# Transparency and Corruption: Does E-Government Effective to Combat Corruption?

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Abstract--- This study aims to analyze whether the implementation of e-government in the local government environment in Indonesia is effective in fighting corruption. Through a qualitative approach, the results of this study have revealed the enormous implications of e-government in fighting corruption. The implementation of egovernance in Indonesia aims to improve public services by promoting transparency and accountability in order to prevent corruption. With the application of this system, it is expected that the practices of corruption, collusion and nepotism can be prevented and able to oversee regional planning and development in Indonesia. In practice, the application of electronic-based public services or e-government has not been effective in preventing corruption in local government in Indonesia.

Keywords--- Transparency, Corruption, E-Government, Supervision, Prevention.

#### I. INTRODUCTION

Corruption is said to be one of the most common and persistent challenges in increasing economic growth and quality of life for citizens around the world (Mistry & Jalal, 2012). Some researchers define corruption as an act where the power of the public office is used for personal gain in a way that conflicts with existing regulations (Jain, 2001; Tanzi, 1998) while others define corruption as an abuse of public power for personal gain (Rose-Ackerman & Palifka, 2016).

Corruption researchers in recent decades (Mo, 2001; Jain, 2001; Svensson, 2005; Tanzi, 1998; Del Monte & Papagni, 2001; Gyimah-Brempong, 2002; Leite, & Weidmann, 1999; d'Agostino et al., 2016; Drury et al., 2006; Podobnik et al., 2008; Anoruo & Braha, 2005; De Vaal & Ebben, 2011) have found that corrupt practices can hamper investment, limit economic growth, change the composition of government spending, cut mission countries to reduce poverty, and prevent the improvement of the quality of life of rural and poor people in developing countries (Bhargava & Bolongaita, 2004).

Corruption prevention efforts, many countries have implemented public services based on information and communication technology or e-governance. The goal is to monitor the performance of public officials and prevent deviant behavior in providing public services by streamlining the work of the bureaucracy and especially also transparency and accountability. The use of information and communication technology is also expected to

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minimize and prevent corruption. However, in practice, the application of electronic-based public services or egovernment was not yet effective in preventing the occurrence of corrupt practices (Manurung et al., 2019).

Various ways are done by corruptors to get around the system that has been built, such as using the services of hackers to damage the e-procurement system. In addition, there are still internet-based public service users who do not experience difficulties or do not understand how to access them, so they are used by individuals for corrupt practices. Ignorance of the application user increases "face-to-face" between the applicant and the public service provider, thus opening a gap for corrupt practices or making charges outside the official fee. There are even agreements for the project winner even though the auction process has been carried out through e-procurement. An example is the intervention of elements in agencies and executives from the planning stage to the technical implementation. In this practice, the tender winner has been known from the beginning. Of course, this is a corrupt practice.

In Indonesia, electronic-based applications or e-government systems are applied in government institutions based on Presidential Instruction of the Republic of Indonesia Number 3 of 2003 concerning National Policies and Strategies for E-Government Development. After the implementation of the system, it was recognized that there was an increase in public services to the community that was far better than the "face-to-face" model, reduced brokering practices, reduced corruption in tax revenue, and the accuracy of the calculation of taxes paid were the benefits derived from the application of e-government.

The implementation of e-government in various countries has produced mixed results. The diverse results of the implementation of e-government can be traced from a study of the application of this system. In general, the causes of the various results (failing, partially failing or succeeding) refer to consistency in implementing this system (Mpinganjira, 2013; Anthopoulos et al., 2016). For the case in Indonesia, the application of this system has been very well initiated through a Presidential Instruction in an effort to develop electronic-based governance in order to improve the quality of public services effectively and efficiently. Through this system, good governance should be realized. This means that if the system is applied consistently, then corrupt practices in public services can be eliminated.

Many studies have been conducted by researchers on the application of e-government to prevent corruption (Andersen, 2009; Manurung et al., 2019; Krishnan, et al., 2013; Mistry & Jalal, 2012; Shim & Eong, 2008; Bertot et al., 2010; Elbahnasawy, 2014; Kim & Lee, 2009; Ojha et al., 2008; Cho & Choi, 2004; Bathnagar, 2003; Hartana, 2015). However, no study has been conducted on the implementation of e-government in local government in Indonesia, so this research contains an element of novelty in it. In this article, we focus specifically on analyzing the potential role of e-government in preventing corrupt practices. This article is derived from the results of our research in several local governments in Indonesia.

International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 04, 2020 ISSN: 1475-7192

#### **II. METHODOLOGY**

This research was conducted using qualitative methods (Patton, 1990; Cassell & Symon, 2004; Creswell & Poth, 2016; Moleong, 2009). Data collection techniques are done through in-depth interviews and literature studies (Creswell & Miller, 2000). Data analysis is carried out inductively where the data obtained will be analyzed and developed into basic research assumptions, then other data continues to be collected and conclusions are drawn. Data analysis was performed using the Miles & Huberman (1984) model, which consisted of three stages, namely data reduction, data presentation and drawing conclusions/verification.

#### **III. RESULTS**

#### Implementation of E-Government in Local Government Environments in Indonesia

One effort to minimize corruption, among others, is carried out by implementing good governance. One form of good governance is the implementation of e-government which was initiated through the Presidential Instruction of the Republic of Indonesia Number 3 of 2003 concerning National Policies and Strategies for E-Government Development. This Presidential Instruction was formed with consideration, among other things, to carry out good governance and improve public services that are effective and efficient. It is necessary to have policies and strategies for developing e-government (Basic Considering letter c).

The development of e-government in the delivery of public services is based on several advantages of this system, namely reducing the time, energy and costs incurred by the community, increasing service delivery and citizen satisfaction, improving information technology and user communication skills, internet knowledge, and computer use; and creating new business and employment opportunities. However, the fact is also realized that the e-government system still has some shortcomings. These deficiencies are inseparable from the character of technology as the basis of this system, namely the man-machine interface that causes the condition of public service officers who are far from the community because of the availability of services via mobile phones, electronic mail (e-mail) and security of electronic-based public services that are still not secure in protecting all data information.

In practice, the technology that is used as a basis for e-government turns out to be vulnerable to intervention, for example by using hacker services in cases of irregularities in the procurement of goods and services through e-procurement. In addition, the e-procurement model apparently did not prevent agreements to determine the winner of the project, so this system was only used as an administrative justification that the procurement of goods and services is one services had been carried out transparently. The auction system for the procurement of goods and services is one sector that is vulnerable to corrupt practices, in addition, to permit issuance services. There are several indications that make corruption-prone to occur at each stage in the process of procurement of goods and services. Emil Salim identified this in 5 (five) processes, namely: in the planning process that began with project identification and feasibility studies, in the system used, in the tender process, in the use of official authority, and in filling out the Project Content List (DIP) and the disbursement of DIPs that are targeted is cut (Amiruddin, 2010). Corruption mode occurs at each of these stages.

According to the Corruption Eradication Commission (KPK) review, the triggers refer to 5 (five) aspects, namely the aspects of regulation, planning, budgeting, implementation, and supervision. To overcome this issue, the Republic of Indonesia Presidential Regulation Number 54 the Year 2010 concerning Procurement of Government Goods/Services was last amended by Presidential Regulation Number 4 of 2015 concerning Government Procurement of Goods / Services). In addition to "behind the table" agreements, a form of cheating that is often used to win a project is to use a hacker who has expertise in information technology. Hackers are paid to hack the system to make it difficult for other bidders to access the site, adjust the bid value, and even frustrate other competitors when uploading data to LPSE website pages. The use of technology in public services is apparently not always accessible or understood by the public as users or applicants for public services. This complexity has forced the applicant to "meet face to face" with public service providers, so as to open up opportunities for the emergence of corrupt practices. In addition, this complexity also results in low public supervision of public institutions, due to the low number of system accesses.

Transparent public services, increasing the professionalism of public officials, and increasing oversight of the performance of public servants are the main objectives to be achieved that have failed to achieve. This is indicated by the occurrence of irregularities or corrupt practices in electronic-based public services. These deviations are marked by several cases of corruption or illegal fees involving the Head of the Investment and Integrated Services Office at One Door in several regions in Indonesia as well as some irregularities in the procurement of goods and services through the Electronic Procurement Service System (LPSE) or e-procurement which shows that it is still the vulnerability of electronic-based public service systems. In the last 5 (five) years from 2015 to 2019, the number of criminal acts of corruption in the goods and services procurement sector has increased from previous years.

Corrupt behavior has a negative influence on the use of e-government (Alshehri & Drew, 2010). The transparency that is expected to be achieved by implementing e-government has not been able to reduce the potential for corruption. Some of the causes are the low number of case disclosures, the difficulty of access to the system, the low sanctions for corrupt practices caught in the act, and the low level of supervision from the public. In addition, this corrupt practice is also driven by a decentralized system that lacks good accountability and supervision. So it is necessary to build an anti-corruption-based policy in the interaction of public services through enhancing the integrity of public officials, the public, and business people by using technology as a supervisory instrument.

#### E-Government Effectiveness in Preventing Corruption in Local Government Environments in Indonesia

The development of information and communication technology in government studies provides easiness in accessing information and communication to the public. However, it is undeniable that technology is also vulnerable to be used or misused to commit a crime. One form is cheating or corrupt. The professionalism of public officials influences the reliability of e-government, including to prevent corrupt practices. The professionalism that was built with a good understanding of public officials towards the management of public services and understanding of sanctions received when committing misconduct turned out to have reduced the potential for corrupt practices (Rahayuningtyas & Setyaningrum, 2018). So as to prevent corrupt practices, e-government does not merely rely on

transparency resulting from the application of this system, but also by increasing the professionalism of public officials.

The application of electronic-based services in public services is not merely to indicate the existence of irregularities (corrupt practices) in the practice of public services, but is also able to build a culture of shame and mutual supervision between public service providers to prevent misconduct. In practice in several countries, the application of this system has a good impact on changing the pattern of relations between government, the community, government and other government partners as happened in Denmark. Through this change, the improvement and benefits of good public services can really be felt by the people and the country.

The practice of e-government in several countries indicates the existence of efforts to improve the professionalism of public officials and the integrity of the community through the use of technology as an instrument of supervision. Comparisons are made with practices in several countries that have established surveillance systems to ensure that public officials have carried out their duties or functions in a professional manner. Increased supervision in the public service sector is done by building systems that facilitate access to public services and interactions between the public and the government.

The Government of Norway and the Republic of Korea built an integrated national portal that provides a variety of online services, interactive services, and transactional services between the government and its citizens, so as to increase public scrutiny of institutions and services provided. Likewise with Singapore, which has succeeded in providing web 2.0 services to communicate using a standard cloud platform online services for its people, such as payment of taxes, fines, licensing and others. Whereas in the United States, online services using social networks (via Facebook and Twitter) were built to facilitate access to provide information on public services and increase government and community interaction.

Specifically, based on an economic perspective, the application of information technology can increase public productivity, efficiency, and achieve good governance (Basu, 2004). The government has reduced the level of corruption in the public sector by increasing the effectiveness of internal government work and government relations with citizens (Bhatnagar, 2001). Based on some literature, the application of information technology can be an efficient way to remove obstacles in economic development in many countries. Many empirical studies illustrate that information technology has an important role in public service reform, namely an increase in public services, in general, to function more efficiently and to increase public supervision of the performance of public officials (Piatkowski, 2006; Asgarkhani, 2005; Brueckner, 2005).

Furthermore, to increase the effectiveness of the use of information technology in preventing corrupt practices must also be accompanied by a certain set of social attitudes, in addition to enhancing the professionalism of public officials described above. Increasing the participation or concern of citizens by not making bribes to obtain public services, and reporting if there are corrupt practices in public services becomes a form of community participation that must be done. This participation or concern is aimed at achieving efficiency and transparency in public services (Bertot, et.al, 2010). Through community participation in this social construction, corruption which is considered a crime by the community is no longer tolerated or allowed to occur.

Furthermore, the concept of a cultural strategy carried out by Van Peursen and Koentjaraningrat, namely by concretizing community participation. This cultural strategy is carried out by initiating two activities which are based on two things, namely technological technology and cultural engineering. Cultural technology is an attempt to emphasize the community to care about social problems, while cultural engineering is an effort to encourage people to be orderly in social life as well. Both are only different in practical actions, cultural technology is coercive while cultural engineering is encouraging (Santoso & Meyrasyawati, 2015).

The background to the need for a cultural strategy to eradicate corruption consists of corruption occurring within the bureaucratic sphere is increasingly becoming massive and systematic, systematic corruption is supported by the habit of strengthening corruption, and cultural constraints that hinder corruption eradication efforts (Santoso & Meyrasyawati, 2015).

For example, the South Korean government has used a cultural strategy to shape the mentality of its citizens as expected. In the South Korean crisis in 1980, the country's economic downturn was caused by inflation due to soaring oil prices and the amount of foreign debt owed to Japan allocated for the country's development. Based on the incident, based on a Confucian ethos that emphasizes hard work, discipline, and collectivity, the government encourages South Korean citizens to rebuild their country's economy. In addition, the government seeks to form an educated society by prioritizing education so that each individual is certain to work hard in accordance with their respective positions in society (Hennida et al., 2017).

The formation of this mentality is focused on the personality of each individual which is manifested through daily behavior. This personality is influenced by aspects of culture and society because the manifestation of real individual behavior occurs when the individual is related to other individuals. Therefore, society has a large role in influencing the formation of individual behavior.

The failure of the implementation of an electronic-based public service system can be triggered by various things. Some of the things that cause this failure include project failure related to non-fulfillment of specifications and some requirements such as budgeting or the time period for its completion, system failure because the system created, does not work as it should, and user failure due to lack of user training, lack of staff reliability, and the complexity of the new system (Abdelsalam et al., 2012; Mpinganjira, 2013; Anthopoulos et al., 2016). Failure due to these three factors, in some practices, forced people to meet face to face in obtaining public services, which of course opened opportunities for corruption.

To prevent this failure and refer to the description above, "supervision" of the performance of public officials is not solely based on the application of the technology being applied. There must also be a change in the practice of public services, both from institutions, public officials themselves and the community. Institutional supervision is carried out among others by building an anti-corruption culture within the institution. Mutual monitoring and copying anti-corruption behavior among public officials in an institution is more effective in preventing corrupt practices than by only providing a large salary or incentive. As a form of external supervision, the community builds a caring attitude or culture not to involve themselves in corrupt practices to obtain public services and reports any corrupt practices encountered in public service practices. Learning from practices in other countries, the initiation of the implementation of e-government that has begun with the development of electronic-based public service systems must be accompanied by good supervision, both internal and external. Referring to Presidential Instruction No. 3/2003, why changes in governance become more transparent becomes important because there are at least 2 (two) demands from the public, namely: 1) The community demands public services that meet the interests of the wider community in all regions of the country, are reliable and trusted, and easily accessible interactively; and 2) Communities want their aspirations to be heard so that the government must facilitate public participation and dialogue in the formulation of state policies.

Therefore, to eliminate bureaucratic barriers and form a network of management systems and work processes that enable government agencies to work in an integrated manner to simplify access to all information and public services that must be provided by the government, information technology is used in public services. By also referring to laws and regulations relating to good governance, changes in the behavior of public officials should reciprocate well with changes in community behavior, including business actors towards anti-corruption behavior.

## **IV.** CONCLUSION

The application of e-government that promotes transparency in public services has not yet been able to prevent corrupt practices in the local government environment in Indonesia. This can be seen from cases of corruption in public services such as procurement of goods and services as well as in obtaining licenses that take advantage of the lack of e-government which is identical to the man-machine, interface, and security characteristics that are not guaranteed. Corruption is often done at the planning stage, the system used, the tender process, the use of official authority, and when filling out a list. Transparency as an impact of the implementation of e-government does not necessarily reduce the potential for corruption but must be accompanied by an increase in the professionalism of public officials and public awareness to make this system reliable.

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