

Building Trust Through Collaboration: An Overview of Digital Transformation in Indonesian Local Government.

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Abstract

The world is witnessing exponential growth and rapid change brought about by the advent of the digitalisation era. This change offers an opportunity to revisit the strategic approach on using Information and Communication Technologies (ICTs) to improve the delivery of public value. Considering that governments around the world are now facing the declining levels of public trust. Using so-called digital transformation, governments adapt the wide use of ICTs to better support government functions, services, and citizens, encouraging their participation in policy-making processes. Successful government digital transformation often depends on the ability of multiple government or non-government organisations to collaborate towards shared objectives.

However, most governments are far from fully exploiting the benefits of ICTs, and often forget that in some social groups, access to ICTs is limited at the point of digital inequality. Furthermore, digital transformation and collaboration should be seen as two parallel processes of government intervention to build up the trust of citizens. Citizen trust has several critical dimensions. Firstly, citizens must have a basic trust in government and in the ability of individual public authorities to deliver inclusive services and to solve problems as promised. Secondly, citizens must have confidence in digital government and the ability of public authorities to protect personal, and often sensitive, information. For this reason, a strategic approach to digital transformation is needed, which requires a digital governance strategy that sets out practical and strategic steps to mobilise and use digital technology for a more collaborative and innovative government to build public trust and expectations.

This article provides an overview of how the Indonesian government implements its digital-based policy, which is centered on an electronic-based government system in Indonesia (SPBE), linking cross-sectoral central government agencies. In recent years, government organisations have spent a large part of their budgets on information and communication systems, and rely on these systems for their functioning. However, the complexity of the digital transformation still requires considerable effort, especially when it comes to a lack of ICT infrastructure, human resources, and bureaucratic culture.

This article uses a systematic literature review to explore how collaboration can play an important role in the implementation of digital transformation. The article identifies factors that influence citizens' trust in government as an institution. It is important to note that, although it is not possible to separate government processes from the technologies used in those processes, technology still occupies a limited place in the theoretical understanding of the public sector. The outcome of this article intends to contribute as a new reference for academics in the field of public administration and government studies, and promote a model for the development of digital government transformation in Indonesia focusing on citizens' participation in public policies.

Points for Practitioners

The emergence of information and communication technology (ICT) in the field of public administration has been understood as a central part of the process of modernising public administration. In a broader sense, the concept of digital transformation, digital government and e-government has been used as an administrative reform strategy in the last two decades. This concept also resulted in an increase in the volume of research literature in the field of public administration and ICT, which has created multi-disciplinary knowledge and interesting research analysis, and is relevant for the future development of public administration. This paper provides an additional view of the interrelationships between several dimensions that affect digital transformation in government, public trust, and collaboration between the non-state stakeholders and the government in the public policy process in Indonesia.

Keywords- *Digital transformation, digital government, collaborative governance, public policy process.*

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1 Introduction

The use of ICT has developed in various multidisciplinary fields, including public administration, where the current ICT approach is not limited to economic fields such as industry and trade, but also other fields such as defence, security, education, social, labour, health, including government, public services and so on. For government administrations, the tendency to use digital technology is unavoidable, with the massive demand for digitisation in various aspects of public life. Digitalisation of government through a concept known as e-Government must be carefully prepared, and integrated between bureaucratic systems and policies. With the alignment of these two, it is expected to accelerate the flow of innovation, information, services, and transactions from government to society (G2C), government to business (G2B), and the government with the government itself (G2G). Some of the things mentioned above are based on the definition of e-Government by the World Bank (2001): “e-Government refers to the use by government agencies of information technologies that have the ability to transform relations with citizens, business, and other arms of government”.

The provision of e-government services is progressing in its development in many countries in the world, along with the rapid development of ICTs; however, the collective e-government users are still low, for several reasons. One of them is a lack of trust in e-government services, as reported by the European Union in e-Government use (EGU) in EU28 (2019), explaining that a lack of trust is one of the causes of low adoption of e-government services. According to Mayer, Davis, & Schoorman (1995), trust in e-Government is the belief or expectation of a citizen that e-Government services will take certain actions according to their needs and desires, even though these citizens have no control over the performance of e-Government services. In the previous literature, trust in e-Government was built from several dimensions, according to Papadopoulou, Nikolaidou, and Martakos (2010) after conducting a literature study stating that trust in e-Government was built from 7 dimensions, namely Trust in Stored Data, Trust in Service, Trust in Information, Trust in system, Trust in Transaction, Trust in Government organisation, Institution-based trust.

The challenge the government is facing today is to fulfil public trust. Thus, governments are adapting public service delivery, policy making, and engagement, and introducing collaborative approaches for a new era of open governance; an era where citizens increasingly expect to be active participants, not passive recipients. Ansell and Gash (2008) explain that the meaning of collaboration is a governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus oriented, and deliberative, and that aims to make or implement public policies or manage public programmes or assets. To make this happen, governments need to adopt and use digital technology and data as strategic components of their efforts to modernise the public sector through e-government. Technology and open data need to be integrated into core processes and activities to build new ways of working, and promote greater collaboration between the public and government.

E-government as a modern, more effective way of public management, based on common access to the Internet, has the potential to bridge the gap between society and government. ICT makes communication between government and citizens easier, more regular, and more authenticated. However, governments often forget that in some social groups, access to ICTs is limited at the point of digital inequality. Consequently, the government should rethink the design and implementation process of public services and policies, to achieve a more inclusive approach, which refers not only to access to technology, but also to ICT literacy (using digital technology, communication tools, and the availability of the right networks to access). For this reason, a strategic approach to digital transformation is needed, which requires a digital governance strategy that establishes practical and strategic steps to mobilise and use digital technology for more collaborative and innovative ways to realise public trust and expectation.

Digital transformation in the public sector means new ways of collaborating with stakeholders, building new frameworks of service delivery, and creating new forms of relationships (European Commission, 2013). A successful digital transformation will enable public sectors to operate efficiently and effectively in the digital environment, and to deliver public services that are simpler and more effective policies (Greenway et al., 2018). However, fully realising this digital transformation requires a paradigm shift from e-government to digital government (OECD, 2014). Digital government approaches favour the use of technologies for improved collaboration with stakeholders at different stages of the policy and service lifecycle, based on Government as a platform and user-driven policy environment for efficiency improvement and customized service development

based on shared ownership and shared responsibility with civil society (OECD, 2020). Moreover, bringing citizens actively on board through collaboration in the design and implementation of policies and services further increases their legitimacy and effectiveness, and creates a feeling of ownership. Transparency, through the right to *access* government (digital) documents and processes to enable effective public oversight (Lathrop dan Ruma, 2010), further builds citizens' trust in the government. From the government point of view, citizen and stakeholder engagement help to gain knowledge about needs, solutions and impacts that could otherwise be overlooked. Additionally, across the policy-making cycle, inclusive processes could help to address the different impacts of various policies on outcomes for different segments of society, and the effect on growth and well-being. Juxtaposing the collaboration process and the resulting impact of innovation, the latter can be seen from the product of public policy itself. Digital transformation also enables changes in the way public administrations deliver their work, communicate, and deliver services, which can have a far-reaching impact such as changing organisational structures and cultures, or engaging and integrating citizens and other partners into the co-design and co-delivery of public policy making (Bretschneider & Mergel, 2011; Mergel, Schweik, & Fountain, 2009; Sivarajah, Irani, & Weerakkody, 2015).

The digital transformation shifts from e-government towards digital government (Vlahovic and Vracic, 2015) require the introduction of the initiatives needed to make deeper changes in the provision of online services through government portals, into a broader government business. New, 'transformed' technology-based systems must not only be consumer-friendly, strategy driven, and capable of providing a better experience for those who interact with government, but more importantly, must also improve the way government operates (Barcevicus et al., 2019). Additionally, the shift shall allow governments to simultaneously satisfy the needs of the public sector itself; address the challenges of public sector employees and policy makers; and benefit all citizens. Janowski et al., (2018) view this shift as empowering citizens and other stakeholders to contribute to or lead the creation of public value, often recognised as one key feature of digital government transformation. Therefore, digital transformation towards digital government potentially transforms citizen-to-government interactions in two ways: by improving policy and service delivery, and by improving relations between citizens and government (Fountain, 2001; Peterson and Siefert 2002).

Improvements in policy outcomes and the political process have also been linked to increased trust in government (Hibbing and Theiss-Morse, 2001). According to the World Bank (2010), trust used to denote the citizens' assessment of a government's privilege to execute its decisions, laws, and regulations, alongside the probability that the government will ensure the delivery of its commitments to its people. This leads governments under influence to provide efficient and effective information and services because of increased accountability and performance management (Shackleton, Fisher et al., 2004). Citizen trust has several critical dimensions. First, citizens need to have a fundamental trust in government and each agency's ability to deliver inclusive services and solve problems as promised. Second, citizens need trust specifically in digital government and an agency's ability to safeguard personal, and often sensitive, information. Smith (2010) claimed that there is a notable decline in the level of trust in institutions related to democratic governance. Third, Kim and Kim (2007) showed that trust in government can improve the degree of accepting the public policies and reduce the costs of administrative procedures, while encouraging conformity with regulations and laws. Rousseau et al. (1998) have also defined trust based on three main constructs: (1) expectation related to confidence, (2) readiness to be at risk, and (3) dependency on another that relates to fairness, benevolence, ability, and other organisational characteristics. Overall, trust can be defined as the positive expectations and beliefs of one party towards the other party who is supposed to meet all commitments in a proper, social, and responsible manner. Trust in public sector institutions and their actors is essential for the functioning of government, especially when it has become increasingly associated with governance through collaboration.

Collaboration refers to the process of joint decision making (Stoker, 2004). The problem faced in the collaboration process is the reluctance of the existing government system with the complexity of the problems of bureaucracy and organisational structuring. Organisational structure and political barriers are crucial. Emerson, Nabatchi, & Balogh (2012) define collaborative governance broadly as the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres, to carry out a public purpose that could not otherwise be accomplished. This definition allows collaborative governance to be used as a broader analytic construct in public administration, and enables distinctions among different applications,

classes, and scales. Collaborative governance has recently emerged as an alternative concept in governance at the local administration, when problems faced by governments are increasingly complex (O’Leary, Gazley, McGuire, & Bingham, 2008).

1.1 Local government

Different definitions have been made in the literature on Local Governments. Lockard (1963) states that the local government can be defined as a public organisation, authorised to establish and administer public policies within a given territory, aimed at the general interest of citizens. According to Clarke (Aijaz, 2007), local government is the part of the government of a country which deals with problems or issues related to a given population within a given territory. This is also in line with the definition given by the OECD (Organisation for Economic Cooperation and Development); the local government is based on fiscal governance, legislative and executive authority over an area corresponding to the territorial limit and a certain group of people (Ndreu, 2016). In its development, according to Eryilmaz (2019), local government contains the authority of decentralisation in the modern sense; It defines the administrative powers of the central government as sharing not only with local administrations, but also with provincial organisations, federal units, semi-autonomous public institutions, professional organisations, and voluntary organisations, the use of representation through intermediaries. This division of power resulted in a more diverse and complex range of local government powers. The complexity of the problems faced also places local governments in an ideal position to initiate collaboration between government, private, and citizen data, to deliver beneficial new digitally enabled public policies which delivered on the front lines, and all supported by an array of IT infrastructure and applications. Digitalisation of local policy and their administration is central for sustaining and developing new steering and governance practices. At the same time, the changes that advanced digitalisation affect relations between citizens and their local government as services providers. However, it is common for governments not to regard ICTs as a collaborative tool for policy governance. In many local governments, 'business as usual' is still the mainstream approach to ICTs, having an effect to strengthen existing government processes which has led to failed projects (OECD, 2014). The growing demands on collaborative public policy making have made local government increasingly glance around for digital technology as the primary and effective means by which public services and other core government activities can be transformed.

1.2 The case of Indonesia

The Indonesian government structures are currently divided into several tiers, which consist of provinces, district or city, sub-district, village. This is based on a consensus that a local government should at least have a leader elected by the community or council, have a legislative body, and can create laws binding on the community in its jurisdiction (Sutiyo and Maharjan, 2017).

Government tasks in Indonesia are classified into absolute and concurrent tasks. It is only the central government that manages absolute tasks, which include foreign policy, defence, security, the monetary system, the judiciary, and religion. The local government, including provincial and district governments, concurrently manage the other tasks, which include public works, health, education, culture, agriculture, communication, industry, trade, investment, environment, land, cooperation and labour. In the overall distribution of tasks, the role of local government is to conduct the most needed public policy, providing services delivery, which usually includes education, health, and basic physical infrastructure, including ICTs. In addition, there is a principle of “money follows function”, which means that the transfer of tasks to local governments is then followed by a transfer of financial resources needed to execute them. (Sutiyo and Maharjan, 2017).

The rapid development, deployment and proliferation of the new and emerging ICTs create new opportunities for growth and development in countries around the world, including Indonesia. Governments are seeking to harness the potential offered by these modern technologies to create new dimensions of economic and social progress. In recent years, governments around the world, including Indonesia, have tried to take advantage of information and communication technology (ICTs) to improve the quality of government administration and the quality of communication with citizens. Digital Government is not only about modernising public administration through ICTs, but it is a key enabler in the building of citizen-oriented, cooperative, and modern governance. For local government in Indonesia, the concept of digital government emerges as a strategy to address problems associated with its population. Big cities like Jakarta, Denpasar,

Bandung, Surabaya, and Medan, for example have had to deal with many recent problems in this digital era. This has presented city or local governments with challenges on delivering public services like education, public transport, and health services with equal access for everyone.

Therefore, significant steps are needed to harmonise the digital government with the collaboration process, strategies in public engagement, the provision of policy and public delivery. According to Denis Anderson, et al (2015), the government's effort to be able to provide public services in a way that is fair, effective, inclusively centered on citizens, and a public sector that has the capacity to provide services, needs to be strengthened at the central and regional levels. This means that effort is needed to strengthen the four main dimensions in the public sectors: (1) public institutions - especially at the regional level, to provide services; (2) leadership capacity and human resources - needed to provide services in a transparent, fair, efficient and accountable manner; (3) processes and mechanisms - that support citizen participation in service design and delivery; and (4) organisational culture - so as to create space for continuous improvement and innovation in service delivery to the community.

2 Methodology

This paper uses case study methodology to understand why and how a social phenomenon of interest occurs through data. Case study methodology is an appropriate approach to conducting this exploratory research (Yin, 2009). This study is also inductive so that it contributes to building new understanding. Case studies in local government are rare, and often tend to cover only certain practical issues in public policy and administration. Such practical matters could address a range of issues: from dealing with problems associated with reforming and restructuring ICT management in a local government setting (Nam and Pardo, 2014). This paper expands that research by exploring the ways in which collaborative governance affects digital government transformation in the Indonesian government, and its relation to public trust through legal documents such as national and local regulation, written legacy, especially in the form of archives, and including books, official documents, government website, and statistics related to the problems that occur.

3 Discussion

In recent years, governments around the world, including Indonesia, have tried to take advantage of information and communication technology (ICT) to improve the quality of government administration. ICTs offer opportunities for government to better serve and interact with all constituents; community, business, and other government partners (Chen, 2002). In the Indonesian context, The Ministry of Administrative and Bureaucratic Reform measured the e-government maturity level of 616 government agencies in 2018, and concluded that most government agencies had implemented e-government, especially for their internal work. However, these digital base administrations have a common problem: they are unintegrated, unsustainable, and have low usage. The absence of integrated and holistic policies is the main cause of these problems, which results in partial planning and strategies in the implementation of digital government (GovInsider, 2020). Presidential Regulation No. 95/2018 on e-Government states that one strategy to implement digital government is to develop a national portal for e-government. This portal will include all the services provided by central government and local government. There will be two types of portal: a central government portal and a local government portal. Each portal will provide various sectoral services, among others related to education, business and work, housing, communication, environment, health, social insurance, tourism, and many other strategic sectors.

Regulations regarding e-government in Indonesia started 2003, with the issuance of Presidential Instruction No. 3 of 2003. Since then, the portal or website of the central and local governments has grown rapidly, and there has been a significant increase in the existence of the government domain. The go.id domain was first registered in 2001, in July 2003, there were already 247 go.id domains, and the number continued to increase until October 2017, when there were 3,882 go.id domains. In line with the condition of e-government as described in Presidential Instruction No. 3 of 2003, e-government in Indonesia is still at the emerging and enhanced presence level, as only a small part has been implemented at the interactive level. Referring to Nurdin (2012), who evaluated the website to find out the conditions in the development of e-government in Indonesia using the 5-stage model from the United Nations (2008), and stated that some 55% of local governments are still in the first stage, namely the emerging stage, 28% have reached the enhanced stage, 17% are already at the

interactive stage, and only one local government has reached the transaction stage. The emerging level is the lowest level in e-government adoption where the government already has a website, but the information provided is limited and static; enhanced level means that the content and information provided on the website is updated regularly, while the interactive stage means that the website already provides a forms download feature, official contacts, and allows users to interact virtually with the government through the website. It is also said that most e-government initiatives are still at the web presence stage, although some have reached the transaction stage (Yunita and Aprianto, 2018).

Then in 2018, from the 548 registered provincial and district/city governments, 543 have official websites. A total of 483 websites can be accessed, the remaining 60 cannot be accessed for several reasons. This means that about 88% of the provincial and district/city government websites already have websites that can be accessed during the assessment (Table 1).

Table 1. Comparison of website status in Indonesian Local Government (Yunita and Aprianto, 2018).

<i>Status</i>	Fathul (2003)		Nurdin (2012)		Yunita, Aprianto (2018)	
	<i>Number of Websites</i>	%	<i>Number of Websites</i>	%	<i>Number of Websites</i>	%
Accessible	305	87%	353	83%	483	88%
Inaccessible	45	13%	71	17%	60	11%
Does not have a website	88	20%	62	13%	5	1%
Website total	350	100%	424	100%	543	100%
Total	438		489		548	

From the data in Table 1, the basis for providing e-government has been implemented in accordance with the mandate of the Presidential Instruction. At this stage, to be able to build public trust, digital transformation is needed, the concept of digital transformation is in line with the collaboration process between the government and citizens, citizen engagement in policy making is the collective agenda of most countries, including Indonesia. This engagement effort involves citizens in the policy process using e-government. At the National level, the fundamental purpose of developing e-government is to improve government and community relations through information about government processes, and the mutual interaction between the community and the government. In Indonesia, this is based on Article 28F of the 1945 Constitution, which reads: "Everyone has the right to communicate and obtain information to develop their personal and social environment, as well as the right to seek, obtain, possess, store, process, and convey information using all available channels." Presidential Instruction No. 3 of 2003, concerning National Policy and Strategy for e-Government Development, mandates every Governor and Regent/Mayor to take the necessary steps in accordance with their respective duties, functions, and authorities to implement e-Government development nationally. This early regulation is the gateway to the development of e-government in Indonesia, intended to ensure the integration of the management and processing of documents and electronic information in developing a transparent public service system.

Indonesia has experienced significant economic growth in recent years, and is transforming from an upper-middle-income developing country to one with an inclusive, modern, and respected economy on the international stage. One of the growth factors is rapid industrialisation, which can encourage national economic growth. Indonesia's real Gross Domestic Product (GDP) has more than doubled from USD 0.5 trillion in 2009 to USD 1.1 trillion in 2019. However, this condition is not in line with the level of innovation development that accompanies GDP growth. It can be seen on the 2019 Global innovation index (GII) that Indonesia's GII value is below Brunei Darussalam, the Philippines, Thailand, Vietnam, Malaysia, and Singapore. Indonesia's ranking in 2019 was 85, or the second lowest position compared to other countries in ASEAN (Kemkominfo, 2019).

Recognising the enormous benefits of digital transformation, President Joko Widodo, at the Limited Meeting on Planning for Digital Transformation, delivered five directives focusing on accelerating the national digital transformation agenda through five steps, namely: accelerating the development of digital infrastructure and the provision of internet services, preparing a digital transformation roadmap in strategic sectors, accelerating the integration of national data centres, developing human resources and digital talents, and preparing various regulations and financing schemes to support the digital ecosystem (Setkab, 2020). The five steps to accelerate digital transformation launched by President Joko Widodo are the foundation for the development of the Digital Indonesia roadmap. Digital Indonesia has set six strategic directives to realise its

vision. The six directives aim to direct Indonesia towards an innovation-based economy with world-class technological capabilities, skilled Human Resources (HR), and a society with a digital culture that is ready to face the future. In addition, the 2021 Draft State Revenue and Expenditure Budget (RAPBN) mandates some spending focuses to realise digital transformation in Indonesia. The Indonesian government has budgeted IDR 30.5 trillion in 2021 for ICT development, which is focused on several aspects (Setkab, 2020):

1. Acceleration of digital transformation for the administration of central and local government.
2. Realising efficient and fast public services, especially in the fields of education, health, and government.
3. Consolidation and optimisation of infrastructure, especially those used with cross-sectoral institutions.
4. Realising community inclusion in developing priority areas and promoting equality with additional internet access in 4000 villages and sub-districts.

Digital infrastructure, the acceleration of digital transformation, and increasing human resource productivity through economic knowledge, are the focus of government spending in 2021. The development of digital infrastructure such as the internet is indeed needed, considering that there is still inequality in internet access in Indonesia. The average percentage of households with internet access in urban and rural homes in West Java Province reached 31.65%, while in Papua Province it was only 10.06%, East Nusa Tenggara Province 13.73% and Maluku Province 20.26%. Inclusive internet access is a necessity to realise digital transformation, but it is not the only determining factor. Other key factors include research and development (R&D) capabilities, production innovation capabilities, and talent capabilities. Unfortunately, Indonesia's capabilities in these various indicators have not shown encouraging results (Katadata, 2020).

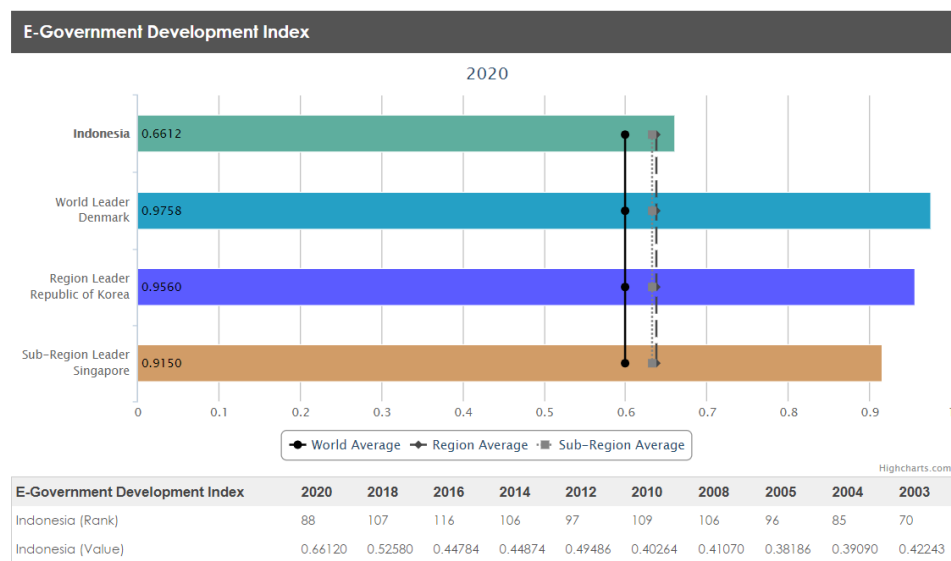
Indonesia itself has great potential in utilising and developing digitalisation opportunities. As stated in the 2020-2024 RPJMN, the assumption of the digital economy's contribution in 2020 is 3.17%, and in 2024 it is forecast to be 4.66%. GDP growth for information and telecommunications in 2020 is predicted to be 7.12%-7.54%, while in 2024 GDP growth will be 7.54%-8.78%. In addition, the contribution of the Indonesian Ministry of Communications and Information Technology's digital program to Non-Tax State Revenue (PNBP) continues to increase. As of the end of 2020, Kemkominfo's PNBP reached Rp106.1 trillion. In the 2015-2019 period, Kemkominfo's PNBP grew an average of 3 percent per year. The government itself has allocated infrastructure funds both through the APBN and PPPs to build a strong and inclusive digital infrastructure.

However, Indonesia is considered not ready to take full advantage of this potential. In the Network Readiness Index (2020), which measures readiness to innovate in the face of the digital revolution, Indonesia is still ranked 73 out of 139 countries. Meanwhile, according to data from the World Digital Competitiveness Ranking (2020), digital transformation in Indonesia is far from countries in ASEAN. Indonesia is ranked 56th out of 63 countries, while Thailand is in 40th position, Malaysia is in 26th position, and Singapore is in second position. According to the World Economic Forum (2015), a 10% increase in internet access correlates with a 1.2% increase in economic growth in developing countries. Meanwhile, the addition of cellular subscribers up to 10% will increase GDP by 0.4% (P2EB UGM, 2017).

However, In the latest developments, there are several positive points that can be turning points in digital transformation in Indonesia. It can be seen from the collaboration at the level of policy making, fiscal support and infrastructure. The provision of an electronic-based government system in Indonesia (SPBE) involves cross-sectoral government agencies; the Ministry of State Apparatus and Bureaucratic Reform, the Ministry of Communication and Information, the Ministry of National Planning, the Ministry of Finance, the Ministry of Home Affairs, the Agency for the Assessment and Application of Technology (BPPT), and the National Cyber and Crypto Agency (BSSN). Collaboration in governance has the implication that all parties involved have the same responsibility for decisions taken, therefore collaboration requires that the parties involved must sit at the same table and have the same power in decision making (Maulana, 2020).

The United Nations (UN) e-Government Survey 2020, with the theme Digital Government in the Decade of Action for Sustainable Development, predicts countries that get more than 0.75 points as very high EGDI, 0.50 to 0.75 as High EGDI, 0.25 to 0.75 points. 0.50 as middle rank EGDI, and less than 0.25 as Low EGDI. In this survey, Indonesia is ranked 88th in the development and implementation of e-government or an electronic-based government system (SPBE). Indonesia received an increase of 19 ranks compared to 2018, which was at 107th, and 116th in 2016. (UN, 2020). Overall, Indonesia got a score of 0.6612 in the High e-

Government Development Index (EGDI) group in the UN e-Government Survey 2020, a result which put Indonesia back in the top 100 world rankings at position 88 out of 193 countries.



Source: UN e-Government Survey 2020 (UN, 2020).

In 2014, the Jakarta Provincial Government initiated a change towards open government, by improving communication and interaction patterns of local governments and communities in the provision of public services. One application in the Smart City framework in Jakarta is "Qlue", which aims to strengthen community participation to be more concerned with the surrounding environment. Through this web-phone based application, the public can report complaints about public service problems that exist in the surrounding environment. Every citizen complaint is monitored by the Qlue application manager to ensure that everything that is submitted is immediately responded to and followed up by the relevant government work units.

The Governor of Jakarta at that time, Basuki Tjahja Purnama. Making Qlue Application as an assessment instrument in seeing the performance of officials in 267 sub-districts and 44 districts in Jakarta Province. The responsiveness of the relevant officials in following up on the reports submitted is a measure of the performance evaluation of these officials. The follow-up time and ranking features available in Qlue serve as a tactical instrument for evaluating the performance of officials in responding to all complaints that come in. Reprimands to officials who do not follow up on complaints via Qlue are conveyed directly by the Governor at the DKI Jakarta Provincial Government Leadership Meeting, and in more extreme cases, officials can be dismissed when ignoring reports from this application. In 2016, through the Qlue application, the Jakarta Government launched the "Lansia Hilang" service feature to simplify and accelerate the handling of missing elderly person in Jakarta, and through this feature, the community can play an active role by reporting when finding elderly people who are lost with indications of Dementia or Alzheimer's. Community reports are then forwarded to the head of the sub-district (lurah) through the Qlue application, to be followed up on. This is a form of inclusiveness of digital-based applications used by the Jakarta government.

Qlue has a role in gradually improving the quality of public services, and at the same time becoming a bridge in connecting the aspirations of the citizens of Jakarta. In the first semester of 2019, Qlue received 58,762 reports with 91% of reports being followed up by the DKI Jakarta Provincial Government. Three main problems currently faced by the people of Jakarta are illegal waste, illegal advertising, and illegal parking, with a contribution of 54% (<https://gizmologi.id>, 2019). The functional guarantee of using Qlue is connectivity and integration of the Qlue application system with the built governance system. There are at least 2 key factors of the maturity and success of an e-government system in public organisations that can be observed from the performance of Qlue applications. These factors are technological outreach and institutional factors (Eom, Seok Jin, Jun Houg Kim, 2014).

In 2019, the Qlue Smart City App was awarded the Best m-Government Service Award at the 7th World Government Summit in the Public Empowerment category, in Dubai (<https://www.menpan.go.id>, 2019).

However, the broader implementation of e-Government at the provincial level in Indonesia is uneven, because there are regions that are already financially capable and have advanced infrastructure like Jakarta or Surabaya. The Surabaya city government introduced an app-based service known as Matakota. Matakota, which was designed to increase mobility and safety for residents in Surabaya by providing information about traffic jams, natural disasters, and any criminal activity. It is equipped with a 'panic button' that can be used to call the police or an ambulance in case of an emergency. Another feature is an early warning system feature to warn victims in case of a looming natural disaster. This was introduced as a mitigation policy to reduce the number of victims in the event of a natural disaster.

The challenge of digital transformation in Indonesia today is uneven infrastructure, as the condition of Indonesia's ICT infrastructure is still not evenly distributed throughout Indonesia. This is shown by the fact that there are still 12,548 villages/sub-districts that have not been reached by 4G services, 9,113 villages/sub-districts in the 3T (Underdeveloped, Frontier and Outermost) areas, and 3,435 villages/sub-districts in non-3T areas. Internet access in Indonesia is also still quite low. Based on Speedtest Global Index 2020 data, Indonesia's internet access speed is ranked 120th in the world, while for fixed broadband speed, Indonesia is ranked 115th in the world. (Kemkominfo, 2020).

From the explanation above, it can be said that various efforts and initiatives have been carried out by the Indonesian government since the issuance of Presidential Regulation No. 95/2018 on e-Government for optimising digital government in Indonesia, but they are still not optimal and even far from what is expected by the regulations, although it is undeniable that there are several regions that show good performance in developing digital government. Based on some of the existing literature, there are many factors that can hinder and challenge the implementation of digital government in Indonesia (Kumar, 2007; Schwesler, 2009; Maulana, 2020), as follows:

1. There is no clear standardisation regarding the implementation of digital government and the lack of socialisation on how to implement ICTs in a real and ideal way for collaborations in local government, which is related to the sustainability of the policy innovations.
2. The unavailability of adequate human resources to manage the business processes of digital government, which causes a gap between the government's internal bureaucracy.
3. The infrastructure network for technology and information is not evenly distributed to the regions (local government).
4. Lack of community engagement and digital literacy related to the use of ICTs because the majority of the population is in the lower and middle-class group.
5. Lack of commitment from top level policy makers in local government to support digital government implementations, which has hampered collaboration with stakeholders, including citizens.
6. Organisational culture that is less supportive of change, and a low culture of sharing knowledge and information, especially between government agencies.

4 Conclusion

Digital Government is a holistic effort to modernise public policy through the adoption of digital technologies and new ways of collaborating with stakeholders, building new frameworks of service delivery, and creating new forms of collaboration. Massive technological developments provide opportunities for the government to serve citizens and increase its participation and cooperation in creating better policies. The involvement of citizens in the process of creating a two-way public policy will change the expectations of the relationship between citizens and the government, with the outcomes of building public trust in the government through the help of ICTs. The government's paradigm towards public services has shifted from a citizen-centric approach to adapting to the business needs of the community through partnerships with the government. For this reason, it is necessary to ensure that digital government is not only limited to digitising public services, but also must be integrated with processes in the development of public policies that involve many parties, including the private sector and the public in general. With the issuance of Presidential Regulation No. 95/2018, which is a regulatory transformation of the Presidential Instruction issued in 2003, opens great opportunities for accelerating the digital transformation of the government in Indonesia. By looking at the rapid development of digital adaptation in various government sectors in Indonesia, and the awareness of the importance of

accelerating digital transformation, Indonesia is currently still faced with conditions that require accelerated regulatory adaptation, equalisation of standardisation of digital government rules, and an equitable distribution of ICT infrastructure. In addition, it is necessary to accelerate the growth of human resources who also have a future skills set to create various innovations to support digital transformation in the government bureaucracy itself.

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