

E-government as Good Governance in Building Post-Covid 19 Technological Innovations

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Abstract. Coronavirus Disease 19 has turned into a worldwide pandemic, Indonesia and the whole world is experiencing it. In a short time, it has spread to all parts of the world. E-government is an effort and process carried out by the government to implement computers, computer networks, and information technology in government and public services. Good governance will create clean and transparent government services to achieve common goals. In implementing e-government in Indonesia, the obstacles faced include are 1) the absence of national standards 2) Inadequate facilities and infrastructure, 3) limited talented human resources, low public understanding of e-government services, and 4) many local governments identify the e-government implementation only by creating a local website. But in pandemic implementation of e-government increase.

Keywords: Covid19, e-government, good governance, digital Innovation.

1. Introduction

Coronavirus Disease19 has become a global pandemic in Indonesia and the whole world experiencing it. In a short time has spread to all hemispheres. As of August 12, 2021, approximately 204 million people from 223 countries have been hospitalized or self-isolating. This epidemic also caused more than 4 million people to die worldwide (World Health Organization data source). Meanwhile, until now in Indonesia, there are approximately 3.7 million confirmed positive cases, and about 113 thousand people have died from this virus (www.covid19.go.id accessed August 13, 2021). This pandemic forces us to maintain social distance, work from home, a study from home, and spend more time at home to suppress the spread of Covid19.

Information technology and communication (ICT) can promise efficiency, speed of information delivery, affordability, and transparency, not least for the government, especially during this pandemic. In addition, the current local government needs to realize good governance. To learn good governance by using information technology and communication, the government implements it into a system known as e-government. Through the implementation of e-government, the improvement of public services can be realized. As stated by [1], the government bureaucracy can develop the implementation of information technology and communication (ICT) in government activities, among others, to be a place of interaction with the public.

Following the Circular Letter of the Minister of State Apparatus Empowerment and Bureaucratic Reform of the Republic of Indonesia, Number 19 of 2020 concerning Adjustment of the Work Procedure of the State Civil Apparatus in Efforts to Prevent the Spread of Covid 19 in the Government Environment and the issuance of a circular letter of the Minister of State Apparatus Empowerment and Bureaucratic Reform, Republic of

Indonesia Number 34 of 2020, among others that public services within the government can continue to run effectively. Public services by applying the principles of good governance must not stop during the COVID-19 pandemic. Digital bureaucratic services are a solution for optimizing public services during the COVID-19 pandemic. This is what underlies e-government research as good governance in building technological innovation in the post-pandemic period. This study aims to provide an overview of the importance of implementing e-government during the pandemic and after the pandemic ends and to find out what innovations need to be improved so that e-government in Indonesia can be implemented effectively.

2. Literature review

2.1. E-government

Information and communication technologies (ICTs) are used to transform traditional governance into more accessible, transparent, effective, and accountable is the implementation of e-government. The adoption of e-government technologies helps improve the efficiency and effectiveness of public service delivery of public organizations. It allows the government to use available resources to their best advantage, promote community development and sustainable development[2]. For e-government to be a realistic promise and carry valuable prospects to help achieve the goals of good governance, development and democracy must be components of comprehensive national strategy, signaling a willingness by the leadership to adjust to new advances and to conquer different hindrances, including political, instruction, innovation, and framework. Financial development, engaged bodies electorate, transformed establishments, and more productivity and viability in arrangement making and organization are potential benefits of the successful implementation of e-government initiatives[3].

During the current pandemic, other governments spent more than triple their supported financial plans on local area policing, cleaning and upkeep administrations. Their incomes from conventional sources, like the public vehicle, traffic fines, deferred duties, and rents from committee properties, experience the ill effects of this: self-confinement and monetary lockdown[4]. The execution of e-government in Indonesia is still most of the way and still far underneath the ideal and wanted norm. The exceptional lack isn't just in the neighborhood setting yet in addition in the worldwide setting. Quantitative accomplishments show huge advancement, yet it isn't adequate as far as quality because of inadequacies in HR, foundation, and guidelines. Consequently, it is important to refine the idea and technique of carrying out e-government from different sides. The presence of rules and principles for e-government advancement should be made so that there is no definition and which means of e-government exclusively by the coordinators, to be specific nearby governments[5].

2.2. Good Governance

Good governance is an issue that arises in public administration management; this is reflected from the intense demands from the community to state administrators, both in the public authority, the agent chamber, and the legal executive, to complete great administration. This interest doesn't just come from the Indonesian public yet additionally the worldwide local area[6]. Good governance is a conceptual understanding of the underlying principles. Starting from these principles, the benchmarks for the performance of a government are community participation, the rule of law, transparency of stakeholder concerns, based on the principles of equality, effectiveness and efficiency, accountability,

and strategic mission[7]. To implement good governance, the government must have a good public communication approach to know the actual data and what steps the public should take systematically. Good cooperation between the government and the people can also produce good results to overcome the COVID-19 pandemic[8]

The principal systems of good administration are straightforwardness, responsibility, proficiency, adequacy, and productivity, and viability. For this situation, advanced administration assists policy management with expanding straightforwardness and responsibility, while organization permits the public authority to work proficiently and successfully[9]. In international development, good governance measures how open organizations lead public undertakings and well oversee public assets. The administration is "the course of dynamic and the cycle by which choices are carried out or not executed". Administration in this setting can apply to corporate, global, public, or neighborhood administration and collaborations between different areas of society[10].

2.3. Information Technology (IT) Innovation

The more IT administration instruments are executed, the more adult the use of good administration standards, as well as the other way around. IT can advance great administration in three fundamental manners: expanding straightforwardness, data, and responsibility work with a precise dynamic and public cooperation and work on the productive conveyance of public labor and products. In this way, giving fitting IT systems and IT administration instruments significantly expands the straightforwardness of dynamic outcomes and indistinct cycles to all partners before carrying out the IT structure[11].

In technology, policymakers and financial backers in regards to IT prospect markets ought to consider international occasions and themes with regards to IT instability anticipating, hazard the board, and portfolio designation in their application[12]. The low usage of new ICT can likewise be a result of the diminished consolation or backing given by formal establishments, which has prompted a huge hole in the uniform pervasiveness of ICT essentials the nation over, for example, web availability and prepared staff[13]. Innovation can be valuable in decreasing the seriousness of the effect of the Covid pandemic on individuals, associations, and society. Nonetheless, utilizing innovation to battle the pandemic security, protection, inclination, morals, and computerized[14].

Developing technological innovation needs connectivity, and talented human resources and government support are needed[13]. Adoption of local IT correlated with measures of work-at-home eligibility. However, regional IT adoption and working from home independently protect the economy from local mobility shocks[15].

3. Methodology and data analysis

The type of this research is a literature review, which means a research methodology that aims to collect and extract the essence of previous studies and analyze several overviews of experts written in the text[16]. The research method is a series of steps or systematic procedures used to find the truth in scientific work, in this case, journal writing, to produce a quality journal that meets research requirements[17]. In this study, the approach used is descriptive qualitative. Our data was obtained by collecting previous research and sources relevant to this research problem. The study focuses on the implementation of e-government in Indonesia. Processing and analyzing data does not use numbers, symbols, or mathematical variables but with in-depth analysis of the research.

4. Research Results and Discussion

4.1. The development of e-governance in Indonesia

The execution of e-government in Indonesia started with Official Guidance No. 3 of 2003. It means that it has been 18 years since the issuance of presidential instruction. However, in reality, not all regencies/cities in Indonesia implement e-government. The execution of e-government in Indonesia is as yet supposed to be low because there are as yet a few impediments in the execution cycle of the 548 provincial, city, and district governments using e-government, only four regions have been running. Namely, two regional governments in East Java and two regional governments in Central Java, meaning that 0.72% are still implementing e-government and 99.28% are still implementing e-government. Have not utilized e-government[18]. There is no national standard of regulation that regulates the implementation of e-government so that local/municipal governments still interpret themselves regarding the performance of e-government, facilities, and infrastructure, limited competent human resources, low public understanding of e-government services, and many local governments identify e-government implementation as merely creating a local government website (web presence).

E-government is the utilization of data innovation that can further develop relations between the public authority and different gatherings. There are at least four classifications of relationships in the new form of the use of information and communication technology there are 1). Government to Citizens (G-to-C), 2). Government to Business (G-to-B), 3). Government to Government (G-to-G) and 4). Government to Employees (G-to-E)[19]. For e-government services to run effectively, innovation related to technology must be improved, both in content or networks easily accessible by the public.

After the Coronavirus pandemic, the utilization of e-government in Indonesia has expanded. According to[20], Indonesia climbed 35 ranks on the e-participation index in 2020, from the previous rank of 92 in 2018. The implementation of e-government after covid includes 1) sharing information through the Covid-19 portal developed through the Website for the National Cluster COVID-19 Tasks, 2). E-health is a Virtual doctor-developed through Artificial Intelligence for the detection of Covid-19, 3). E-business such as online shopping and delivery of goods, 4). Contact tracing, tracking, and tracing through *PeduliLingkungan* (Care & Protect) application, 5). Social distancing and virus tracking were developed through the social distancing robot medical assistant ITS Airlangga (RAISA) and the last 6). Carry out work and study activities through E-learning, learning from home.

4.2. Barriers faced in the implementation of e-government

The obstacles faced in the process must found a solution so that e-government can run immediately so that public services continue to run effectively. In technological innovation, adequate facilities and infrastructure are needed, such as connectivity and human resources. In any case, insufficient assets, not administration mentalities, and framework qualities are the principal issue of the end-product of preparation[21]. As far as e-government execution, its focal point/IS reception should be transformed from the typical IT/IS. An establishment approach is an institutional methodology that accentuating instinctive development in government and the worries and needs of government employees and residents[22]. Study[23] finds that e-government execution endeavors in Oman are as yet in their beginning phases, and the nation faces a few difficulties in such a manner. Among the most noticeable components recognized as the principle challenges for e-government, execution is the absence of procedure, administration, lawful and administrative structures, and foundation-related issues.

Although the COVID-19 pandemic is global, the handling is still local, and this is because state regulations, governance mechanisms, links to science-based decision-making, local governance, and people's behavior are different in each country[24]. For example, research conducted in Nepal, the implementation of e-government be affected by low education rates, low per capita pay, helpless framework, absence of HR, political unsteadiness, absence of administration and responsibility/coordination, restricted monetary assets, and absence of mindfulness preparing[25]. With higher IT adoption. IT can significantly protect local economies during the COVID-19 pandemic[26].

The execution of e-government in Indonesia is impacted by an unmistakable image of the presentation of e-government because of the shortfall of clear normalization and socialization. The scarcity of adequate human resources, information technology services that are not evenly distributed, still not even distribution of community literacy is related to the use of e-gov because the majority of the population is in the lower-middle-class line[5]. According to[27], Indonesia's barriers to e-government include e-leadership, information network infrastructure, information management, business environment, and community and human resources. Obstacles or challenges in implementing e-government in Indonesia to meet the industrial revolution 4.0. The culture of sharing information does not yet exist, the culture of documenting is not uncommon, the scarcity of reliable human resources in the IT field, infrastructure that is inadequate and expensive, limited access to information[28].

E-government is an effort and process carried out by the government to implement computers, computer networks, and information technology to run government and public service and measure efficiency dan effectiveness. Designers and partners should guarantee that the data gave through e-government data administrations are exact, finished, predictable, right, and reliable[29]. In implementing e-government, local governments experience several obstacles. During the pandemic, where social interaction makes public services limited. Therefore, the Minister of State Apparatus Empowerment and Bureaucratic Reform circular was issued, one of the objectives of which is to ensure that public services in government agencies can continue to run effectively. Data show the efforts made by the government were maximal, during the pandemic the implementation of e-government in Indonesia experienced a significant increase. This can be seen from the results of a survey conducted by the Department of Economic and Social Affairs in Asia including Indonesia. This survey aims to find out Digital Government Initiatives in response to the COVID-19 Pandemic. Which experienced an increase in ranking both in the implementation of e-government and e-participants from the survey conducted the previous year. This shows the seriousness of the government in implementing the implementation of e-government.

5. Implications and Suggestions for Research

Public institutions, especially the government, are expected to start making e-government development plans within their scope of work. So that they can increase the quality and amount of administrations to the public based on information technology and support a clean and transparent government process by providing services that enable the public to access information and government policies, e-government can also shape improvements to government organizations (bureaucracies), including improving time management for discipline and employee productivity and financial management in integrated government.

Realizing the snags identified with the execution of e-government in Indonesia, it is hoped that it can be used as a reference for improvement in formulating a technology

innovation strategy after this pandemic. It is considering that e-government services are not limited to only website implementation but also information technology to interact with the public, providing information for business, government services with other governments, the government, and its employees. If the implementation is effective and sustainable, it will be able to support economic development because technology helps the government to be able to create a healthy business by implementing e-government.

For further research, it can be analyzed whether the implementation of e-government in Indonesia is effective enough by using the performance measurement method.

6. Reference

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