

## **IMPLEMENTATION OF E-GOVERNMENT IN AN EFFORT TO IMPROVE PUBLIC SERVICES IN INDONESIA**

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### **INTRODUCTION**

This research departs from the importance of using information technology in government, especially e-government, in realizing Good Governance. The Indonesian government has attempted to implement e-government in public services and state financial management, but implementation is still not optimal (Yunita, 2018). This can be seen from the low level of public participation in using e-government, as well as the many obstacles faced in its implementation (Rybnikova et al., 2022). Therefore, it is necessary to analyze the implementation of e-government and the factors that influence its success, as well as solutions to overcome the obstacles faced in realizing Good Governance in Indonesia.

*E-government* understood as the use of information technology in government (Dhaoui, 2021). E-government refers to public services provided by the government through information technology, such as the internet, computer networks, and information systems. E-government can be interpreted as the government's efforts to carry out digital transformation in public services and state financial management. E-government can be applied in various aspects of government, such as public administration, finance, law, environment, etc. (Liang & Yueping, 2018). E-government can be used to increase efficiency, transparency, and accountability governance, and increasing participation publicingovernment. E-government can also increase people's accessibility to public services, especially for those living in rural and remote areas (Ferrari et al., 2022).

In a global context, the implementation of e-government has become a trend and a need that must be met by countries in the world. E-government is expected to increase efficiency, transparency and accessibility in public services and improve people's quality of life. The implementation of e-government is expected to increase community participation in decision making and government supervision, as well as improve the quality of public services. In Indonesia, implementing e-government is also one of the government's priorities in national development (Arief & Yuardani, 2018). The government has issued various programs and policies for increase implementation of e-government in Indonesia. However, there are still various obstacles faced in its implementation, such as the low level of literacy in digital society, ICT accessibility, inappropriate regulations, poor quality of human resources, and low public trust in e-government services.

The history of e-government began in the 1960s, when governments in several countries began to develop information systems to support government activities (Hu ek et al., 2021). Initially, the information system used was only used by the government itself, without

involving the public. In the 1990s, the concept of e-government emerged, which emphasized the use of information technology to carry out digital transformation in public services and state financial management. In the world, e-government is implemented by various countries with the aim of increasing government efficiency, transparency and accountability, as well as increasing public participation in government.

*Good governance* is a concept that refers to the way the government and other institutions carry out their duties and authorities in an effective and efficient manner and through a transparent and responsible process. In this research, Good Governance is linked to the implementation of e-government, because e-government is expected to improve Good Governance by increasing government efficiency, transparency and accountability as well as increasing public participation in government. The analysis carried out in this research will discuss how e-government implementation affects good governance in Indonesia, factors that influence the success of e-government implementation and solutions to overcome obstacles in e-government implementation that can improve Good Governance in Indonesia (Umbach & Tkalec, 2022a).

The implementation of e-government is also expected to increase effectiveness in public services through increasing service accessibility and better quality of public services. Apart from that, with the e-government system, the government decision-making process can also be carried out more quickly and efficiently. The government can easily collect data and information from the public and analyze it to support the decision-making process. The implementation of e-government is also expected to increase efficiency in government financial management. With an e-government system, the government can be more efficient in managing and controlling financial expenditure (Nganje, 2020).

The implementation of e-government is also expected to increase efficiency in government supervision. With an e-government system, the public can easily access information and report violations or problems that occur in public services. Overall, the implementation of e-government and e-governance is expected to increase efficiency and effectiveness in public services, through increasing the accessibility of public services, better service quality, faster and more efficient decision-making processes, more efficient financial management and better supervision. more effective.

However, the implementation of e-government in various countries still faces various obstacles (Mensah, 2020). Some of the problems faced include (1) Accessibility: Accessibility to e-government services is still limited for people in rural and remote areas, and those who lack access to information technology.

(2) Infrastructure: The infrastructure needed to support e-government, such as internet networks and information systems, is still quite weak in several countries and often experiences disruptions (3) Quality of service: The quality of e-government services still does not meet standards in several countries, especially in terms of speed and accuracy (4) System integration: System integration between government agencies is still not optimal in several countries and often causes difficulties in service (5) Cybersecurity: there is still a fairly high

risk of cyber attacks on e-government systems that could detrimental to both the government and society (Ostasius & Laukaitis, 2015).

The implementation of e-government in each country is also influenced by various factors unique to that country, such as political, economic and cultural conditions (Martin-Shields et al., 2021). Therefore, the implementation of e-government in each country can be different and can have different obstacles. This article will focus on how e-government is implemented in various regions in Indonesia. Obstacles and solutions for implementing e-government in the context of improving public services in Indonesia.

## **RESEARCH METHODS**

This research uses a research method called library research. Library research is a type of qualitative research which is generally carried out without going into the field to search for data sources. Library research can also be defined as research conducted solely based on written works, including research results both already and unpublished. The steps in library research according to Kuhlthau (2002) in Mirzaqon and Purwoko (2017) are as follows: 1. Selecting a topic 2. Exploring information 3. Determining the focus of research 4. Collecting data sources 5. Preparing data presentation 6. Preparing a report. So library research activities are collecting, reading and recording literature/books. Apart from that, you must also pay attention to: 1. steps in researching literature, 2. research methods in order to collect data, read and process library materials and equipment that must be prepared for the research, 3. Its purpose is to make it easier for researchers to obtain data. Sari, Milya & Khaidir, Asmendri. (2022). Library Research in Science Education Research. Natural Science. 6. 41-53. 10.15548/nsc.v6i1.1555.

## **RESULTS AND DISCUSSION**

### **1. Implementation of E-Government in various regions in Indonesia**

E-Government is a process in a government system that utilizes technology, communication and informatics as a tool to provide easy communication and transaction processes (public services) to the public, private organizations, industry and government institutions. Based on Presidential Instruction Number 3 of 2003 concerning national policies and strategies for e-Government development, it is an actualization of the government's seriousness in providing public services by utilizing information technology infrastructure. Through this Presidential Instruction, the government instructed several government agency officials, including regional heads, to take steps to implement e-Government nationally by formulating and implementing and coordinating with the Ministry of Communication and Information of the Republic of Indonesia. Several previous studies have revealed that the development of e-Government in Indonesia is still relatively slow due to various reasons, including uneven infrastructure, budgets and the role of central and regional governments. But there are also several studies which say that several cities have moved forward. One of them is the city of Surabaya which has even become a reference for all regional governments throughout Indonesia in implementing e-Government.

### **E-Government in Surabaya**

Devi Novita Sari's research results (Journal of Governance Innovation Volume 2, Number 2, September 2020 "Implementation of Surabaya City Government Policy in Realizing Smart City Innovation" -) The Surabaya city government in realizing Surabaya Smart City is by applying the e-government concept which includes Electronic Innovation to Regional Development and Services to the Community. To see how the Surabaya City Government implements policies in realizing a Smart City, indicators in determining Surabaya city government policies can be studied based on Edward III's implementation theory and through 4 studies of Edward III's implementation concepts, the Surabaya City Government in implementing policies can be said to be successful. The implementation of Surabaya City Government policies can be proven by the Surabaya City Government through the efforts made to realize Smart Government, Smart Economy, Smart Environment, Smart Living, Smart People and Smart Mobility. And the efforts made by the Surabaya City Government to create a Surabaya Smart City bore sweet fruit, because in 2011 Surabaya was awarded and received the Smart City title at the 2011 Smart City Award event. The Smart City Award is an award for cities that have succeeded in building technology systems. integrated information and communication so as to improve the quality of public services to the community. The awards given have four categories, namely Smart Governance, Smart Economy, Smart Living and Smart Environment. Where in the four categories contested, the City of Surabaya won three categories, namely Smart Governance, Smart Living and Smart Environment, which managed to beat 60 other cities/districts from all 33 provinces in Indonesia. Then in 2015 Surabaya also received an award as the Indonesian Smart City Index (IKCI) by obtaining the highest score for a city with a large population of more than 1 million people.

However, the research results also state that there are obstacles that hinder the implementation of e-government itself, namely:

Several challenges in implementing E-Government include:

- **Technological Aspects**

1. **Internet speed**

E-Government services require quality and stable internet speed. The success of South Korea and the UK in implementing E-Government is due to the support of internet speed. In Indonesia (including Surabaya), internet is still relatively expensive with speeds that still need to be improved (when compared to other countries such as Japan, England, Singapore, etc.).

2. **Infrastructure**

Technological infrastructure ranging from networks, hardware devices and software is still limited, especially for lower economic communities as users. There are still technical problems, especially servers when an application is accessed simultaneously by many people. An example is an online report card.

3. **Accessibility**

How can all levels of society access E-Government services equally. In Surabaya, most internet customers are still mobile-based. People who subscribe to the internet at home are still limited to the upper middle class. Meanwhile, lower economic communities do not have the ability to subscribe to the internet. Even though the number of people from lower economic levels is also quite large. The spread of E-Kiosks and mobile/Android based applications (SSW Mobile and E-Wadul which can be downloaded from the Play Store could be a solution). However, it also needs to be followed by outreach and training to the public on how to use it.

- **Non-Technological Aspects**

1. Bureaucracy, which means the speed of response, quality of service and professionalism of the bureaucratic apparatus needs to be improved. There needs to be awareness that people are not objects, but customers who have the right to receive quality service. The public has the right to complain when they receive poor and slow service from the bureaucracy. So ease and speed of service must be given top priority. E-Government applications are just tools to help, but what is more important is the people who control these tools.
2. Regulation, meaning that there are still many regulations and procedures that are too long, complicated, rigid and less flexible to change. Unnecessary regulations should be removed immediately to increase competitiveness at the international level, not only at the Asian level.
3. Human resource skills regarding information technology need to be improved, both the Surabaya city government bureaucracy as controllers and the community as users. The challenge is the limited IT capabilities of people who are economically and educationally lower class.
4. Law enforcement, meaning that violations of the law need to be dealt with firmly so as to foster mutual trust, both among state bureaucratic officials, the community and other related parties. This includes increasing public confidence in the use of E-Government applications and the trust of city government officials in the data and supporting documents submitted by the user community.
5. Political conduciveness, which means the sustainability of E-Government applications is very dependent on political conduciveness where the provision of the E-Government budget is through DPRD approval.
6. Economy  
The economic capacity of the community certainly influences the use of E-Government applications. Middle and upper economic communities certainly find it easier to use E-Government services than lower economic communities. This is due to the ability to independently own supporting devices, such as computers/laptops/gadgets to access and use E-Government services provided by the Surabaya city government.
7. Culture  
Government culture in Indonesia in general still tends to be paternalistic, placing the

government at the top and society at the bottom. Maybe it is also due to historical factors in the past where the kingdom had full power and the people as subjects had to obey all decisions made by the king. Times have changed, now the community needs to be positioned as a partner of the city government to carry out prosperous development. So it is necessary to empower community participation in every decision making related to the city.

### **E-Government in South Sumatra**

Likewise, South Sumatra Province faces various obstacles which require the government to be careful so as not to take the wrong steps. The research results show that there are obstacles faced by the South Sumatra Provincial Government. Infrastructural obstacles do not lie in the lack of infrastructure, but rather in the capacity of qualified human resources to be able to utilize existing infrastructure. Apart from that, there are also security problems where guaranteed security methods are not yet available to protect database privacy. Research data shows that there is also a digital gap in accessing the internet for society. Another obstacle concerns the culture of the apparatus itself which is still fixated on old performance processes, such as still using the old method of dribbling the ball in information transparency between agencies and the use of paper which still continues to this day. Lastly, the most influential obstacle is a high budget so that it has an impact and is related to each other.

### **Implementation of E-Government in Papua**

Jayapura City, as a role model for good governance in Papua Province, is expected to be able to utilize communication and information technology in government processes (e-Government) which will then increase efficiency, effectiveness, transparency and accountability in government administration. The implementation of e-Government in Jayapura City is very possible if we refer to the data that: Papua Province experienced an increase in internet users by 261,776 people, from initially 2,640,160 people in 2018, increasing to 2,901,936 people in 2019-2020. This indicates that the people in Papua Province are already actively using the internet, so that the implementation of e-Government in Papua can be guaranteed to run well with the level of internet users which has increased in the last 2 years. The percentage of internet users per provincial capital in Maluku - Papua, especially in Jayapura City, is among the highest with a percentage reaching 87.5%. Where the people of Jayapura City almost all use internet access (Bisay, 2022).

Based on data analysis, from the implementation of e-Government in Jayapura City, it was found that the Jayapura city government has made efforts to implement e-Government as a form of openness to public services. This is of course marked by the availability of websites and the willingness of stakeholder officials who want bureaucratic reform in public services. The Jayapura City Government has also implemented four e-Government concepts, namely G2C (Government to Citizen), G2B (Government to Business), G2G (Government to Government), and G2E (Government to Employee). This has an impact on increasing the quality of public services that are effective, efficient, transparent and accountable. However, in

its implementation there are various factors that cause public services with this eGovernment system to not be optimal, this is because; lack of availability of human resources (HR), communication technology infrastructure constraints, inadequate budget, and organizational constraints. Another obstacle in implementing e-Government cannot be separated from various security system disturbances that allow data breaches and/or hacking (cyber crime), which are rife in cyberspace. On the other hand, it is necessary to appreciate the Political Will and Good Will of the Jayapura City government, which in implementing its governance, has prioritized the principle of openness as a form of service in implementing e-Government.

### **Implementation of E-Government in North Sulawesi**

The results of Karen Betsy Lineleyan's research (PAPATUNG: Journal of Public Administration, Government and Politics 2021) states. Based on the policy implementation theory put forward by Edward III, a policy implementation can be said to be successful if the four factors that influence policy implementation, namely communication, resources, disposition and bureaucratic structure, run well. Meanwhile, in the implementation of the Administrative Services Policy Based on the E-Office Application System in the Administrative Services Unit (ULA) of the North Sulawesi Provincial Government, of the four influencing factors, there are still two factors that are not working well, namely resource factors and bureaucratic structure. The resource factor in question is human resources, where there are still employees who do not understand the existing E-Office system. Apart from that, the majority of employees' education level is high school and there are also those with junior high school education. The bureaucratic structure factor in question is problems related to Standard Operational Procedures, where there are still problems because sometimes there are delays in handling files, in this case it takes a long time for them to be signed by the relevant officials. Apart from that, SPOs related to incoming mail services for bureaus cannot be implemented due to problems with the E-Office application system. So it can be concluded that the implementation of the Administrative Services Policy Based on the E-Office Application System in the Administrative Services Unit (ULA) of the North Sulawesi Provincial Government cannot be said to be successful or in other words it is not yet running completely well.

The supporting factors in implementing the Administrative Services Policy Based on the E-Office Application System in the Administrative Services Unit (ULA) of the North Sulawesi Provincial Government are existing resources. The resources in question are facility resources, in this case finance and human resources/apparatus. Financial resources due to the large number of incentives for employees, as well as in terms of facilities and budgeting, ULA is quite adequate. The next supporting factor is human resources or apparatus. This is quite interesting because the HR factor is not only a problem in the policy implementation process, but can also be a supporting factor, because there are still employees who have good capacity in terms of administrative services based on the E-Office system, they are employees who are highly educated, and of course master their main duties as service officers at ULA. Supporting factors

that are no less important come from the support of service recipients or the community. Meanwhile, the inhibiting factor is that technical errors often occur in the E-Office application system, either due to network problems, or due to interference with the application system itself which makes the system down or even unable to run at all. So there are often delays in handling incoming letters. Another thing that is also an inhibiting factor is the problem of bureaucratic flow which can be said to be quite long, so that sometimes the process of completing files takes a long time. In the ULA SPO itself, at the stage of signing the file by the relevant official, the time for completion is not stated because up to now, there is no definite time because it has to be adjusted to the time of the relevant official.

### **Obstacles in implementing E-Government in Indonesia**

Based on several research results on the implementation of E-government in several areas above, it can be seen that the implementation of e-government in Indonesia has developed in recent years, but there are still several obstacles in implementing e-governance in Indonesia. E-governance is part of e-government which includes government management carried out electronically through information and communication technology (ICT) systems. One of the obstacles in implementing e-governance in Indonesia is the low level of literacy in digital society. People who do not understand the use of information and communication technology in government will have difficulty accessing e-government services. Apart from that, inadequate quality of human resources is also an obstacle in implementing e-governance. Government employees who do not understand the use of information technology in government will have difficulty managing e-government systems (Umbach & Tkalec, 2022b).

Inappropriate regulations are also an obstacle in implementing e-governance in Indonesia. Several regulations are not yet in accordance with developments in information and communication technology in the implementation of e-government and e-governance (Idzi & Gomes, 2022). Therefore, to overcome these obstacles, the government must increase digital literacy in society, improve the quality of human resources, and adapt existing regulations to developments in information and communication technology. Apart from that, the government must also improve ICT infrastructure and provide stable and fast internet access in all regions, as well as provide adequate education and training for government employees in handling e-government and e-governance systems.

The government must also pay attention to security aspects in developing e-governance, so that the security of the public data collected can be guaranteed. The government must also ensure that the e-governance system offered complies with applicable regulations. Overall, the implementation of e-governance in Indonesia requires strong support from the government and society to be able to overcome the obstacles faced and the factors enhancer Which influencing the success of e-governance in Indonesia (Miskiewicz, 2022). In this way, it is hoped that it can improve efficiency, transparency and accessibility in better government services and be able to provide optimal benefits for the community and government.

*E-government* can help the government in collecting data and information from the public



and analyzing it to support the decision-making process. E-government can also be used to increase access to public information needed by society and the government. With e-government, people can easily access the information they need, such as demographic data, economic data, and so on. E-government can also be used to improve coordination and cooperation between government service agencies, so as to increase efficiency in public services. E-government can also be used to improve the quality of public services provided by the government. Overall, e-government is a system that can be used by the government to increase efficiency, effectiveness, transparency and accountability in managing government and public services, as well as improving government performance and community integration.

In general, the implementation of e-government in Indonesia is currently quite developed and shows quite positive developments, but more consistent and integrated efforts still need to be made to expand the scope of e-government implementation in Indonesia and overcome the obstacles faced. This can be done by increasing cooperation between government agencies, as well as expanding public and private participation in the development of e-government in Indonesia. Apart from that, efforts need to be made to continue to improve the quality of human resources related to e-government and ICT infrastructure in Indonesia (Meiyanti et al., 2018)

### **Solutions to overcome obstacles to implementing E-Government in Indonesia**

In overcoming the obstacles faced in implementing e-government in Indonesia, several efforts that can be made include:

- a) **Increasing digital literacy:** One of the obstacles faced in implementing e-government in Indonesia is the low level of digital literacy in society. Efforts to increase digital literacy can be made by providing education and training about the use of ICT and the benefits of e-government to the community. This can be done through community programs or collaboration with educational institutions. In addition, the government can provide facilities such as computers and free internet access in public places that can be accessed by the public. This effort can be done by providing education and training about the use of ICT and the benefits of e-government to the community, especially in areas that still have low levels of digital literacy.
- b) **Increasing ICT accessibility:** Accessibility to ICT is still low in most regions in Indonesia, especially in rural areas. Efforts to increase ICT accessibility can be made by expanding the reach of internet networks and improving the quality of ICT infrastructure throughout Indonesia. This can be done through collaboration with telecommunications companies or by allocating special funds to build ICT infrastructure in the region. This effort can be done by expanding the reach of the internet network and improving the quality of ICT infrastructure throughout Indonesia, especially in rural areas.
- c) **Regulatory improvements:** Almost all e-government implementation in Indonesia is limited by existing regulations. Efforts to review and change existing regulations that are

considered to be hampering the development of e-government, and the development of new regulations that are more in line with technological developments and community needs are expected to be able to overcome the regulatory obstacles faced. Efforts need to be made to review and change existing regulations that are considered to hinder the development of e-government, and to develop new regulations that are more in line with technological developments and community needs.

- d) **Improving the quality of human resources:** The quality of human resources related to e-government is still low in several government agencies. Efforts to improve the quality of human resources can be done by providing training and education about ICT and e-government to government employees, as well as improving employee qualifications related to e-government. This effort can be done by providing training and education about ICT and e-government to government employees, as well as improving employee qualifications related to e-government.
- e) **Increased public trust:** Public trust in e-government services is still low. Efforts to increase public trust can be done by increasing transparency and accountability in e-government services, as well as making efforts to improve the quality of e-government services. This effort can be made by increasing transparency and accountability in e-government services, and making efforts to improve the quality of e-government services.
- f) **Cooperation and coordination:** To overcome the obstacles faced in implementing e-government in Indonesia, it is necessary to carry out close cooperation and coordination between the government, the private sector and the community in developing e-government. This collaboration can be carried out through mechanisms, such as the preparation of a clear cooperation framework, the assignment of integrated work teams consisting of various parties, as well as good and regular communication mechanisms. This will help in overcoming the obstacles faced in implementing e-government and make the efforts made more effective and efficient. Close cooperation and coordination between the government, the private sector and the community in developing e-government will make the efforts carried out more effective and efficient.
- g) **Monitoring and evaluation:** The implementation of e-government in Indonesia needs to be monitored and evaluated continuously to identify problems that arise and evaluate the success of the efforts that have been made. This will help in optimizing e-government implementation and taking appropriate action to overcome the obstacles faced. It is necessary to continuously monitor and evaluate the implementation of e-government, to identify problems that arise and evaluate the success of the efforts that have been made.

## **CONCLUSION**

Based on the analysis that has been carried out, it can be interpreted that the implementation of e-government in Indonesia is currently quite developed and shows positive developments. However, there are still several obstacles faced in implementing e-government

in Indonesia, such as the low level of literacy in digital society, the low level of accessibility to ICT in most regions in Indonesia, and there are still regulatory obstacles that hinder developmente-government, and the low level of public trust in e-government services.

To overcome these obstacles, integrated efforts need to be made, such as increasing digital literacy, increasing ICT accessibility, improving regulations, improving the quality of human resources, increasing public trust, close cooperation and coordination between government, the private sector and society in developing- government and carry out continuous monitoring and evaluation. These efforts must be carried out consistently and continuously to overcome the obstacles faced and increase the success of e-government implementation in Indonesia.

## **REFERENCE**

- ACCH (Anti-Corruption Clearing House : Sejarah Panjang Pemberantasan Tindak Pidana Korupsi  
Alathea rabbani dalam SOSIOLOGI79, 9 Februari 2017 : Hukum Represif dan Restitutif  
CNN Indonesi, 09 Januari 2021: Korupsi Era Ode Baru dan Munculnya Raja Baru Usai Reformasi  
Detik.com 1 September 2021 : Ahir Drama Hinaan dan Vonis 12 Tahun Penjara Untu Juliari Batubara  
Redaksi SOSIOLOGI 2 November 2017 : Teori Solidaritas Sosial Emile Durkheim : Mekanik,  
UU No 7 tahun 2017 tentang Pemilihan Umum  
UU No 31 tahun 1999 sebag aimana telah diubah dengan UU No 2o tahun 2001 tentang Pembarantasn Tindak Pidana Korupsi, pasal 2 ayat (1) dan ayat (2)  
Zulfa ‘Azzah Fadhlika pada Haylaw Edu – Marceh 3, 2022 : Mewujudkan Hukum Yang Ideal  
The Dibision Of Labor Society  
Organi, dan Contohnya