Public Value e-government Implementation: Evidence from Indonesia

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ABSTRACT: This study aims to identify the public value factors of the implementation of e-government in Indonesia from the perspective of government officials. To answer this objective, the results of a literature review from previous studies have been used that have identified six dimensions of public value and their respective factors. Survey data were collected from heads of government agencies in 33 province in Indonesia. The public value model is tested empirically through confirmatory factor analysis using structural equation modeling. The results showed that the crucial factors of public value e-government are: (1) increasing the quantity of information and public services ; (2) more responsive government operations ; (3) greater possibility of fairness, honesty, equality ; (4) better political possibilities and innovation ; (5) requesting good information for decision making; and (6) citizens have better access to government information and services. Research related to the public value of e-government implementation has never been carried out in Indonesia, so this study makes a significant contribution as an initial step in the evaluation and development of e-government in Indonesia.

KEYWORDS: public value, e-government, public services value, improved administration value, improved social value

1. INTRODUCTION

Along with the development of digital technology today, many changes have occurred, from traditional systems to digital system implementation. The public sector has also begun to take advantage of the existence of information technology to support its operational processes (Bretschneider & Bozeman, 1986). New terminologies such as "online government" (Peled, 2001), "digital government" (Mandelson, 1999), and "NetState" (Lawson, 1998) have been coined to emphasize this new phenomenon. Nonetheless, the term that eventually became broadly accepted was "e-government". Several benefits such as the ability to increase transparency and efficiency (Ahn & Bretschneider, 2011; Alsaad, Yousif, & AlJedaiah, 2018; García-Sánchez, Cuadrado-Ballesteros, & Frías-Aceituno, 2012; Santoro, Ferraris, & Winteler, 2019), increase communication and offer better services (Norris & Reddick, 2013). At the same time, it allows citizens to have easier access to information and increases the utility of services (Ziemba, Papaj, & Descours, 2014). ICT provides the infrastructure for better decision making (Simon, 1997) and is a major determinant of a country's growth (Avgerou, 2010). But if e-government does not work effectively, it is more difficult to achieve government growth, economic growth, poverty reduction, citizen prosperity, and the sustainability of a nation (Del Giudice, Garcia-Perez, Scuotto, & Orlando, 2019; Hanna, 2010). Developed and developing countries can get similar benefits from digital government initiatives such as efficiency, effectiveness, transparency, and accountability (Ndou, 2004). However, results are often simple and it is not always easy to produce a visible impact, especially in the short term (Gil-García & Pardo, 2005; R. Heeks, 2008; Zhu & Kindarto, 2016; Ziemba, Papaj, & Jadamus-Hacura, 2016).

Based on case studies conducted in several countries, the application of e-government aims to improve public services, tax administration, transparency and anti-corruption, and empowerment through information (Ndou, 2004). This is in line with (Bertot, Jaeger, & Grimes, 2010) that e-government can increase flexibility which can reduce corruption. The results of a survey related to e-government implementation conducted in the United States with chief officer informants as respondents, concluded: a) 86% felt an increase in service delivery; b) 83% stated that the government is more efficient; and c) 63% experienced a reduction in costs (Gupta & Jana, 2003). According to (Dada, 2006), the implementation of e-government in several developing countries has failed, 35% total failure, 50% partial failure, and only 15% were successful (Richard Heeks, 2003).

Smart digital strategies and technologies must be guided by the creation of public value through anti-corruption, data openness, information access, and data privacy strategies. Government efforts must focus on preventing corruption, making the government transparent, disclosing data, and handling the correct privacy of information. Technology is an important mechanism for enhancing public value creation (Valle-Cruz, 2019). An assessment of the meaning of public value is built collectively through deliberations involving selected and appointed government officials and key stakeholders (Stoker, 2006). Although e-Government can reinvent the public sector (Wirtz & Nitzsche, 2013), there is a lack of value research on e-Government from a developing country perspective (Karunasena & Deng, 2012). Developing countries have an inefficient administrative system (Yeboah-

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Assiamah, 2016). Hence the need to match investment in e-Government with certain aspects of public value desired by citizens, for the simple reason that public sector performance is evaluated in terms of the public value it generates (Moullin, 2017; Okong'o & Kyobe, 2019).

In Indonesia itself, the use of e-government still has major challenges including the readiness of government officials, traditional systems that are identical to the bureaucracy, the adoption of e-government to the community, the readiness of network infrastructure, low transparency, and the issue of corruption which has an impact on maladministration in public services (Wahyu Sulistya et al., 2019). (Sabani, Deng, & Thai, 2019) shows the various obstacles in the development of e-government in Indonesia, among others, ICT infrastructure is still inadequate, human resources are less competent, the readiness of citizens to use e-government and the environment is not supportive. All the above challenges must be resolved so that the implementation of e-government can increase the value of the public in Indonesia.

According to (Deng, Karunasena, & Xu, 2018) that information quality, electronic service functions, user orientation, efficiency and openness of public organizations, equality, self-development of citizens, trust, and environmental sustainability are important public values of e-government in the country. developing. This reveals that the use of the concept of public value is effective in evaluating the performance of e-government in developing countries. While a study from (Okong'o & Kyobe, 2019), there is a large influence of e-Government on various dimensions of public values. In practice, it provides an appropriate reference for guiding the formulation and restructuring of e-governance policies and strategies in developing countries. (Skiftenes Flak et al., 2009) argue that a structured way of understanding public sector values will make it easier to design e-government projects and also contribute to the alignment of various actors in the public sector. (Scott, Delone, & Golden, 2016) argue that the success of e-government systems depends on how citizens perceive the value that is realized from using the system. Likewise, (Rose, Persson, Heeager, & Irani, 2015) argue that studying the values embedded in the perceptions of e-government projects is a way of understanding their superordinate goals, and that coordinating the basic values of shareholders in the implementation of e-government. government.

Regarding the current state of research on public value, this study finds a lack of research on the public value of e-government, particularly, in the context of developing countries (Twizeyimana & Andersson, 2019) and from the wide variety of public values that have been studied previously, this author seeks to know more about which factors are most relevant to be applied in developing countries, especially in Indonesia.

2. LITERATURE REVIEW
E-Government

Electronic government (E-Government) is still not clearly defined, (Al-Busaidy & Weerakkody, 2011) and the World Bank has defined E-Government 'as' the use of information technology by government agencies (such as Wide Area Networks, the Internet, and cellular computing) which can change relationships with citizens, businesses, and other government agencies (Al-Shuaili, Ali, Jaharadak, & Al-Shekly, 2019). UNDP (United Nations Development Program) defines, "E-government is the application of IT by government agencies". As such, e-government has proven to be a dynamic and sustainable service delivery process. These e-services use ICTs to make services accessible to all citizens, with multi-channel public service delivery in an effective and efficient management process (Richard Heeks, 2005; Shareef, Archer, Kumar, & Kumar, 2010). On the other hand, e-government and e-democracy make citizens' contributions to the government more valuable, visible, and much more efficient (Holzer & Kim, 2005; Khamallag, Kamala, & Tassabehji, 2017).

Public Value

Public value theory is important for public administration research; However, it is difficult to study quantitatively the causes, consequences, and correlations of public value (Faulkner & Kaufman, 2018). One of the important issues that generate public value is the aspiration to achieve horizontally and vertically coordinated thinking and action, allowing citizens access to services without boundaries rather than fragmentation, public value is a matter of who consumes them, not who produces them (Alford & Hughes, 2008).

Public values are a central part of every government process (Prebble, 2015). According to (Frederickson, 1991), public value is created in a relationship that involves the "public", distinguishing five perspectives: the public as an interest group: a pluralist perspective; the public as consumers: a public choice perspective; represented public: a legislative perspective; the public as a client: a service delivery perspective; and the public as citizens. The theory of "public value" was adopted from public administration and more specifically Moore's theory of "public value" as the collective expectations of citizens in terms of government and public services (Moore, 1994). According to (Castelnovo, 2013), government actions usually do not have a direct impact on citizens or citizens of a particular country in a broad sense; rather it is intended to have a direct impact on stakeholder groups and their interests (Twizeyimana & Andersson, 2019).

In the search for "public value", the government addresses strategic objectives that go beyond economic gain to account for political and social goals such as efficiency in public services, equal treatment of constituents, social inclusion, openness,

community regeneration, community welfare, stewardship and accountability (Chircu, 2008; Chircu & Lee, 2005; Cordella & Bonina, 2012; Grimsley & Meehan, 2007; Moore, 1994). That is, achieving "public value" in e-government must be understood as the ability of e-government systems to provide increased efficiency in government, improve services to citizens, and social values such as inclusion, democracy, transparency, and participation (Twizeyimana & Andersson, 2019).

One way for the government to generate public value through the use of technology is with e-government services, which provide ways of interacting with citizens, accountability, transparency, efficiency, and anti-corruption strategies. Currently, governments are using new and emerging technologies to automate their processes and develop their activities more efficiently, and generate public value, through technological innovation (Valle-Cruz, 2019).

The results of the literature review that has been carried out by (Twizeyimana & Andersson, 2019) has succeeded in documenting various factors in public value and at the same time mapping them as follows:
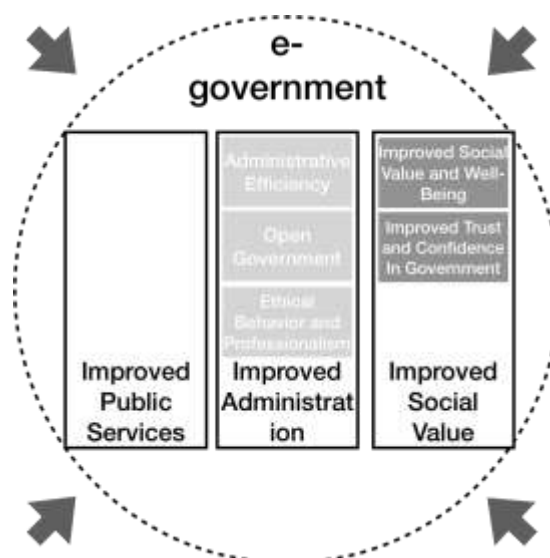

Figure 1. Generalization of the 6 dimensions of public value

Improved Public Serviced (Twizeyimana & Andersson, 2019)

"Public Service Improvement" is one dimension of public value. This definition refers to the enhancement of different services offered by e-government. For example, the adoption of digital platforms to increase public service propositions and deliverables, increase access, and public service delivery (Pirannejad, 2011). According to (Rose, Persson, & Heeager, 2015), public service, citizen orientation, service level, and service quality are the values that underlie e-government as seen from the ideals of public service and customer orientation of New Public Management.

According to (Omar, Scheepers, & Stockdale, 2011) that providing services to citizens is one of the main sources of public value, and this value is highly dependent on the level of service quality provided by public organizations. However, improving services should not only be related to the quality of information and public services (Hellang & Flak, 2012; Jansen, 2012), but also related to many factors such as an increase in the quantity of information and public services (Pang, Lee, & Delone, 2014), and the provision of more inclusive public services, for example, public (citizen) centered services and personalized public services such as special provision for persons with disabilities, language support for minorities, online advice, etc. (Grimsley & Meehan, 2007; Hellang & Flak, 2012; Jansen, 2012; Rose, Persson, & Heeager, 2015; Rose, Persson, Heeager, et al., 2015; Twizeyimana & Andersson, 2019).

Improved Administrative Efficiency

According to (Bannister & Connolly, 2014), through e-government, humans can be removed from the chain of decision making, rules can be formalized and embedded in IT artifacts and thus provide (to some extent) more fairness, honesty, equality, reduction or elimination. big. risk of corruption and abuse of the law by civil servants, etc. Also, e-government is expected to facilitate the maintenance of durable and accurate records, build durable and competent institutional capacity, and serve citizens impartially (Grimsley & Meehan, 2007; Rose, Persson, & Heeager, 2015; Rose, Persson, Heeager, et al., 2015) and decisions by law and official policy (Bannister & Connolly, 2014).

The "Administrative Efficiency Improvement" dimension includes the objectives of efficiency, effectiveness, quality improvement, and lower costs for administrative processes, systems, and services (Castelnovo, 2013; Hellang & Flak, 2012; Mkude & Wimmer, 2013; Ndou, 2004). It also concerns maintaining systematic, sustainable, flexible, strong, lean and agile government operations, better management of resources and the public economy (Castelnovo, 2013; Rose, Persson, & Heeager, 2015; Rose, Persson, Heeager, et al., 2015; Twizeyimana & Andersson, 2019). Increased administrative efficiency is also related to reducing

administrative burdens, reducing barriers and queues in service delivery to citizens, improving the quality of processes and services to citizens (Castelnovo, 2013), enabling better communication, collaboration, and cooperation in public administration (Bannister & Connolly, 2014; Castelnovo, 2013; Karkin & Janssen, 2014), and public empowerment and capacity building (Ndou, 2004), better organization, and efficient use of IT (Hellang & Flak, 2012).

Open Government (OG) Capabilities

The value of Open Government (OG) can be achieved through achieving democratic dimensions such as openness, transparency (Jansen, 2012), participation, and collaboration (Castelnovo, 2013; Harrison et al., 2011). Online platforms can facilitate government agencies and departments to collaborate with, for example, sharing databases, resources, skills, and capabilities (Ndou, 2004). The open government capability dimension also refers to public involvement, good information, sharing databases, skills, and resources - hence, capacity building, and empowerment (Twizeyimana & Andersson, 2019). (Castelnovo, 2013) argues that OG allows citizens to acquire substantial financial, social, political or strategic values as well as intrinsic values associated with the government itself. For example, the impact of e-government on openness, transparency, participation, communication, and collaboration to exert personal or corporate influence and control over government actions or policies, thus allowing more possibilities, opportunities, and political innovation (Castelnovo, 2013; Jansen, 2012; Liu, Derzsi, Raus, & Kipp, 2008).

A transparent environment is built to proactively disseminate information to citizens promptly (Karkin & Janssen, 2014), to make citizens well informed and able to participate in decision making (Scott et al., 2016). In addition, in today's dynamic environment, OG is expected to support the government or public organizations to collaborate with, or partner with, other public organizations or with private sector businesses to provide quality public services (Pang et al., 2014).

Improved Ethical Behavior and Professionalism

Improved Ethical Behavior and Professionalism are related to " Core Values" (Rose, Persson, & Heeager, 2015). These values form the backbone of government operations and policies (Rose, Persson, Heeager, et al., 2015). They include but are not limited to, the responsibility to citizens, appropriate and efficient use of public funds, facilitation of democratic will, integrity, honesty, justice, accountability, economy or simplicity, honesty, legitimacy, rule of law, effectiveness, coherence, capability adaptability, impartiality, objectivity, trustworthiness, and openness (Bannister & Connolly, 2014; Mkude & Wimmer, 2013; Rose, Persson, & Heeager, 2015; Rose, Persson, Heeager, et al., 2015; Twizeyimana & Andersson, 2019). Core values refer to resilience, reliability, demand for good information for decisions, security, efficiency, effectiveness, better access to government information and services, collaboration, participation, maintenance of accurate long-lasting records, durable institutional capacity, and competent (Grimsley & Meehan, 2007; Rose, Persson, & Heeager, 2015; Rose, Persson, Heeager, et al., 2015), and decisions based on law and official policy (Bannister & Connolly, 2014).

Improved Trust and Confident in Government

E-government can increase public trust through increased transparency, citizen participation, and giving the public greater control over the actions and decisions of their government (Castelnovo, 2013). Public trust is also gained by providing the public with better access to government information and services (Rose, Persson, & Heeager, 2015), and by increasing flexibility, reliability and customer service (Chircu, 2008). The notion of Increasing Trust and Trust in Government refers to "social trust", trust obtained from the extent to which the government maintains public information and the privacy of its citizens (Osmani, Weerakkody, Sivarajah, & El-Haddadeh, 2014), and to public trust, namely, the way public organizations manage the economy, public resources, and service delivery (Castelnovo, 2013; Rose, Persson, & Heeager, 2015; Rose, Persson, Heeager, et al., 2015). Menurut (Grimsley & Meehan, 2007), the experience of citizens in service provision and service outcomes contributes to the formation of public trust. Increased government confidence resulted from better interaction through e-government at the local level (Boughton, 2006).

Trust through transparency is created when public organizations disclose their decision-making processes and procedures through e-government (Castelnovo, 2013). Trust can be gained through increased reliability (Chircu, 2008) and security, for example, when the government is more flexible and agile to overcome challenges that arise (Pang et al., 2014), protecting the basic values of trust, openness, resilience, reliability, accountability, and security (Rose, Persson, & Heeager, 2015). Trust through participation is created by public organizations by allowing and increasing citizen participation in public discussions (Karunasena, Deng, & Singh, 2011).

Improved Social Value and Well-Being

E-government can affect social value and welfare in many ways (Twizeyimana & Andersson, 2019). For example, through digital platforms such as social media, digital news portals, etc. This can increase the level of community social contact, thereby improving the social health of residents. Welfare and prosperity are also supported by e-government through facilitating better management of public resources through online applications and transactions, by increasing the quantity and quality of services to citizens, etc. (Rose, Persson, & Heeager, 2015; Rose, Persson, Heeager, et al., 2015).

Social Values and Welfare are dimensions of values created by the government for family, community, and other relationships (Cook & Harrison, 2015; Srivastava, 2011) which includes increasing social status, relationships, and opportunities;

increased security, trust, social and economic welfare (Liu et al., 2008; Raus, Liu, & Kipp, 2010). The social value and well-being dimension of e-government relate to the ability to support the government in achieving better outcomes in the areas of peace, security, poverty reduction, public health, employment, crime rates, cleaner roads, a better environment, and better educational achievement. better (Osmani et al., 2014). Ease of doing business can also create value for citizens, in terms of a better country's economic conditions which in the long run can contribute to improving the welfare and quality of life of citizens (Castelnovo, 2013).

3. RESEARCH DESIGN

(Twizeyimana & Andersson, 2019) from the results of their study, mapping the six dimensions of public value from e-government and of all these values transcend one another so that several factors that are tested are examined first, if the same factors are found then only one is chosen. more under the context of the dimensions. (It's in the attachment)

4. RESULT AND DISCUSSION

The questionnaire was given to respondents with 10 indicators for each variable improved public service, 13 indicators of variable improved administrative efficiency, 7 indicators of open government variables, 9 indicators of improved ethical behavior and professionalism, 9 indicators of variable improved trust and confidence in government, 11 indicators of variable improved social value and well-being. From the respondents' answers, the value of the variable improved public service on average was 3.84. This value falls into the high category.

From the respondents' answers, the value of the improved administrative efficiency variable on average was 3.85. This value falls into the high category. Based on the respondents' answers to the Open Government (OG) capabilities variable, the average value is 3. This value falls into the high category. Meanwhile, the variable value of improved ethical behavior and professionalism was 3.84. This value falls into the high category.

Based on respondents' answers to the variable Improved Trust and Confidence in Government, the average value is 3.67. This value falls into the high category. Based on the respondents' answers to the Improved Social Value and Well-Being variable, the average value is 3.91. This value falls into the high category.

The Confirmatory Factor Analysis (CFA) test is used to test the unidimensional validity and reliability of the construct measurement model that cannot be measured directly. CFA has 2 main objectives, namely measuring the indicators that are conceptualized unidimensional, precisely and consistently as well as the dominant indicators that form the construct under study. Referring to (Wijanto, 2008), the relationship between latent variables and the observed variables has a reflective character, meaning that the observed variable is a reflection of the related latent variable. Therefore, by testing the measurement model, the researcher tries to confirm whether the observed variables are indeed a reflection of a latent variable, so the measurement model analysis is also called confirmatory factor analysis or CFA. For this reason, the researcher conducted the test by checking whether the t-value and standardized loading factors (λ) of each observed variable had met the criteria for good validity, namely x t-value $\geq$ 1.96 and the value of standardized loading factors (SLF). $\geq$ 0.50 (Igbaria, Zinatelli, Cragg, & Cavaye, 1997) in (Wijanto, 2008). As for the reliability analysis, researchers used composite reliability (CR) $\geq$ 0.70 and variance extracted (VE) $\geq$ 0.50 (Wijanto, 2008).
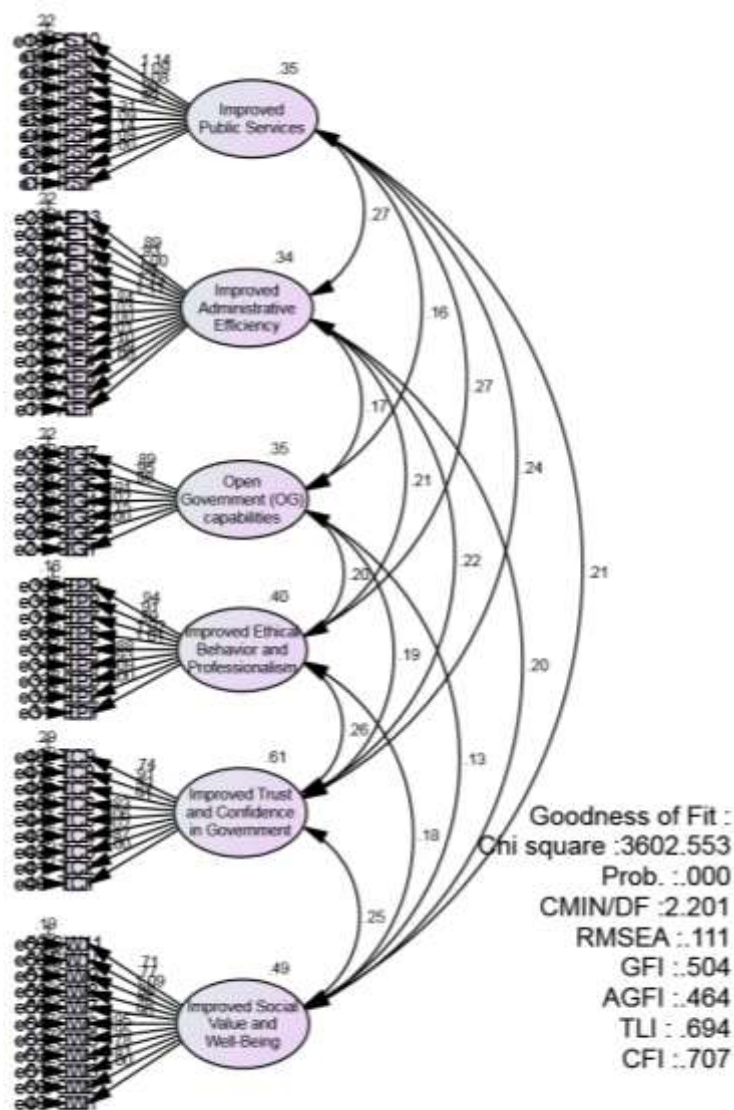
Figure 2. Initial CFA Model

Measurement model testing is carried out to see how indicators can represent latent variables in previously created research models that are assessed using validity and good performance. Validity was tested using convergent validity and discriminant validity, while reliability was measured using composite reliability and Cronbach's alpha. The convergent validity test is used to determine whether the construct (indicator) has a high proportion of variance or not. Discriminant validity testing is used to find out how far an indicator (construct) is different from other indicators (constructs). In this study, the testing is done by loading factor and using AMOS AVE 22, as shown in Table 4. 7 below.

Table 1. Convergent Validity Test Results

Convergent Validity	Hasil Uji							Keterangan
	Indikator	**Variabel Laten**						
		PS	**AE**	**OG**	**EP**	**TC**	**SW**	
Outer Loadings	PS1	0.785						Valid
	PS2	0.737						Valid
	PS3	0.768						Valid
	PS4	0.798						Valid
	PS5	0.778						Valid
	PS6	0.802						Valid
	PS7	0.723						Valid
	PS8	0.791						Valid
	PS9	0.802						Valid

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Item						Status
PS10	0.820					Valid
AE1		0.849				Valid
AE2		0.822				Valid
AE3		0.803				Valid
AE4		0.843				Valid
AE5		0.825				Valid
AE6		0.812				Valid
AE7		0.712				Valid
AE8		0.851				Valid
AE9		0.870				Valid
AE10		0.796				Valid
AE11		0.798				Valid
AE12		0.759				Valid
AE13		0.743				Valid
OG1			0.823			Valid
OG2			0.854			Valid
OG3			0.857			Valid
OG4			0.797			Valid
OG5			0.753			Valid
OG6			0.786			Valid
OG7			0.751			Valid
EP1				0.853		Valid
EP2				0.866		Valid
EP3				0.832		Valid
EP4				0.800		Valid
EP5				0.749		Valid
EP6				0.839		Valid
EP7				0.853		Valid
EP8				0.820		Valid
EP9				0.828		Valid
TC1					0.832	Valid
TC2					0.819	Valid
TC3					0.894	Valid
TC4					0.906	Valid
TC5					0.769	Valid
TC6					0.814	Valid
TC7					0.824	Valid
TC8					0.853	Valid
TC9					0.727	Valid
SW1						0.911 Valid
SW2						0.817 Valid
SW3						0.784 Valid
SW4						0.787 Valid
SW5						0.926 Valid
SW6						0.891 Valid
SW7						0.877 Valid
SW8						0.808 Valid
SW9						0.810 Valid

				0.708	Valid
	SW10			0.708	Valid
	SW11			0.750	Valid
Average Variance Extracted (AVE)	**PS**	**0.610**			
	AE	**0.652**			
	OG	**0.646**			
	EP	**0.684**			
	TC	**0.686**			
	SW	**0.684**			

Source: Research Data Processing, 2020

To show that an item has convergent validity, the loading factor value is at least 0.5 (Hair, Black, Babin, & Anderson, 2010) . Table 4.7 shows that the outer loading of all indicators in the questionnaire is more than 0.5, so it can be said to be valid. Meanwhile, based on Average Variance Extracted (AVE), it can be seen that all latent variables have a value> 0.5 so that it is said to be valid.

Model Fit Test

Results of testing the suitability of the model in the confirmatory factor analysis are presented in Table 4. 1 4 below:

Tabel 2. Criteria for Goodness of fit Final Model CFA results

No.	*Goodness of Fit Index*	*Cut off Value*	Hasil Analisis	Evaluasi Model
1	X2 – *Chi Square*	Sekecil mungkin	3602.553	Marginal Fit
2	Probabilitas	≥0.05	0.000	Not Fit
3	CMIN/DF	≤2.0	2.201	Not Fit
4	RMSEA	≤0.08	0.111	Not Fit
5	GFI	Approaching 1	0.504	Not Fit
6	AGFI	Approaching 1	0.464	Not Fit
8	TLI	Approaching 1	0.694	Marginal Fit
9	CFI	Approaching 1	0.707	Marginal Fit

Source: Primary data processed, 2020

Based on the table above shows that from the initial analysis the resulting model is not fit. This can be seen from the RMSEA, CFI , GFI, IFI, TLI, and P-Value values that are not yet under the expected criteria or size. Therefore, the next step is to conduct a confirmatory factor analysis (CFA) analysis to find the best model. The results of the analysis of model adjustments can be seen in the image below:
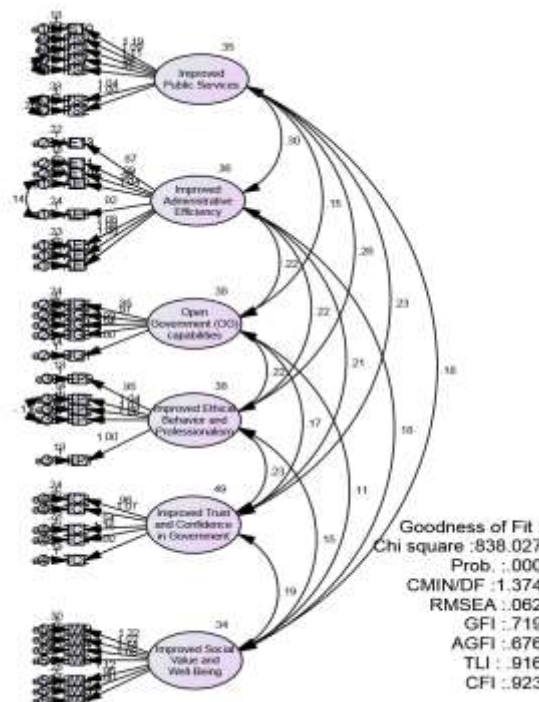
Figure 3. CFA Test Results After Modification

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The results of measuring the Goodness of fit criteria for the final model of the CFA results are as presented in the following table:

Tabel 3. Criteria for Goodness of fit Final Model CFA results

No.	*Goodness of Fit Index*	*Cut off Value*	Hasil Analisis	Evaluasi Model
1	X2 – *Chi Square*	Sekecil mungkin	838.027	Good Fit
3	CMIN/DF	≤2.0	1.374	Good Fit
4	RMSEA	≤0.08	0.062	Good Fit
5	GFI	Approaching 1	0.719	Marginal Fit
6	AGFI	Approaching 1	0.676	Marginal Fit
8	TLI	Approaching 1	0.916	Good Fit
9	CFI	Approaching 1	0.923	Good Fit

Source: primary data analysis (2019)

The table above shows that the planned model fits well because after testing the compatibility of the CMIN / DF, GFI, AGFI, RMSEA, TLI, and CFI values is good. So it can be concluded that the modification test results are better than the initial model.

Covariances Test
Tabel 4. Covariances Test

			Estimate	**S.E.**	**C.R.**	**P**
Improved Public Services	<-->	*Improved Administrative Efficiency*	0.302	0.062	4.879	***
Improved Administrative Efficiency	<-->	*Open Government (OG) capabilities*	0.216	0.049	4.368	***
Open Government (OG) capabilities	<-->	*Improved Ethical Behavior and Professionalism*	0.219	0.051	4.275	***
Improved Ethical Behavior and Professionalism	<-->	*Improved Trust and Confidence in Government*	0.228	0.056	4.048	***
Improved Trust and Confidence in Government	<-->	*Improved Social Value and Well-Being*	0.193	0.051	3.758	***
Improved Public Services	<-->	*Open Government (OG) capabilities*	0.148	0.047	3.127	0.002
Improved Administrative Efficiency	<-->	*Improved Ethical Behavior and Professionalism*	0.218	0.049	4.414	***
Open Government (OG) capabilities	<-->	*Improved Trust and Confidence in Government*	0.172	0.053	3.236	0.001
Improved Ethical Behavior and Professionalism	<-->	*Improved Social Value and Well-Being*	0.153	0.044	3.482	***
Improved Public Services	<-->	*Improved Ethical Behavior and Professionalism*	0.262	0.059	4.452	***
Improved Administrative Efficiency	<-->	*Improved Trust and Confidence in Government*	0.213	0.054	3.978	***
Open Government (OG) capabilities	<-->	*Improved Social Value and Well-Being*	0.109	0.042	2.601	0.009
Improved Public Services	<-->	*Improved Trust and Confidence in Government*	0.225	0.059	3.842	***
Improved Administrative Efficiency	<-->	*Improved Social Value and Well-Being*	0.176	0.044	3.981	***
Improved Public Services	<-->	*Improved Social Value and Well-Being*	0.176	0.047	3.72	***

Based on the results of the Covariances Test on Confirmatory Factor Analysis (CFA) it can be seen that all the factors have a significant relationship between factors that one other factor because it has a probability value which is under alpha of 5% (0,05)..

4. DISCUSSION

From the descriptive analysis, it was found that the Improved Social Value & Well Being variable had the highest score of all variables. This suggests the hopes or goals of government agencies in implementing e-government, given that the sample used in this study is the head of government agencies. The government has a different perception of values from society in implementing e-government (Caroline J. Tolbert & Karen Mossberger, 2006; Omar et al., 2011; Pirannejad, 2011; Srivastava, 2011). Different findings might be found in the sample used is the community (Scott et al., 2016) or business (Raus et al., 2010). Therefore, it is necessary to match the perceived value of the government and society to get a better evaluation of e-government implementation results (Bai, 2013).

Furthermore, government operations are more responsive and allow for greater justice, honesty, equality is the most crucial factor of variables improved administrative efficiency. This could be due to the culture of the government apparatus which tends to be bureaucratic so that there is a desire for the implementation of e-government which allows increased responsiveness, integrity, and equality at various levels of government. This is also what might lead to better political possibilities and innovation to be the most crucial factor in the open government capabilities variable.

Then in the variable improved ethical behavior and professionalism, the demand for good information for decision making is the most crucial factor because decision making based on data has not been evenly applied in various government agencies/agencies. So there is hope that the implementation of e-government implementation can support this. In the improved trust and confidence in government variable, citizens have better access to government information and services which is the most crucial factor, this is because the condition of citizens' access to information and government services, which is currently not optimal, could trigger expectations from the government in its implementation e-government. In the variable improved social value and well-being, the achievement of better results in the fields of peace, security, poverty reduction, public health, high employment, low crime rates, clean roads, the environment, and better educational attainment are the most crucial factors. This is because the current condition is still opposed to the factors above. The political uncertainty caused divisions that threatened peace and security. High levels of poverty (9.78%) and unemployment (4.99%) are still the main agenda in social development in Indonesia (BPS, 2020) . High levels of poverty and education correlate with crime rates (Armin & Idris, 2020; Bissonnette, 2019). The accumulation of some of these things might cause the SW4 factor to be the most crucial in the improved social value and well-being variable.

5. CONCLUSION

E-government development should be based on public values. There is a need to match the views of the government and the public as users to the public value created by e-government. This study reveals crucial or important factors from the six public value variables. Of the various kinds of crucial factors in each of the variables that have been mentioned above, it should be a major concern in implementing e-government in Indonesia.

6. ACKNOWLEDGMENT

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Public Value e-government Implementation: Evidence from Indonesia

APPENDIX A. VARIABLES OPERATIONS

Variable	Definition	Indicator	Scale
Improved Public Services	Improved different services offered by e-government (Twizeyimana & Andersson, 2019)	provision of services to citizens	Interval
		increased quantity of public information and services	Interval
		increased quality of public information and services	Interval
		provision of more inclusive public services	Interval
		provision of personalized services (e.g., special provision for disability, language support for minorities, online advice, etc.)	Interval
		provision of services directed towards the public good,	Interval
		improved delivery of public services	Interval
		enabled transparency, participation, and collaboration in the delivery of public services	Interval
		provision of more responsive, efficient, and cost-effective public services	Interval
		improved access to government information and services	Interval
Improved Administrative Efficiency	Efficiency improvement includes the goals of efficiency, effectiveness, quality improvement, and lower costs for administrative processes, systems and services (Twizeyimana & Andersson, 2019)	better management of public resources and economy	Interval
		cost-reduction	Interval
		reduced administration burden	Interval
		reduced bottleneck and queues in the delivery of services to citizens	Interval
		a robust government (e.g., operations are systematic, efficient, effective, sustainable, flexible, lean, and agile)	Interval
		more responsive government operations	Interval
		increased quality of processes, systems, and services to citizens	Interval
		better collaboration, cooperation, and better communication	Interval
		enabled public empowerment and capacity building	Interval
		maintained accurate and durable records	Interval
		enabled government to taking decisions by law and authorized policy	Interval
		reduced or eliminate the risk of corruption and abuse of the law by public servants	Interval

		Memungkinkan keadilan yang lebih besar, kejujuran, kesetaraan	Interval
Open Government	Refers to public engagement, good knowledge, sharing of databases, skills and resources - hence, capacity building and empowerment (Twizeyimana & Andersson, 2019)	more open government or public sector operations	Interval
		increased transparency of public sector operations	Interval
		increased public/citizens participation in government actions and policy making	Interval
		improved communication and collaborative actions in the public sector	Interval
		improved public control and influence on government actions and policies	Interval
		improved political possibilities and innovations	Interval
		increased frequency and intensity of direct involvement in decision making	Interval
Improved Ethical Behavior and Professionalism	Basic values which include, but are not limited to, responsibility to citizens, use of public funds appropriately and efficiently, facilitation of democratic will, integrity, honesty, justice, accountability, economy or simplicity, honesty, legitimacy, rule of law, effectiveness, coherence , adaptability, impartiality, objectivity, trustworthiness, and openness (Twizeyimana & Andersson, 2019)	maintenance of fundamental beliefs and constitutional principles (e.g., responsibility to the citizen/politician)	Interval
		proper and efficient use of public funds	Interval
		facilitation of democratic will	Interval
		compliance with the law	Interval
		demand for good information for decisions	Interval
		reduction or elimination of the risk of corruption and abuse of the law by public servants	Interval
		increased integrity, honesty, fairness, equality, accountability, responsibility, economy/parsimony, rectitude	Interval
		increased citizens' access to government information and services	Interval
		creation of durable and competent institutional capacity	Interval
Improved Trust and Confidence in Government	Referring to "social trust", trust obtained from the extent to which the government secures public information and the privacy of citizens (Twizeyimana & Andersson, 2019)	better security of public information and privacy of citizens	Interval
		better management of public organizations, manage economy, public resources	Interval
		better delivery of public services	Interval
		citizens have more control of actions and decisions of their government	Interval
		citizens have better access to government information and services	Interval
		increased quality of public services	Interval

		improved citizens' experience of service provision and service outcomes	Interval
		improved interaction at the local level (e.g., visiting a local government website increase citizens' trust in local governments)	Interval
		protection of foundational values of trustworthiness, openness, robustness, reliability, accountability and security	Interval
Improved Social Value and Well-Being	Various values created by government for families, communities and other relationships (Twizeyimana & Andersson, 2019)	improved social well-being	Interval
		creation of value(s) for families, community, and other relationships	Interval
		increased safety	Interval
		achievement of better outcomes in areas of peace, security, poverty reduction, public health, high employment, low crime rates, clean streets,	Interval
		improved environment and better educational achievements	Interval
		enabling freedom and equal rights	Interval
		improved citizens' levels of social contact	Interval
		impact on individual and household health, security, and satisfaction	Interval
		improved economic well-being	Interval
		increase ease of doing business (i.e., create a value for citizens in terms of increased citizens' well-being and quality of life	Interval
		improved better management of public resources (e.g., by means of online applications and transactions)	Interval