The Use of Information Communication and Technology (ICT) to Enable Transparency, Accountability, and Participation in Indonesia

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Abstract

This research aims at understanding how ICT as panopticon vision enable transparency, accountability, and Participation in Indonesia. The betterment of these three aspects is believed to be beneficial for the government in fighting corruption. In the transparency aspect, this research has eight indicators which are constructed from studies by Bhatmagar, Davies & Fumega, Park & Florida, Grimmelikhuijsen, Keuffer & Mabillard: (1) the availability of laws and regulations, (2) the availability of government budget allocations and spending, (3) the availability of performance reports, (4) open government processes, (5) identification of elected officials and civil servants under investigation for corruption and fraudulent activities, (6) disclosure of assets and investments of public officials, (7) provision of e-procurement, and (8) using file formats. In the accountability aspect, four indicators from studies of Lee & Kwak and Davies & Fumega are used. They are (1) the availability of social media presence, (2) using mainstream social media for interactive, on-going conversations, storytelling, and communications, (3) the availability of a platform for questions and answers, and (4) the availability of information about feedback from the public. Finally, for the aspect of Participation, three indicators by Lee & Kwak are employed. Those are (1) voting and polling for a decision-making process or a public organization assessment, (2) feedback and ideation platform, and (3) crowdsourcing to report corruption or grievances.

This research uses a qualitative research approach. It is benefiting from the use of secondary data as a form of the big data source. Hence, this research is an initial attempt to exploit the availability of big data as a valid data source. To ensure the secondary data sources’ validity, the researchers employed a triangulation process of backgrounds and reference checking. The data analysis in this research is based on 2 ICT based initiatives; Government websites and apps.

It is evident from this research finding that, first, there are 35 ICT based initiatives, 31 websites, and four apps. From these numbers, there are only 18 websites and four apps that are available. Second, in general, those websites and apps do enable transparency, accountability, and Participation. Another important highlight of the finding is that three unidentified websites and ten websites are unsuccessful in promoting those three aspects. However, most of the websites and apps had turned out a success. In the meanwhile, ICT as panopticon vision also results in new corruption opportunities. This study highlights three examples of new corruption opportunities. It is recommended that Indonesia continue to work on those ten unavailable websites and, more importantly, be cautious and aware of the new corruption modes. Only by doing those, the role of ICT to fight corruption can be more strengthened.
Keywords:

Information & Communication Technology (ICT); transparency; accountability; participation

Introduction

In the Presidential Regulation of the Republic of Indonesia, Number 95 of 2018 about Electronic Based System of Government, the use of ICT by the government or e-Government is essential to create effectiveness, cohesiveness, continuity, efficiency, accountability, interoperability, and security. Another crucial aspect of ICT is that it also offers countries a new approach to create transparency and promote anti-corruption. To eradicate corruption, OECD (2003) also indicates that "information and communication technologies can act as an enabler to engage citizens in the policy process promote open, accountable government and help prevent corruption" (as cited in Purón-Cid, 2014:45).

OECD (2011) notes that using ICT was designed to support the public with additional tools and information on citizen involvement and facilitate public Participation. If Becker and Stigler (1974) argue that the citizens’ Participation in monitoring is vital to overcome corruption, the OECD (2011) confirmed that ICT could boost citizens’ participation rate.

A previous study conducted by Sinuraya & Rachmawati (2015) has proposed IT progresses for local governments and the effect of ICT on corruption. In short, they find that:

It has indicated that ICT facilitates the creation of transparency, accountability, and Participation. Then the expectation of corruption eradication could happen. However, it has also discussed ICT as the panopticon vision, which could provide new corruption opportunities.

The previous study’s result by Sinuraya and Rachmawati (2015) supports this research argumentation that ICT enables transparency, accountability, and Participation. Nevertheless, there are also new corruption opportunities that can be provided by using ICT.

25 The Republic of Indonesia Number 95 of 2018 about Electronic Based Government System.
The number of corruption cases in Indonesia has decreased (Figure 1.5). Figure 1.5 illustrates how corruption in Indonesia experiences its ups and downs. Then, in 2018, the number of cases is lower than in 2015, 2016, and foremost in 2017. It reached about 454 cases. The details are given below in the graphical form:

**Figure 1.5**
The Numbers of Corruption Cases 2015 - 2018

![Graph of Corruption Cases 2015-2018](image)

In the VOA INDONESIA’s article titled *Berantas Korupsi dengan IT, Pemerintah Klaim Tingkat Korupsi Menurun* or “Eradicate Corruption with IT, Government Claims that the corruption rate has decreased.” From this article, the interviewee is Deputy II of the presidential staff office, Yanuar Nugroho. He argued that from these past four years, the Government of Indonesia has some ways to eradicate and fight corruption. Then, using the advent of technology and information is one of them. In the President Instruction (INPRES) Number 7 the Year 2015, there are 96 anti-corruption actions (hereafter referred as initiatives) in which about 31 initiatives within these are using ICT.

Furthermore, other applications of ICT such as e-procurement, One-Single Submission (OSS), or *Sistem Perizinan Berusaha Terintegrasi Secara Elektronik*, KPK Whistleblower System, and more, they have been provided to support transparency, accountability, and Participation. This statement also was written on their regulation basis.

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All those electronic-based initiatives in government is regarded as the panopticon vision. Following the panopticon vision concept the anti-corruption project has been an integral part of the intellectual and political reform movements. One currently dominant paradigm of corruption control is that the ‘Panoptic vision’ sees management techniques of rules and enforcement as the key to controlling corruption.

Panopticon vision is initially provided by Jeremy Bentham’s nineteenth-century idea of the Panopticon. As we are using it, a vision is a paradigm or worldview that includes assumptions about the nature and control of human behavior and government institutions’ role and potential. Bentham envisioned a "panopticon" prison whose ingenious architecture featured a control tower at the center of a circular cell house. From this tower, the cells, inmates, and staff would be completely visible to the guards. Its purpose is to deter and prevent corruption by establishing a system of thorough and efficient observation. Anechiarico & Jacobs (1995) argue that:

The panopticon metaphor sheds light on the "anti-corruption project" in public administration: the panoply of laws, rules, and regulations, and strategies aimed at identifying and preventing official corruption. The pursuit of corruption-free government has led to the adoption of significant measures to control contracting, expenditures, and all sorts of governmental operations to make corruption impossible or at least detectable. The anti-corruption project operates through civil service, conflict of interest laws, financial disclosure requirements, contracting rules, whistleblower protections, administrative and criminal investigations and punishments, and so forth.

Then Heeks (1999) claims that the Panoptic: a constructed technology that allowed a single central unseen guard to observe all prison inmates' activity. He also cites the statement from (Roszak 1994; Ramasoota 1998), i.e., "In the late twentieth century, information

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32 Ibid.
35 Loc.cit.
38 Heeks. 1999. op.cit.; 184.
technology (IT) presents organizations with the possibility of creating their Panopticon: one that would allow managers to gaze unseen upon the activities of their employees and thus monitor and control corruption.”

Hence, this study is questioning “how can ICT as the panopticon vision enable transparency, accountability, and participation in Indonesia?”. Therefore, this study would like to understand the way ICT enabling those three aspects. Then, it is hoped by doing this will help the Indonesian Government fight corruption.

Theoretical Framework

The use of ICT by the government, such as providing passport for citizens, licensing service, e-procurement, and so on, was not as massive as nowadays. Based on the researcher’s experiences and observations. It is true that now there have been improvements in public services. However, there is no data such as an index that shows the Indonesian government’s progress before using ICT and after using it. Furthermore, it is difficult to find a way or any data that can offer the relation between the use of ICT and the decrement of corruption in Indonesia.

This research will identify ICT use by the Indonesian government to enable transparency, accountability, and Participation. However, comparing the corruption decrement before and after the Indonesian government using ICT is not possible due to data lack; therefore, this study focus on ICT as an enabling factor to transparency, accountability, and Participation.

ICT and Transparency

Srimarga, Wibowo, & Aisah (2018) explain that transparency is understood as a process of encouraging/making information flows from government to citizens or the public.39 The transparency information could be a public document such as law and regulations, budget information, and other policy documents.40 Furthermore, Pathak, Singh, Belwal, & Smith (2007) here also support the importance of ICT and transparency by stating that the

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40 Loc.cit.
increased transparency, which can be achieved using ICT, may powerfully reduce all types of bureaucratic corruption.\textsuperscript{41}

The researcher has constructed eight indicators based on Bhatmagar (2003); Davies & Fumega (2014); Park & Florida (2019); Grimmelikhuijsen (2012); Keuffer & Mabillard (2019). These indicators will show how the ICT based initiatives should work to enable transparency. These indicators are as follows:

1) The availability of laws and regulations
2) The availability of departmental budget allocations and government spending
3) The availability of performance reports
4) Open government processes
5) Identify elected officials and civil servants who are under investigation for corruption and fraudulent activities
6) Disclose of assets and investments of public officials
7) Public procurement using the electronic system
8) Using file formats that let users explore and analyze the data

ICT and Accountability

ICT enables and supports accountability, meaning that it is possible to identify and hold public officials accountable for their actions.\textsuperscript{42} Tiago Peixoto & Jonathan Fox (2016) introduce an additional dimension to understand accountability further. They distinguish between two trajectories for ICT-enabled accountability: Upwards accountability occurs when users provide feedback directly to decision-makers in real-time, allowing policy-makers and program managers to identify and address service delivery problems – but at their discretion. In contrast, downward accountability occurs either through real-time user feedback or less immediate forms of collective civic action that publicly call on service providers to become more accountable and depend less exclusively on decision-makers’ discretion about whether or not to act on the information provided.

Therefore, based on the definitions above, accountability is a two-way process; when the government is accountable, the government will be questioned for the work done and

explain how it was accomplished. In other words, the government is supposed to be answerable for their actions. Timely and consistent responses of government determine its accountability. A few aspects are available that enable accountability introduced by Lee & Kwak (2012); Davies & Fumega (2014):

1. The availability of social media account
2. Using mainstream social media for interactive, on-going conversations, storytelling, and communications
3. The availability of the question-answer feature
4. The availability of information about feedback from the public

ICT and Participation

The last aspect is that participation; allows members of the public to contribute ideas and expertise so that their government can make policies to benefit widely dispersed information in society. It also has been confirmed by Becker and Stigler (1974), who suggest that public Participation and the right punishments could be used as an approach to reduce corruption (as cited in Olken, 2007). Then OECD (2011) notes that ICT were designed to support the public with additional tools and information on citizen involvement and facilitate public Participation. Complaining or reporting to the government is one of the forms of citizen participation.

Accordingly, where there is a political will to challenge corruption, citizen reports will have a greater chance of leading to change through complaints processes, investigations, and sanctions backed by judicial processes or integrity agencies. Where reports are made public, media attention may also create political pressure for change.

45 Loc.cit.
46 Olken. 2007., op.cit., 201.
47 OECD. 2011., op.cit., 39.
50 Loc.cit.
Moreover, nowadays, many online channels are formed for citizen reporting have increased outside government. According to Lee & Kwak (2012), there are a few aspects available that enable Participation:

- Voting and polling for a decision-making process or a state institution assessment.
- Feedback and ideation platform
- Crowdsourcing to report corruption or grievances

Participation occurs because state institutions open doors or invite information from citizens. In this case, it should be noted that Participation involves both parties’ activity, namely the government and citizens. Participation means the government is active in inviting or at least ensuring that information is taken into account. The more requests from citizens received by state institutions, the state institutions can be said to be more participatory. Moreover, the government’s monitoring process could be conducted due to the activation of an ICT based initiatives that supports citizen participation.

ICT and New Corruption Opportunities

Many have argued that information technology, in practice, helps control corruption. However, Heeks (1995) disagree with this. He argues that ICT could not eradicate corruption. Instead, ICT provided new corruption opportunities for some staff. This phenomenon may often be related to closing down opportunities for other staff. ICT does so by creating changes in one or more of four aspects as follows:

- Skills: computerization is often associated with an ‘up-skilling’ of corruption, providing opportunities for those with IT skills, and denying those without these skills.
- Confidence: borrowing from the Panoptic vision concept, a mythical image may be promoted off the computer as an objective, all-seeing, all-knowing machine. This may cause some corrupt staff to lose confidence and to refrain from corrupt practices. Those who understand computers are not put off (and will often spread the myth to reduce the likelihood of competition or detection).

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53 Loc.cit.
Access: computerization of records was accompanied by closing down access to some staff but opening up access to all those operating the IT systems. With the advent of networked systems, such opportunities for access may significantly increase.

Control: the mask of data quality and computer omnipotence makes some managers assume that IT removes the opportunities for corruption, i.e., that the Panopticon can operate without the need for human intervention. They may therefore fail to institute controls on computerized systems. This assumption provides greater autonomy for IT-literate staff.

It has shown that the adoption of ICT in governmental systems creates new opportunities for corruption among the officers and staffs who understand and occupy skills of ICT (e-literate). At the same time, block chances for those who do not understand ICT. This is called up-skilling corruption.

Methods

This study uses a qualitative method. Yin (2011) states that qualitative research strives to collect, integrate, and present data from various sources of evidence as part of any given study. The study's conclusions are likely to be based on triangulating the data from different sources. Thus, it will support the data's validity and trustworthiness.

This research uses secondary data sources that are valid or reliable and can be verified. O'leary (2017) defines secondary data as the data found in documents, databases, and on the internet– none of which was created by the researcher for the research project's express purpose. It is existing data that the researcher simply gathers and analyzes.

This study's data sources are the government webs and applications (hereafter referred as apps) based on the President Instruction (INPRES) Number 7 of 2015 about Action of Prevention and Eradication Corruption in 2015. This study found 31 ICT based initiatives. The researcher finds the other four activities included as the best ICT systems practice implemented by several public organizations in Indonesia to add more data.

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56 Sinuraya and Rachmawati. 2016., op.cit., 54.
57 Loc.cit.
59 Loc.cit.
60 O'Leary. 2017. op.cit.; 484.
61 Loc.cit.
Discussion

There are 31 initiatives based on the President Instruction (INPRES) Number 7 of 2015 about Action of Corruption Prevention and Eradication in 2015 and the other four initiatives or ICT implementations sourced from the researcher’s exploration of the internet. So, in total, 35 ICT based initiatives would be assessed in this research. All the ICT based initiatives that are identified in this research provided by different 19 public organizations in Indonesia.

These 35 initiatives consist of 31 websites and four apps, which would be assessed how they enable transparency, accountability, and Participation. Nevertheless, three unidentified and ten unavailable websites could not be accessed or found on the internet. The unidentified ones mean that their operations indeed were not openly worked on the internet, but more like intern organization programs. Furthermore, the unavailable websites reflect that those were supposed to be available publicly on the internet based on the INPRES. Still, it turned out they could not be found on the internet.

All available ICT based initiatives have been going through 3 assessment processes. In these processes, the researcher has done all the indicators from transparency, accountability, and Participation. One ICT that is assessed enables those three aspects: it provides an indicator of transparency, accountability, and Participation.

*The Use of ICT by Indonesian Government enable Transparency*

In the transparency aspect, there are 22 initiatives that enable transparency. These consisted of 18 websites and four apps provided by 19 public institutions in Indonesia. In brief, These 22 initiatives has all eight indicators as illustrated in Figure 4.1 below.
Based on the researcher's findings, only one website was owned by the Commission of Eradication Corruption (KPK) that supported all those eight indicators from transparency. Mainly, KPK is the only public organization that identifies elected officials and civil servants under investigation for corruption and fraudulent activities. These investigations information is shared on the KPK website. This means KPK has been doing their job very well since they are responsible for investigating and suing against corruption.

Since the Indonesian government has enabled the transparency aspect, it means the government has encouraged/made information flows freely from the government to citizens. This is then given a possibility for citizens to find data that can also be used as their proofs to prove corruption.
The Use of ICT by Indonesian Government enable Accountability

Based on the findings, 18 out of 22 initiatives are ICT based initiatives to enable accountability. These 18 initiatives consist of 15 websites and three apps provided by 15 public institutions in Indonesia. Our analysis shows that these 18 initiatives do enable accountability. It is illustrated in Figure 4.2 below.

As explained in the theoretical framework part, the government is accountable when they are answerable for their actions. To make the government answerable, they need to provide a question and answer platform for the citizen. The government also needs to display or show all those feedback from the public on its website and app. This study shows that the Indonesian government was answerable. It is evident from 14 initiatives have provided question and answer features, and five initiatives have supported the other indicator: the availability of information about feedback from the public.

All four aspects of accountability are found in the 14 ICT based initiatives; therefore, it can be concluded that the use of ICT by the Indonesian government enabled accountability. Davies and Fumega (2014) stated that public officials’ authoritarian tendencies and discretionary power would be weakened when accountability is constructed and, hence,

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62 Peixoto and Fox. 2016. 2
mitigates corruption. Further research is needed to study how the achievement of accountability mitigates corruption.

The Use of ICT by Indonesian Government enable Participation

There are 20 ICT based initiatives that enable participation. These consisted of 17 websites and three apps provided by 17 public institutions in Indonesia. All of three indicators of participation are detected in those 20 initiatives. It is shown in Figure 4.3 below.

It can be concluded that the use of ICT by the Indonesian government enabled participation. This shows how the government has opened a space for the citizen to be involved in governance, such as the decision-making process, evaluation process, etc. Srivastava, Teo also argue it, and Devaraj (2016) participation allows the public to give ideas and expertise to the government to help the government make policies. Davies and Fumega (2014) stated that enabling participation is government political will to challenge corruption. Besides, Davies and Fumega also suggest that complaints or reports as a form of participation should have been made public. It will then gives the government political pressure for change.

*The use of ICT as panopticon vision create opportunities for new forms of corruption*

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63 Davies and Fumega, 2014. op.cit.; 144.
65 Davies and Fumega. (2014), op.cit., 10
Heeks’ argues that the use of ICT as the panopticon vision could open up opportunities for new forms corruption. In this section, we have found three examples of new corruption opportunities, as follows:

**Case 1**

Public Procurement in Indonesia has been conducted through the online system. Electronic Public Procurement Agency (or Layanan Pengadaan Secara Elektronik/LPSE) has the task on this. However, corruption can still be found in electronic procurement. One of the e-procurement process requirements is that the project needs to be worth up to 200 million rupiahs. However, in responding to that requirement, one could break the project into a few projects that are worth below 200 million rupiahs. Then, the project does not have to go through the auction process but with a direct appointment.

Moreover, many tender participants have complained that e-procurement could not be accessed. The applicants could then not send their requirement documents, so it inhibits them from being involved in the procurement process. They assumed whether this system error was conducted intentionally to prioritize one particular participant to enter tenders.

In this case, it corresponds to Heeks’ argument that that ICT systems access could be closed down for some parties, but those who operate the system could still access it. Therefore, with the advent of ICT systems, such opportunities to do misappropriation may significantly increase.

**Case 2**

New corruption mode or practice has been identified by the Commission of Eradication Corruption (KPK) in the Fintech Lending (FL) service. Financial Service Authority of Indonesia, or Otoritas Jasa Keuangan (OJK), has a responsibility to monitor these FL. Until February 1, 2019, there were about 99 FL registered in OJK. Even though OJK has

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opened for the FL registration only by 2017, the amount of money loaned in 2018 reached about 22.67 trillion.\(^{60}\) Moreover, until June 2019, there were 144 illegal FL.\(^ {71}\) Those illegal FL are not registered in the OJK FL list. So, the existence of illegal FL must be questioned.

The vast amount of money and numbers of illegal FL have strengthened KPK suspicion in this money laundering activity. The Functional Officer of KPK is also convinced that they still have little experience dealing with this kind of fraud activity, particularly in digital finance.\(^ {72}\) This case relates to what has been explained by Heeks from the control aspect. Since FL is operated through the online system, as Heeks mentioned, they would have greater autonomy.\(^ {73}\)

Case 3

Corruption has become more sophisticated in Batam Municipal People’s Representative or Dewan Perwakilan Rakyat Daerah (DPRD) Administration since 2012,\(^ {74}\) the House of Representatives of the Republic of Indonesia or Dewan Perwakilan Daerah Republik Indonesia (DPR-RI)\(^ {75}\), and Attorney General’s Office or Kejaksaan Tinggi in Papua.\(^ {76}\) Corruption mode, in this case, was formed in a fictitious work visit and budget mark up. Based on the confession of a former specialized staff of DPRD, Batam mentioned that the modes of corruption were quite systematic.\(^ {77}\) For instance, participants of one work visit would be given empty travel electronic tickets, which later on will be invoiced electronically by a travel agent. Lots of airplane tickets could have been marked up; it was because the cost that would be put on the record was the electronic bill from a travel agency.

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\(^{60}\) Loc.cit.


\(^{72}\) Loc.cit.


\(^{77}\) Loc.cit.
Moreover, nowadays many representatives have a travel agency. Therefore, one would be given a chance to make a fake travel bill while no activity is held. This phenomenon relates to skills and confidence aspects as new corruption opportunities that have been explained by Heeks. When one can manipulate any transaction that proceeds through the ICT system, it means they are the ones who have skills and confidence in ICT.

Conclusion
This study found 35 ICT based initiatives, 31 websites, and four apps. These initiatives are provided by 19 public organizations from various national, provincial, and city levels. From these 35 ICT based initiatives, there are 22 ICT based initiatives that have been well developed. These 22 ICT systems do enable transparency, accountability, and participation. This study suggests that there 10 initiatives in the form of websites that are unavailable. We recommend that the Government of Indonesia continue to work on these.

Heeks has argued that ICT as panopticon vision could create new corruption opportunities. Heeks argument is evident from this study. Three cases have been found to illustrate these new forms of corruption. The use of ICT did help the Indonesian Government fight corruption; however, the government must also be cautious and aware of the new corruption modes.

This study uses secondary data, therefore it shows the trend on the use of ICT by the Indonesian government and how each ICT based initiatives could create changes either in transparency, accountability, or Participation to enable transparency, accountability, and participation. Further research to find evidence that the use of ICT does eradicate corruption is needed; research that employ a more precise measurement to understand the changes in transparency, accountability, and participation before and after employing ICT based initiatives and how these three aspects eradicate corruption.

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78 Loc.cit.
80 Loc.cit.
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