

Application Of E-Government In Welcoming The Era Of Contemporary Industrial Revolution 4.0 In Indonesia

P. Jefri Leo Chandra S, Adriana Grahani Firdausy

Sebelas Maret University Masters Program

***Abstract** This research aims to find out and examine the application of e-government in welcoming the era of the industrial revolution 4.0 which has recently been very influential in aspects of life in Indonesia. This is very interesting to study because during this transition period all countries and especially Indonesia have implemented the role of industry 4.0 in government components. The research method used in this research uses a type of normative legal research, with the research approaches used being a statutory approach and a case approach. The results of the first research analysis show that the development of the e-government system in Indonesia has begun to increase in quantity, but in terms of quality it is still inadequate because the implementation of e-government has not been evenly distributed throughout the region and it still only functions as a provider of static information. Second, there are fundamental obstacles in the implementation of e-government. -government in the industrial revolution 4.0 is at the regional government level, including; the initiative and meaning of e-government implementation by autonomous regional governments is still individual; implementation via the regional website is not yet supported by an effective management system and work processes due to the readiness of regulations, procedures and limited human resources; Many local governments identify the implementation of e-government as simply creating a local government website (web presence). Third, the projection of e-government in the future, whether the industrial revolution 4.0 is still ongoing or in the future after undergoing regeneration, must have the best formulation, including: (1) Good legal regulatory order and legal protection. (2) The government is proclaiming education, especially in the IT sector, as the formation of qualified human resources from now on. (3) Adequate infrastructure and availability of access media. (4) Formation of good character and work ethic for human resources for government officials. (5) Changing the mindset of the apparatus to become a disruptive mindset of the apparatus in Indonesia. (6) The industrial revolution 4.0 is based on a mental revolution. (7) Creating reliable Intrepreneurial Leadership. (8) Strengthening religious education.*

***Keywords:** E-government, Welcoming, Industrial Revolution 4.0*

INTRODUCTION

Good governance has the meaning of good governance related to clean and authoritative government that is free from Corruption, Collusion, Nepotism (KKN) with principles of transparency, accountability, upholding the law, and open community participation.¹ To realize Clean and Good Governance, especially in terms of public accountability and transparency, requires directed policy steps in changing institutional and management systems through the use of Information and Communication Technologies (ICT), namely e-government or Electronic Government. Susartono, in his journal research entitled E-government in Indonesia, concluded that the implementation of e-government aims to increase public participation.

E-government is an information technology system developed by the government to improve public services by giving the public options for easy access to public information. Implementing good governance and improving effective and efficient public services requires e-government development policies and strategies. These policies and strategies are regulated

in Presidential Instruction Number 3 of 2003 concerning National Policies and Strategies for E-government Development at all levels of government as a whole.

Digitalization has begun to enter the crevices of our daily lives. These technological advances were then widely used by the public sector and the private/private sector. Many companies and even small creative industries use digital technology to develop their businesses. Thus, in this paper we will describe: first, how the implementation of e-government services has developed in welcoming the era of industrial revolution 4.0, and second, what obstacles influence the implementation of e-government in terms of the current human resources of Indonesian society, and third, the best formulation for prepare future e-government projections, both while the industrial revolution 4.0 is still ongoing and after undergoing regeneration

RESEARCH METHODS

This type of research is normative legal research with the main focus on reviewing library materials. Normative legal research is legal research that uses secondary data. Secondary data comes from primary legal materials, secondary legal materials and tertiary legal materials. Secondary data Priority is sought for legal regulations related to the implementation of e-government in the industrial revolution 4.0 era, however secondary data apart from those sourced from primary legal materials also comes from secondary legal materials and tertiary legal materials which are closely related to the research topic. The research approaches used are the statutory approach and the case approach

DISCUSSION

The Role of E-Government as Part of Smart Government in Supporting and Welcoming the Era of Industrial Revolution 4.0

Some time ago the President of the Republic of Indonesia Joko Widodo launched the "Making Indonesia 4.0" road map, which is a national strategy in facing the era of the Industrial Revolution 4.0. With the launch of this roadmap, the government is now racing to prepare itself to face the wave of technological disruption. Socialization continues to be encouraged in the fields of industry, economics and education. Based on Law Number 25 of 2009 concerning Public Services, Public Services are activities or series of activities in order to fulfill service needs in accordance with statutory regulations for every citizen and resident for goods, services and/or administrative services provided by service providers. public. Then the connection with public services and the current era of the Industrial Revolution 4.0, is actually clearly contained

in Law Number 25 of 2009 concerning Public Services, there is an article which stipulates that Public Services must have a system that can provide convenience to the public. Referring to Article 23 paragraph (1) of Law Number 25 of 2009 concerning Services Public, it is stated that "In order to provide information support for the implementation of public services, it is necessary to organize a national Information System" while in Article 23 paragraph (4) of Law Number 25 of 2009 concerning Public Services, organizers are obliged to manage Information Systems which consist of Systems Electronic or Non-electronic Information which at least includes; organizer profile, implementer profile, service standards, service announcements, complaint management and performance assessment. Therefore, it is quite clear that every organizer is required to provide a national information system. In this way, information technology plays a major role in fulfilling this system on a national scale. This should be a concern for the government to be able to adjust the delivery of its services to the community in facing the current Industrial Revolution 4.0, namely by implementing technology-based (digital) public services. Because, with technology, transparency, speed, convenience which are the keys to a service will be realized, it is not surprising that services in the private/private sector will usually be better because of the use of increasingly sophisticated technology in the process of providing services to maintain customer trust so that the business is run will continue to be productive.

This should also be implemented by the government as the organizer of public services, especially since the number of "customers" who access services in the public sector is greater than in the private/private sector. So if the government wants to gain the trust of "customers", in this case the public, the government should start to get serious about utilizing digital technology in the era of the Industrial Revolution 4.0, in providing public services. So it is not only the private/private sector that can take advantage of current technological advances but also the state/public sector. In fact, currently the Ministry of State Apparatus Empowerment and Bureaucratic Reform (MenpanRB) as the ministry that assists the President in organizing government which has the function of formulating and establishing policies related to public services has begun to utilize Information Technology to apply the Law in providing information nationally, namely by enacting Regulation of the Minister of State Apparatus Empowerment and Bureaucratic Reform of the Republic of Indonesia Number 13 of 2017 concerning Guidelines for Implementing the National Public Service Information System (SIPPN). In the Regulation, Article 3 states that Ministers, Heads of Institutions, Governors, Regents, Mayors, Main Directors of BUMN, Main Directors of BUMD are obliged to ensure the provision of public service information into SIPPN after the enactment of the

Regulation of the Minister for Empowerment of State Apparatus and Bureaucratic Reform in accordance with the provisions of the regulation. legislation. After more than a year of promulgation of this regulation, the Minister of Administrative and Bureaucratic Reform launched the SIPPN application which can be accessed via <http://sipp.menpan.go.id/> as a forum for information on public services for all implementing agencies national public services starting from regional governments, ministries/institutions, non-structural institutions and BUMN/BUMD. However, the SIPPN which is being developed by the Menpan RB is still not perfect because not all regional governments or ministries/institutions have input public service information data in their respective agencies into the SIPPN application at <http://sipp.menpan.go.id/>. The weak authority of the Minister of Administrative and Bureaucratic Reform to encourage these agencies to integrate public service data for each agency into the SIPPN application is one of the obstacles to the ineffectiveness of the application. In fact, with SIPPN public services in Indonesia will be integrated with each other. So all information related to public services can be accessed through the SIPPN application. Apart from that, SIPPN is a form of effective community supervision and participation so that abuse of authority in the delivery of public services is prevented.

The e-government system, which is the government's effort to implement the use of computers, computer networks and information technology to run government, especially public services, is still very minimal. There are still very few Ministries/Institutions and Regional Governments that utilize technology in the public service process. In fact, if e-government itself is implemented in every government then this is in line with the Industrial Revolution 4.0. E-government has many benefits in the democratic system that we are currently implementing, including increasing the speed of communication between government, society, the private sector, as well as internet-based coordination between agencies. Apart from that, to create transparent services, increase accountability in the government administration process, save government budgets, and facilitate the flow of information that can be accessed openly in order to realize the ideals of good governance and open government in government administration in Indonesia. Quoting Dunleavy's statement when introducing the digital concept governance in 2005 as a replacement for New Public Management (NPM) which was widely adopted in government, said that digital was very important in government governance. Even the Professor of Politics and Public Policy at the London School of Economics and Political Science (LSE) also stated that "New Public Management is Dead, Long Live Digital Era Governance". So it is none other than the digital era that we are currently facing in the

Industrial Revolution 4.0 in government governance that inevitably must be implemented immediately.

The implementation and development of e-government, apart from requiring reliable technological support, is also very much determined by the support of the competence of Human Resources (HR) of the staff/employees of each work unit. The number of human resources who are able to use computers is adequate, this is shown by 25% of respondents stating that the number of human resources who are able to use computers in their work units is less than 10 people, 25% of respondents stated that it is between 10 to 10 people. 25 people. 25% of respondents stated between 25 s.d. 50 people, and 25% of respondents said more than 100 people. The computer educational background of staff/employees who are able to use computers shows that 50% of respondents stated that they had a bachelor's degree, 25% said it was because of their diploma, 25% said it was because of their training, 50% said it was because of their courses, and 75% said it was due to self-study.

The implementation of e-government will be optimal if all staff/employees are competent in utilizing all the facilities according to their respective duties and management. To be able to utilize e-government optimally. All respondents stated that all human resources needed additional education specifically on competency in using e-government. 75% of respondents stated the need for additional special education in the field of e-government programmer competency, 75% stated the need for internet competency, 100% stated the need for additional computer technician competency, 75% stated the need for additional operator competency, and 75% stated the need for additional word processing and data. The priority of additional special education required was stated by 50% of respondents stating the field of programmer competency, and the other 50% of respondents did not provide an answer.

To support additional special education in the field of e-government, 50% of respondents stated the need for leadership policies regarding learning assignments for staff/employees through work-learning assignments, and 50% of respondents stated the need for full study permits. Other suggestions that emerged from respondents were the need for a human resource development map in the e-government sector.

E-government should be socialized to all elements of society. This data shows that human resources are ready to implement e-government. However, commitment from all parties is still needed to improve the e-government competency of each staff/employee according to their main duties and functions, management , and his abilities.

Obstacles That Influence the Implementation of E-Government Seen from the Current Human Resources of Indonesian Society

There are several things that are obstacles or challenges in implementing e-government in Indonesia to welcome the industrial revolution 4.0, including: (1) The culture of sharing information does not yet exist, (2) The culture of documenting is not yet common, (3) Scarcity of human resources reliable in the IT sector, (4) Inadequate and expensive infrastructure, (5) Limited access to information. Retnowati said the determining factors for the success of implementing e-government are: (1) What needs are currently the main priorities of the people in the country or region concerned, (2) Telecommunication infrastructure, (3) Level of connectivity and use of IT by the government, (4) Readiness of human resources in the government, (5) Availability of funds and budgets, (6) Availability of legal instruments, (7) Paradigm changes in the way human resources work and behavior in the apparatus. So the most urgent factor in the scope of human resources is the problem of the current lack of qualified IT experts in Indonesia, and there are still many officials in government who are still technologically illiterate, especially for the older generation who are still filling in various segments. government to date.

However, according to the author, there are three fundamental obstacles in the implementation of e-government at the regional government level, including; First, the initiative and meaning of e-government implementation by autonomous regional governments is still individual. Second, implementation via the regional website is not yet supported by an effective management system and work processes due to readiness of regulations, procedures and limited human resources. Third, many local governments identify e-government implementation as simply creating a local government website (web presence), so that e-government implementation only stops at the maturation stage of the 4 stages that must be passed.

CONCLUSION

Projections for e-government in the future, whether the industrial revolution 4.0 is still ongoing or in the future after undergoing regeneration, must have the best formulation, including: (1) Good legal regulatory order and legal protection. (2) Government proclaiming education, especially in the IT field, as the formation of qualified human resources from now on. (3) Adequate infrastructure and availability of access media. (4) Formation of good character and work ethic for human resources for government officials. (5) Changing the mindset of the apparatus to become a disruptive mindset of the apparatus in Indonesia. (6) The

industrial revolution 4.0 is based on a mental revolution. (7) Creating reliable Intrepreneurial Leadership. (8) Strengthening religious education.

E-government is a supporting tool for achieving clean and good governance, because Indonesia is still just implementing e-government and has not yet developed quickly, so clean and good governance in Indonesia has not yet been achieved. However, it does not rule out the possibility that in the future the development of Indonesian e-government implementation will be successful.

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