Absensi)	Personnel Service	Staffing	Government-to-Employees (G2E)	The system used to manage ASN attendance as the basis for calculating ASN Performance
21	Public Service Complaint Management System (SP4N) LAPOR!	Public Service Complaint Service	Supervision	Government-to-Citizen (G2C)	Public Service Complaint Management System
22	Legal Documentation and Information Network System (JDIH)	Legal Documentation and Information Network Services	Communication and Informatics	Government-to-Government (G2G)	The National Legal Documentation and Information Network, hereinafter referred to as JDIH, is a forum for joint utilization of legal documents in an integrated and sustainable manner, as well as a means of providing complete, accurate, easy, and fast legal information services.
23	Official Travel Information System (SIPEDas)	Financial Services	Finance	Government-to-Government (G2G)	This system is for the management of Business travel Administration
24	Spatial Planning Management Information System (SIPETARUNG)	Public Works and Spatial Services	Public Works and Spatial	Government-to-Government (G2G)	The Spatial Planning Management Information System (SIPETARUNG) is an official service owned by the Luwu Regency government as an information medium for the use of spatial planning in the Luwu Regency.
25	Luwu Regency Online Licensing Service (SIMAP)	Licensing Service	Capital investment	Government-to-Business (G2B)	Luwu Regency Online Licensing Service

(continued)

Table 1. (continued)

No	App Name	Service	Affairs	Data Service	App Description
26	Sports Data Management (PENDEKAR)	Youth and Sports Services	Youth and Sports	Government-to-Citizen (G2C)	Luwu District Sports Data Management
27	Information and Document Management Officer Application	Open Data Service	Communication and Informatics	Government-to-Citizen (G2C)	PPID is a record containing systematic information on public information that is under the control of a public agency. Through the PPID application used by the Ministry of Home Affairs, public bodies can publish controlled information which is then compiled as DIP automatically.
28	Metadata Information System (OMMGAUL)	Open Data Service	Communication and Informatics	Government-to-Citizen (G2C)	Information System to manage metadata via Online
29	Gender and Child Information System (SIGA)	Women and Children Empowerment Services	Empowering Women and Children	Government-to-Citizen (G2C)	The Gender and Children Information System containing gender and child disaggregated data in South Sulawesi serves to capture the success rate of development of women's empowerment, protection of women and children through Gender Mainstreaming (PUG) and Child Rights Mainstreaming (PUHA) strategies.
30	Covid -19 Data Information System (Pikacu)	Health services	Communication and Informatics	Government-to-Citizen (G2C)	Luwu Regency Covid-19 Monitoring Data

(continued)

Table 1. (continued)

No	App Name	Service	Affairs	Data Service	App Description
31	Construction Services Data Information System (D-JAK)	Public Works and Spatial Services	Public Works and Spatial	Government-to-Government (G2G)	Construction Services Data Information System within the Scope of Luwu Regency
32	Resident Registration Service Information System	Resident Service	Social	Government-to-Citizen (G2C)	Information System for Population Registration Services for Social Welfare Service Needs
33	Infrastructure Monitoring Information System (RIDM)	Public Works and Spatial Services	Public Works and Spatial	Government-to-Government (G2G)	Infrastructure Monitoring Information System in real time
34	Employee Transfer Information System (SIIMUT)	Personnel Service	Staffing	Government-to-Employees (G2E)	Si-IMUT is a web-based application that is used internally by BKPSDM Luwu Regency to manage employee transfers

(continued)

Table 1. (continued)

No	App Name	Service	Affairs	Data Service	App Description
35	Spatial Planning Management Information System (SIPETARUNG)	Public Works and Spatial Services	Public Works and Spatial	Government-to-Government (G2G)	The Spatial Planning Management Information System (SIPETARUNG) is an official service belonging to the Luwu Regency government as an information medium for the use of spatial planning in the Luwu Regency.
36	Package Capability Limitation Information System (SIMBASKET)	Goods and Services Procurement Services	Planning	Government-to-Government (G2G)	Information System of Package Capability Restrictions on the Procurement of Goods and Services
37	Integrated Dynamic Archive Information System (SRIKANDI)		Record management	Government-to-Government (G2G)	Integrated Dynamic Archival Information System
38	Financial Records Information System (SIARSIP)	Dynamic Archive Service	Finance	Government-to-Government (G2G)	The Financial Records Information System is for storing and documenting financial archive documents

Source Diskominfo 2022

Table 2. Dynamics of E-Government in Kab. Luwu

No	E-Government Implementation Problems	Explanation
1.	Human Resources	The lack of human resources is one of the obstacles to developing e-government.
2.	Network Towers	In implementing the e-government tower network, one of the most important things is to reach remote villages
3	Sectoral Ego	Lack of enthusiasm for regional device organizations in running the applications that have been provided
4.	Budget	In managing online information services, it requires a lot of budget because the budget is one of the main priorities in carrying out programs in the government

Source Diskominfo 2022

state administrators in order to implement a clean government free from corruption and similar actions.

Implications of E-Government Development

The Department of Communication, Informatics, Statistics and Encoding, Luwu Regency, in this case as the implementer of e-government policies that have provided information website features, is expected to be able to meet the demands of the community in order to provide services in the field of communication and information to the public so that the administration of government is transparent and accountable in accordance with the era of openness. Information works well.

With the efforts to distribute information and fulfill the rights of the public in the field of communication and information, it is hoped that the community will be more participative in utilizing communication and information. Which in turn can improve the welfare of the community as well as the implementation of e-government in the context of realizing bureaucratic reform in the Luwu Regency Government Area.

The assessor is focused on the process of implementing e-government policies regulated in the regent's regulation number 21 of 2020 regarding website utilization so it is necessary to analyze web presence, interactions, transactions, and transitions, sustainability, willingness and transparency of e-Government, investment value in each region, leadership, institutionalization of e-government in these sectors, process management, performance of front office leadership, and budget factors The implementation of e-government in Indonesia has progressed very rapidly, compared to when it was first implemented.

Based on the results of the analysis, it was found that the implementation of e-government policies in managing information in Luwu Regency had fulfilled the presidential instructions and also followed up on ministerial circulars, but in the implementation or technical information management, it was found that there were several

dynamics that needed to be addressed, such as the sectoral ego of each related agency because Diskominfo only provides website features for use by every government agency.

4 Conclusion

Based on the results of the discussion, the authors conclude that the application of e-government policies in information management in Kab. Luwu is less than optimal in technical service to provide information and ease in accessing the online services that have been provided. The author proposes that in order to achieve good governance, it is necessary to strive for a harmonious and harmonious relationship on all lines, both from the community, implementing staff and leaders of all OPDs as well as the Regent as a government coach in implementing E-government programs. In this research, of course, there are still many shortcomings, but it can also be used as a reference material for developing e-government because a common constraint in implementing e-government policies is the internet network.

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