Inhibiting Factors The E-Government Development in Indonesia from 2010-2020: A Systemic Review

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Abstract

This research aims to determine the factors inhibiting the development of e-government in Indonesia because Indonesia is one of the countries that has the potential to develop e-government well. However, in practice, the Indonesian government still often experiences problems in developing e-government. To find out the factors inhibiting e-government development in Indonesia, the author conducted a literature review of various research articles on e-government development in Indonesia from 2010 to 2020. We reviewed English language articles published in reputable international journals indexed by Scopus at least Q3, and procedia with Hi-Index value above 50. These articles were obtained from Science Direct, Emerald Insight, Taylor and Francis, and Google Scholars. The author found 40 articles that were relevant to the data need and made a mapping. The research results found seventeen factor inhibiting the development of e-government in Indonesia, these factors are technical and non-technical.

Keywords: *E-Government Development, Inhibiting E-Government, Digital Transformation, Governance Challenges, Developing Countries*

INTRODUCTION

The development of digital technology in various parts of the world significantly changes the way public administration works such as communication (Vie, 2010), leadership (Reddick, 2011), work orientation (Tassabehji, 2016), etc. Changes in the way public administration works using digital technology are called e-government (Yuan et al., 2012, Gomes & Laureano, 2018, Mensah, 2018). Each country has different ways of utilizing e-government, as in Japan it is used to support economic investment (Tanaka et al., 2005), in Singapore it is used for branding (Chan et al., 2008), in Lithuania it is used for an informative community ecosystem (Kažemikaitiene & Bilevičiene, 2008), in Latin America and Africa it is used as a means of disseminating public information (Lau et al., 2008, Rorrisa & Demissie, 2010), in the United States and Sweden it is used for inviting people to participate in development (Nygren, 2010, Ganapati & Reddick, 2012), in Russia it is used for integrating central and regional government (Kalinina & Borisova, 2013), etc.

According to the World Bank and Asian Development Bank, a country must have good internet facilities and infrastructure to be able to develop e-government (Indrajid, 2017). Currently, many countries are taking serious action to build internet facilities and infrastructure, one of which is Indonesia with the Palapa Ring project (Bernadette et al., 2022). Indonesia is a country that has great potential to develop e-government because it has a large number of Internet users. About a decade ago, Indonesia had 73 million internet users (Ministry of Communication and Informatics of the Republic of Indonesia, 2014), or around 30% of the total population (Central Bureau of Statistics of the Republic of Indonesia, 2013). Along with the rapid development of technology, the number of Indonesian internet users reached 175 million people, or around 54% of the population in 2020 (We Are Social, 2020). This number reflects Indonesia as the country with the 3rd highest internet growth rate in the world (We Are Social, 2020).

Even though Indonesia has great internet development, it does not guarantee that its government can develop e-government well. From data released by the United Nations, from 2010 to 2020 Indonesia's e-government development index ranking was very unstable. In 2010, Indonesia's e-government development index was ranked 109th (United Nations, 2010), then in 2012 it rose to 97th (United Nations, 2012), but in 2014 and 2016 Indonesia's e-government development index fell to 106th and 116th (United Nations, 2014; United Nations,

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2016). In 2018 and 2020 Indonesia's e-government development index ranking rose again, in 2018 it rose to rank 107th (United Nations, 2018), and in 2020 it rose to rank 88th (United Nations, 2020). These data showed that the development of Indonesian e-government was in an unstable and unfavorable condition. Even when compared with neighboring countries in the Southeast Asia region, such as Singapore, Malaysia, and Thailand, e-government development in Indonesia is still very far behind. In 2020, Singapore was ranked 11th in terms of e-government development, then Malaysia was ranked 47th and Thailand was ranked 57th (United Nations, 2020).

This fact shows that the Indonesian government has problems in developing e-government, even though Indonesia has the potential to develop e-government well. This poor condition of e-government development must be immediately overcome by the Indonesian government to achieve the national digitalization target in all government sectors by 2025 (President of the Republic of Indonesia, 2018). Through this article, the author aims to find out and map the factors that inhibit the development of e-government in Indonesia by conducting a literature review of various research on e-government development in Indonesia from 2010 to 2020. The author hopes that the input from this article can be used as a reference for parties involved in e-government development.

METHODOLOGICAL APPROACH AND DATA SOURCE

The literature review research that the author conducted is a type of qualitative research and is included in the document analysis category (Wolff, 2017). Literature reviews help describe the state of a social condition quickly and measurably (Helen et al., 2019). The object was a scientific article. A document can be used as a research object because it is a data source (Woolgar, 1980; Knorr-Cetina, 1981; Wolff, 2017). Documents are a source of knowledge that contains a lot of information or phenomena (Gusfield, 1976). They are also one type of interpretation of social conditions that occur in an environment (Smith, 1978; Wolff, 2017). By conducting a literature review, the author was able to map the factors inhibiting the development of e-government in Indonesia from 2010 to 2020.

This research was carried out from January to April 2024. In January the author carried out data mining on e-government development research in Indonesia from 2010 to 2020 on several international article databases such as Science Direct, Emerald Insight, Taylor and Francis, and Google Scholar. To search for these articles the author used the keywords 'Indonesian E-Government Development'. Exploring scientific article manuscript documents through international article databases can make it easier for people to develop knowledge (Donthu et al., 2021). Then in February, the author selected the articles. The scientific article selected as data in this research is a research manuscript on the development of e-government in Indonesia which has been published in a reputable international journal indexed by Scopus at least Q3, and a Scopus indexed procedia with a Hi Index value above 50. Apart from that, the author only took data from articles that discuss the provision of online services, telecommunications connectivity, and human capacity in a country because these three points are indicators set by the United Nations in mapping the e-government development index ranking of countries throughout the world (United Nations, 2003).
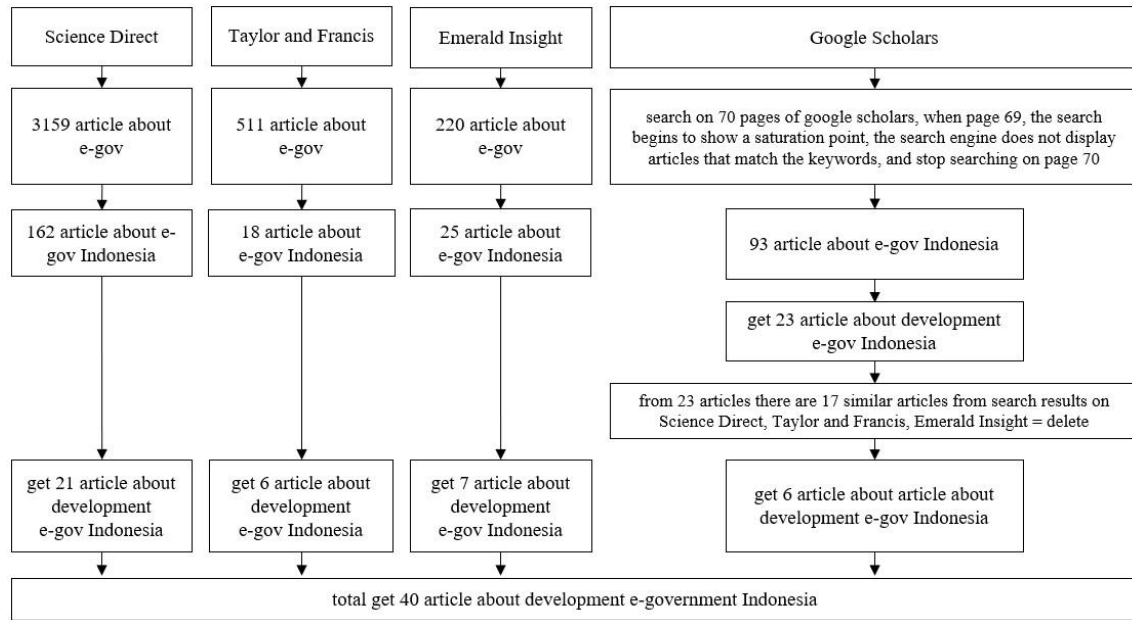
Figure 1. Article Search Process About Development E-Government Indonesia

Source: author's research results 2024

In the Science Direct database, the author found 3159 articles related to keywords, then the author chose articles that were in the subject area of social science and related to Indonesian e-government development. From the thousands of articles the author got 162 articles discussing e-government in Indonesia, then from hundreds of articles, only 21 articles discussed Indonesia's e-government development. Therefore the author decided to take these 21 articles as data. Furthermore, in the Taylor and Francis database, the author found 511 articles related to keywords. The author chose articles that were in the subject area of public administration and management. Of the hundreds of articles, the author found 18 articles that discussed e-government in Indonesia, then of the 18 articles there were only 6 articles that discussed e-government development in Indonesia. Thus, the author decided to take these 6 articles as data. Then in the Emerald Insight database, the author found 220 articles related to keywords. Of the 220 articles, 25 articles discuss e-government in Indonesia, then of the 25 articles, 7 articles discuss e-government development in Indonesia. Therefore, the author decided to take these 7 articles as data. Article searches were also carried out on the Google Scholar database on 70 pages. The author only searched 69 pages because the search engine did not display articles that matched the keywords on page 70. On Google Scholar the author found 93 articles about e-government in Indonesia, and there were 23 articles discussing Indonesian e-government development. However, of the 23 articles, 17 articles were the same as the articles found in the Science Direct, Taylor and Francis, and Emerald Insight databases. Therefore, the author took only 6 articles as data.

From March to April, the author read the 40 articles thoroughly to find out the problems caused by poor e-government development in Indonesia, then made conclusions from the data obtained. Each article had different themes; 4 articles discussed the provision of online services, 10 articles discussed communication connectivity, and 9 articles discussed human capacity. Some articles discussed two themes at once; 5 articles discussed the provision of online services and telecommunications connectivity, 11 articles discussed human capacity and telecommunications connectivity, and 1 article discussed the provision of online services and human capaciy.

Table 1. Data Article

Article Theme	Article Reference	Method	Problem
provision of online services	Nurmandi & Kim, 2015	Comparison	Government Agencies, Human Resources
	Susanto & Aljoza, 2015	Survey	Commitment and Trust, Socialization

	Nulhusna et al., 2017	SEM	Function, Government Agencies, Leadership
	Seo et al., 2018	Survey	Function, Management, Technical
communication connectivity	Nugroho, 2010	Case Study	Technical,
	Hapsara, 2017	Case Study	Leadership, Politic, Motivation
	Hariguna, 2017	SEM	Socialization
	Helinggo, 2017	Software Development	Management, Technology, Planning
	Kurniawan et al., 2017	Comparison	Function
	Cahyono & Susanto, 2019	Eye Tracker & Mind Wave	Function
	Effendi & Susanto, 2019	Eye Tracker & Mind Wave	Function, Planning
	Fakhruzzaman & Dimitrova, 2020	SEM	Function, Technical, Socialization
	Puspitasari & Ishii, 2020	Survey	Environment, Technology
	Sukendro et al., 2020	Survey	Function, Government Agencies, Policy, Technology
human capacity	Ritchi et al., 2015	SEM	Policy, Human Resources
	Ritchi et al., 2016	SEM	Policy, Human Resources
	Batara et al., 2017	Survey	Government Agencies, Environment, Policy, Leadership,
	Sutopo et al., 2017	Survey	Human Resources, Financial
	Mulatiningsih & Jhonson, 2018	Survey	Human Resources
	Nurdin, 2018	Comparison	Environment, Policy
	Pratama, 2019	Survey	Government Agencies, Policy, Management, Technology, Leadership, Planning
	Budi et al., 2020	Evaluation	Government Agencies
	Sabani, 2021	Literature Review	Government Agencies, Environment, Policy, Management, Leadership
provision of online services and telecommunications connectivity	Susanto & Goodwin, 2013	Survey	Function, Environment
	Berliana et al., 2017	SEM	Function, Technology 60
	Joshua et al., 2017	Case Study	Function, Environment, Technology, Planning
	Susanto et al., 2017	Survey	Function, Government Agencies, Environment, Management, Commitment and Trust,
	Khoir, 2019	Deep Interview	Environment, Policy
human capacity and telecommunications connectivity	Nurdin et al., 2014	Case Study	Government Agencies, Human Resources, Leadership, Financial, Coordination
	Gunadi, 2015	System Dynamics	Function, Human Resources, Management, Commitment and Trust, Collaboration
	Prahono & Elidjen, 2015	Evaluation	Environment, Technology
	Choi et al., 2016	Evaluation	Policy, Management, Technology, Leadership, Technical
	Rochman et al., 2017	Mapping Article	Collaboration, Environment
	Napitupulu, 2017	Best Practice	Government Agencies, Human Resources, Technology
	Hutahaen et al., 2018	SEM	Leadership
	Adi et al., 2019	Komparasi	Policy, Leadership
	Herdiyanti et al., 2019	Evaluation	Function, Government Agencies, Policy
	Sabani et al., 2019	Literature Review	Human Resources, Management,
	Ariana et al., 2020	Gap Analisis	Government Agencies, Human Resources, Management
provision of online services and human capaciy	Pinem et al., 2018	Survey	Function, Government Agencies, Environment, Commitment and Trust

Source: author's research results 2024

Of the 40 articles, there were 109 problems divided into 17 factors. Each article describes a different problem. Some articles only explained one problem, but some articles explained more than one problem. The most frequently presented problems in these various articles were functional problems at 12.84%, government agencies at 11.92%, Environment at 11%, Policy at 10.10%, Human Resources at 9.18%, Management, Technology, and Leadership at 8.26%, Technical, Planning, and Communication and Trust at 3.66%, Socialization 2.76%, Collaboration and Finance at 1.84%, and Coordination, Political, and Motivation at 0.92%. In determining the percentage value, the author used a simple formula (number of values in one factor x 100: total problem value), for example, 14 (14 articles stating the function as an obstacle to e-government development) x 100%: 109 (total problem value) = 12.84%. The percentage value is explained descriptively.
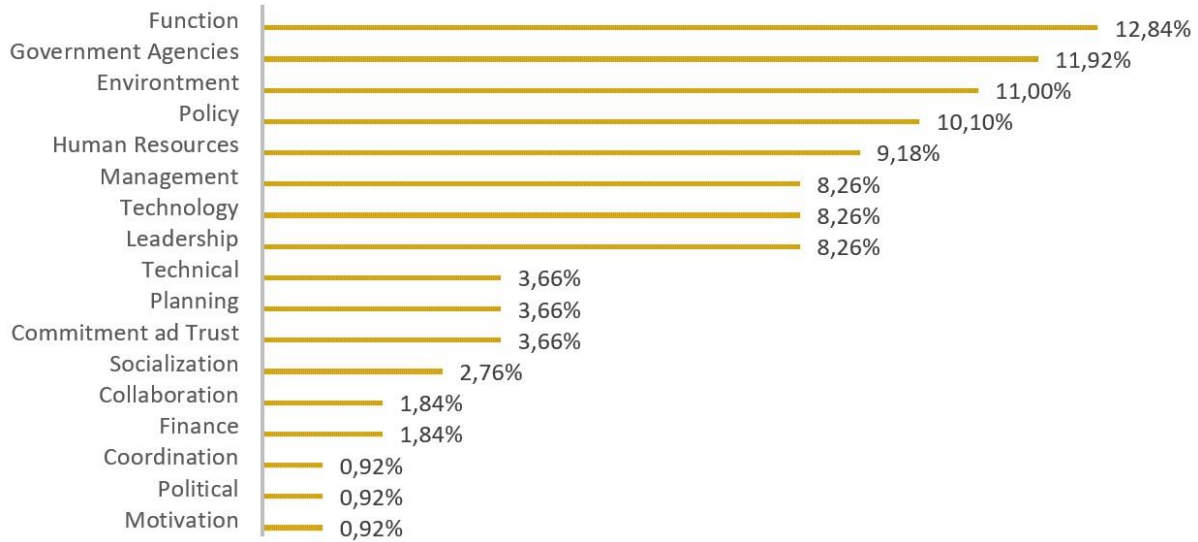
RESULTS

Figure 2. Problem Development E-Government in Indonesia 2010-2020

Source: author's research results 2024

The most inhibiting factor in the development of e-government in Indonesia is the function factor with a percentage value of 12.48%. Many e-government products were made by the government only for prestige and did not have a clear function, thus making government officials and the public unwilling to use these e-government products or services (Susanto & Goodwin, 2013; Gunadi, 2015; Kurniawan et al., 2017; Susanto et al., 2017; Pinem et al., 2018; Seo et al., 2018). The presence of e-government should be able to make people's lives easier by providing good service functions, but in reality, there are still e-government products that are difficult to use, access by the public, and operate by the implementers (Berliana et al., 2017; Joshua et al., 2017; Nulhusna et al., 2017; Pinem et al., 2018; Fakhruzzaman & Dimitrova, 2020; Cahyono & Susanto, 2019; Sukendro et al., 2020). Many e-government products are created without paying attention to ease of use and make it difficult for implementers to operate them, thereby hampering the process of implementing public services (Kurniawan et al., 2017; Seo et al., 2018; Effendi & Susanto, 2019; Herdiyanti et al., 2019; Sukendro et al., 2020). Due to the functional problems with e-government services, people think that the presence or absence of e-government will not have a significant impact on their lives and they are not too enthusiastic about using e-government services, so e-government products developed by the government just becomes a malfunction asset (Susanto & Goodwin, 2013; Gunadi, 2015; Susanto et al., 2017; Pinem et al., 2018; Seo et al., 2018; Effendi & Susanto, 2019; Fakhruzzaman & Dimitrova, 2020).

The second factor inhibiting the implementation of e-government development in Indonesia is the government agency factor with a percentage value of 11.92%. There are still government agencies in Indonesia that are not ready for e-government and do not want to implement e-government (Nurdin et al., 2014, Batara et al., 2017, Napitupulu 2017, Herdiyanti et al., 2019, Pratama 2019, Ariana et al., 2020, Sukendro et al., 2020). Legislation that is considered incomplete in supporting e-government is often a reason for government agencies to avoid e-government (Herdiyanti et al., 2019, Pratama 2019). Not all government agencies want to develop e-government because they do not want to change their working paradigm and are worried that its implementation will change the way the bureaucracy works so that e-government products developed to reform the bureaucracy are not used completely (Nurdin et al., 2014, Nulhusna et al., 2017, Susanto et al., 2017, Pratama 2019, Sabani 2020, Budi et al., 2020). The demand for transparency and public service orientation in all lines of work make government agencies are not willing or ready to fully implement e-government (Nurmandi and Kim 2015, Susanto et al., 2017, Pinem et al., 2018, Sabani 2020, Budi et al., 2020).

The third factor that becomes an obstacle to implementing e-government development in Indonesia is environmental factors with a percentage value of 11.00%. To achieve successful e-government development, the social environment of the community around the area must be conducive and supportive, but not all regions of Indonesia have an environment that supports e-government (Susanto & Goodwin 2013; Prahono & Elidjen 2015; Batara et al., 2017; Joshua et al., 2017; Susanto et al., 2017; Nurdin, 2018; Sabani, 2020). The community must be willing to accept and utilize e-government developed by the government, but not all of them are willing to do that (Susanto & Goodwin 2013; Joshua et al., 2017; Rochman et al., 2017; Susanto et al., 2017). To make people want to take advantage of e-government, the government must develop e-government according to people's needs, but not all governments are willing and able to do that (Joshua et al., 2017). An environment that is accustomed to the presence of technology will usually make it easier for the government to develop e-government, however, this kind of environment is barely found in Indonesia (Pinem et al., 2018). Not many environments in developing countries are ready to implement e-government development, one of which is Indonesia (Sabani, 2020). The imbalance in e-government development in western and eastern Indonesia is an important note to be immediately addressed by all parties involved in e-government development, both central and regional governments (Prahono & Elidjen, 2015). The more established the level of economic prosperity of a region, the greater the level of success in implementing e-government development, but unfortunately not all regions in Indonesia have a good level of economic stability (Nurdin, 2018). The synergy between government and society is needed to create an environment that can support the implementation of e-government development, even though it is not easy to do this (Joshua et al., 2017; Rochman et al., 2017; Khoir, 2019). Technology education is also needed for the younger generation so that they can use technology properly, but this will be challenging because the Indonesian government has abolished the obligation for every student to receive information and communication technology lessons at school (Puspitasari & Ishii, 2020).

The fourth factor hindering e-government development implementation in Indonesia is the policy factor with a percentage value of 10.10%. The policy has an important role in making e-government development a success because no matter how good the e-government product or project is, if there are no supporting policies then e-government development is difficult to carry out sustainably and this is the problem that Indonesia has experienced so far (Ritchi et al., 2015; Choi et al., 2016; Ritchi et al., 2016; Batara et al., 2017; Nurdin, 2018; Herdiyanti et al., 2019; Khoir, 2019, Pratama, 2019; Sabani, 2020). E-government policy regulations are also needed as a tool to evaluate whether e-government development has been carried out well or not, but most governments in Indonesia do not yet have this instrument so they cannot carry out evaluations properly (Ritchi et al., 2015; Nurdin, 2018; Herdiyanti et al., 2019; Pratama, 2019; Adi et al., 2019; Sukendro et al., 2020). When the central or regional government wants to develop e-government, but there are no supporting policies, then these activities can be wrong because they have no legitimacy and are against the rule of law, because the work lacks accordance with policies and regulations (Choi et al., 2016; Batara et al., 2017; Nurdin, 2018; Herdiyanti et al., 2019; Pratama, 2019; Sabani, 2020). When the central or regional government wants to develop e-government without supporting policies, these activities can be wrong because they have no legitimacy and are against the rule of law, because the work lacks accordance with policies and regulations (Choi et al., 2016; Batara et al., 2017; Nurdin, 2018; Herdiyanti et al., 2019; Pratama, 2019; Sabani, 2020). The Indonesian government must be able to create a good and complete e-government policy so that all central and regional governments can develop e-government in a good, sustainable, and integrated manner, therefore they can immediately carry out bureaucratic and public service reforms (Ritchi et al., 2016; Herdiyanti et al., 2019; Khoir, 2019; Adi et al., 2019).

The fifth factor that inhibits the implementation of e-government development in Indonesia is the availability of human resources with a percentage value of 9.18%. It is because not all human resources who are e-government implementers can carry out their duties well (Nurdin et al., 2010; Gunadi, 2015; Nurmandi & Kim, 2015; Ritchi et al., 2015; Ritchi et al., 2016; Napitupulu, 2017; Sutopo et al., 2017; Mulatiningsih & Johnson, 2014; Sabani et al., 2019; Ariana et al., 2020). There are still regions that appoint officers without relevant educational background to implement e-government development (Ariana et al., 2020). Not all officers who implement e-government development have the skills and expertise to be fluent in using information and communication technology (Nurdin et al., 2014; Gunadi, 2015; Ritchi et al., 2015; Ritchi et al., 2016; Ariana et al., 2020). Implementers must be oriented toward community satisfaction, but not all human resources who

serve as e-government implementers have this attitude (Gunadi, 2015; Nurmandi & Kim, 2015; Ritchi et al., 2015; Napitupulu, 2017; Sutopo et al., 2017; Mulatiningsih & Johnson 2014; Ariana et al., 2020). Human resources, in this case implementers, must be able to educate the public to be able to utilize e-government, but not all implementers can and are willing to do this (Mulatiningsih & Johnson, 2014). The Indonesian government still has difficulty having competent human resources to be a good implementer of e-government, therefore this affects the development of e-government in Indonesia (Nurmandi & Kim 2015; Sabani et al., 2019; Ariana et al., 2020).

The sixth factor that inhibits the implementation of e-government development in Indonesia is the management factor with a percentage value of 8.26%. The definition of management in this case is a concept used by the government in managing e-government. There are still many governments in Indonesia, both central and regional, that have not been able to manage e-government well (Choi et al., 2016; Pratama, 2019; Ariana et al., 2020). Management of e-government development must be carried out well and effectively by the government, but unfortunately, not all of them are capable of doing so (Gunadi, 2015; Choi et al., 2016). The e-government management created by the government must be able to minimize the space for corruption, but creating a system like this is very difficult (Sabani et al., 2019). Not all governments are capable of creating good project management (Helinggo, 2017). Developing e-government is not an easy matter, and cannot be done in a short time, management progress must show an increasing trend from time to time, and be consistent and structured so that it can maintain the sustainability of e-government, but this cannot be done by all governments in Indonesia, both central and regional governments (Choi et al., 2016; Helinggo, 2017; Susanto et al., 2017; Seo et al., 2018; Sabani, 2020; Ariana et al., 2020). The government must be willing to carry out e-government evaluations periodically so that if a problem occurs the government can take quick action to resolve the problem, but not all governments are able and willing to do that (Gunadi, 2015; Susanto et al., 2017; Seo et al., 2018).

The seventh factor inhibiting the development of e-Government in Indonesia is the technological factor with a percentage value of 8.26%. So far three technological factors often hinder the development of e-Government in Indonesia. The first is the availability of technological infrastructure in a region. Not many regional governments in Indonesia have the readiness and stability to use technological infrastructure, there are still many technological gaps. Amid these technological limitations, the government is required to continue the development of e-government following the demands and developments of the times, because these conditions ultimately make the government unable to work optimally in developing e-government (Prahono & Elidjen, 2015; Choi et al., 2016; Pratama, 2019; Berliana et al., 2017; Napitupulu, 2017; Puspitasari & Ishii 2020; Sukendro et al., 2020). Then the second factor is the government cannot utilize the use of technological infrastructure facilities maximally. Even though a region has good and supportive technological infrastructure facilities, if they cannot utilize them well it will also hinder the development of e-government (Helinggo, 2017; Napitupulu, 2017; Pratama, 2019; Sukendro et al., 2020). Next, the third factor is the appropriateness of selecting technology as a means of implementing and developing e-government, because it must be adjusted to the accessibility of consumers who will enjoy the e-government services. Don't let the e-government product or project being developed not be used by consumers, does not provide many benefits, thus making e-government development seem bad and have no benefits (Napitupulu, 2017; Helinggo, 2017; Joshua et al., 2017; Pratama, 2019; Sukendro et al., 2020).

The eighth factor that hinders the implementation of e-government development in Indonesia is the leader factor with a percentage value of 8.26%. The main initiator in e-government development is the government. A region must have a leader who is visionary and modern, and has a paradigm that is willing to carry out bureaucratic reform and transform government governance, but not all regions have leaders with that kind of character (Choi et al., 2016; Batara et al., 2017; Hapsara, 2017; Nulhusna et al., 2017). The government must be able to develop e-government in a long-term and sustainable manner, lest when a change in leadership occurs the government policy regarding e-government development also changes (Nurdin et al., 2014). Regional leaders must be able to convince government officials to accept the presence of e-government, even though it is challenging to do it (Pratama, 2019). Regional leaders must continue to develop e-government to avoid the e-government being only used as a tool for prestige (Choi et al., 2016). The presence of e-government will make

all government affairs and public services transparent, leaders and their staff must be ready to face these conditions, but unfortunately, not many parties are ready for these (Hapsara, 2017; Hutahaen et al., 2018; Adi et al., 2019; Sabani, 2020).

The ninth factor that inhibits the implementation of e-government development in Indonesia is technical factors with a percentage value of 3.66%. Even though all aspects that support e-government development are ready, when it is implemented there are technical problems occur. These obstacles include miscommunication between the implementer and the community which is caused by differences in understanding the absorption and interpretation of the meaning of language in information (Nugroho 2010; Seo et al., 2018). There are still fears regarding the risks that will occur if e-government is implemented (Fakhruzzaman & Dimitrova, 2020). There is unpredictable damage to the e-government system, so that e-government cannot be operated by implementers and its services cannot be accessed by the public (Choi et al., 2016). These non-technical factors ultimately hinder the development of e-government in Indonesia.

The tenth factor that inhibits the development of e-government in Indonesia is the planning factor with a percentage value of 3.66%. Good planning is one of the essential elements that governments need to develop e-government, but not all governments have the ability to make good plans that are in accordance with the national strategic agenda (Pratama, 2019). Planning must be made based on community needs, but many governments do not pay attention to this (Joshua et al., 2017). The government must conduct prototyping so that it can determine what type of e-government products and software are appropriate to use for e-government development for e-government services to be accessed well and are easy to use by the public, however, not all governments are able and willing to do this (Helinggo, 2017; Effendi & Susanto, 2019).

The eleventh factor that inhibits the development of e-government in Indonesia is the commitment and trust factor with a percentage value of 3.66%. The government cannot gain trust from the public easily, hard work is needed so that the public can trust the government (Susanto & Aljoza, 2015). The government must have a strong commitment when developing e-government to gain the trust of the public. This commitment must be demonstrated by developing e-government well and consistently, but not all governments can do this (Gunadi, 2015; Susanto & Aljoza, 2015; Susanto et al., 2017; Pinem et al., 2018). To gain the trust of the public, the government must be able to provide good and consistent e-government services from time to time so that the public will have a sense of trust in the government, and be willing to use the e-government services, but to do all this it's not easy, not all governments can do so (Gunadi, 2015; Susanto & Aljoza, 2015; Susanto et al., 2017; Pinem et al., 2018).

The twelfth factor that inhibits the development of e-government in Indonesia is the socialization factor with a percentage value of 2.76%. Socialization is the government's effort to explain the benefits of e-government to the public. It can increase public enthusiasm for e-government services (Susanto & Aljoza, 2015; Hariguna et al., 2017) and can educate the public about the positive side of e-government (Fakhruzzaman & Dimitrova, 2020). E-government socialization must be carried out by the government to the public so that they know about the benefits of e-government, but unfortunately, the socializations were not carried out evenly across all levels of society by the government (Susanto & Aljoza, 2015; Hariguna et al., 2017). The government can utilize various social media platforms to disseminate e-government, because information conveyed via social media is easily received by the public and the information conveyed also spreads quickly, but not all governments want to do this because it is not very materially profitable for some individuals government (Hariguna et al., 2017).

The thirteenth factor that inhibits the development of e-government in Indonesia is the collaboration factor with a percentage value of 1.84%. To carry out e-government development requires good collaboration between stakeholders such as the government and the community, but collaborating well is not easy, good communication is needed and all actions taken by the government and the community must be mutually beneficial (Gunadi, 2015). The government must be able to provide e-government services that can be accessed by the public, and the public must be willing to utilize the e-government services provided by the government for them to have useful value, but doing this is not easy, not all governments have that kind of understanding (Rochman et al., 2017).

The fourteenth factor that inhibits the development of e-government in Indonesia is the financial factor with a percentage value of 1.84%. The development of e-government requires a lot of money, however not all governments have good financial capabilities for this development (Nurdin et al., 2014; Sutopo et al., 2017). In developing e-government the government must be able to utilize the budget well, appropriately, and effectively, however, not all governments can do this well (Nurdin et al., 2014; Sutopo et al., 2017). The government must be able to use the e-government development budget as efficiently as possible and its use must be audited transparently, but in its implementation, there are still budgets that are corrupted, which ultimately hinders the e-government development process (Sutopo et al., 2017).

The fifteenth factor that inhibits e-government development in Indonesia is coordination with a percentage value of 0.92%. To be able to develop e-government, good and effective coordination is needed. However, often the government has difficulty coordinating vertically with the central government and coordinating horizontally with other regional governments to gain their support for the e-government development that will be carried out. Good communication relations are needed so that coordination can be carried out well, but not all governments can do this (Nurdin et al., 2014).

The sixteenth factor that inhibits the development of e-government in Indonesia is politics with a percentage value of 0.92%. For the e-government development to be carried out well, stakeholders must ensure that an area has conducive political conditions. All parties who will receive the impact of the presence of e-government must be willing and ready to accept the consequences. Unfortunately, not all regional governments in Indonesia have conducive political conditions. When a region does not have conducive political conditions, it will be difficult to develop e-government well (Hapsara, 2017).

The final factor or the seventeenth factor that inhibits the development of e-government in Indonesia is motivation with a percentage value of 0.92%. We have to know the government's motivation regarding the reason why they want to develop e-government. When the motivation is intended for the good of all parties, for bureaucratic and public service reforms, or to utilize technological developments to accommodate the interests of the public or society, the e-government development carried out by the government will be carried out successfully until the public or society can experience the results. However, if the motivation is intended only for the benefit of some groups, e-government development will only be successful until interested parties gain benefits from the project, which will cause the e-government development to be inadequate (Hapsara, 2017).

CONCLUSION

From 2010 to 2020 the Indonesian government faced many obstacles in developing e-government. These obstacles are technical and non-technical. Regarding technical obstacles, there are still many cases of e-government development that do not consider the use-value function of an e-government product, so many parties are confused about operating and utilizing the e-government facilities that have been created by the government. There are still government policies that do not support the development of e-government. Not all parties involved in e-government development can make good plans and control the development and management of e-government professionally. Not all regions in Indonesia have good finances and technological infrastructure. Lack of socialization from the government about e-government to various parties such as the community or government officials themselves. There are still coordination problems between stakeholders, which hinders the development of e-government. Not all governments can get good partners and can be invited to collaborate in developing e-government. When the government does not have good partners, it will be difficult to develop e-government effectively.

Meanwhile, non-technical obstacles that also influence the development of e-government in Indonesia are also quite diverse, such as not all government agencies are ready and willing to become developers and implementers of e-government because they are afraid of the risks that they will face and they don't want to change their work culture which they have been comfortable doing. Not all regional leaders or regional heads support e-government. There are still many government officials who are not fluent in using technological devices. There are still many communities in Indonesia that are not ready to accept the presence of e-government and other

types of modernization. Not all governments have the motivation to develop e-government seriously. There are obstacles from a technical side that cannot be predicted, even though all aspects that support e-government development are ready, however, when it is to be executed, an obstacle occurs that disrupts the implementation of e-government development. And the last is the political factor. To support the development of e-government properly stakeholders must ensure that a region has conducive political conditions, unfortunately not all regional governments in Indonesia have conducive political conditions, so it will be difficult to develop e-government effectively.

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