# Digital Technologie and Corruption Control Mechanism

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> Abstract. Nowadays, corruption is a serious issue in Malaysia and international levels. Digital technology that can detect and prevent fraud and corruption is particularly important to manage processes in public sector activities more transparently. The availability of information and the application process to support the delivery system in certain public sectors is more transparent to the public if through digital technology. Therefore, this paper aims to understand the use of digital technology in an effort to eliminate the symptoms of corruption, overcome fraud, and increase transparency in the government service delivery system for the well-being of the community. The method used is literature review analysis. The paper's results can provide information to the government about the importance of improving digital technology for more efficient control mechanisms in Malaysia. Therefore, the government should focus on efforts to streamline better regulatory affairs and standards by using additional anti-corruption technology in service delivery processes with more transparent access to the public through digital technology.

Keywords: Digital technology, corruption, delivery system, public sector.

# 1. Introduction

The corruption issue should take serious action to control the behavior in Public Sectors. Corruption behavior and negative ethics need to be handled immediately when this issue is a major contributor to the destruction of a country. Resources may be diverted because of corruption, favoring effective initiatives and methods [21]. Government policies can be hampered by corruption, which can also have an impact on the foreign commerce and investment sector [24]. According to Kehoe<sup>14</sup>, unethical corporate practices like accepting gifts will increase actual expenses and hidden costs and have a negative effect on customers or society. Therefore, the issue of corruption needs to be dealt with immediately to reduce the negative impact of the current economic crisis which is a defect for society. Past studies

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focusing on the factors of corruption have found that there are several factors of corruption such as politics, government regulation, legislation, GDP level, civil servants' salaries, gender issues, culture, religion, poverty, colonial roles, parenting upbringing, individuals and norms[2] [11].

Numerous efforts have been taken actions by the government to overcome the problem of corruption such as the establishment of institutions, policy formulation, acts, and campaigns. However, the problem of corruption still persists. Therefore, digital technology in the delivery systems may be able to reduce this problem. Hence, this paper will discuss the advantages of digital technology through a literature review analysis in eradicating corruption.

# 2. Literature Review

# 2.1 Digital Technology

The Sustainable Development Goal by the United Nations applies all Information and communication (ICT) in the SDG. ICT can help accelerate progress towards every single one of the 17 United Nations Sustainable Development Goals (SDG). To educate people in ICT, SDG aimed to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all included in Agenda 4. In the agenda, According to the UN [31], one of the key components of this document is to educate the people so that they have the information and skills necessary to access the labor market, which is a requirement of modern society. Enhancing information and communication technology (ICT) skills is therefore one of the goal's key elements [31]. However, there is one technique in SDG 16 that is a control in the organization: Peace, justice, and strong institutions, which mentions that e-government services help increase the effectiveness of the government's service delivery system and bridge the gap between the public and the government. Jobs in smart cities and essential metrics for social inclusion, including voter participation or the quantity of government services, are two ways that ITU supports people's empowerment.

All social media, the Internet, and the World Wide Web as the digital as a networked domain that is brought into being via mobile and other information and communications technology [10]. He also mentioned that digital is also a new media that shapes current society. New media refers more to the computerization of cultural production. The unpredictability of digital hardware and software must be encouraged since it necessitates ongoing funding, training, and promotion of specialized new technologies in the community. Technology use and social interaction must be combined, and DLs involving socially accepted "practices" must be inclusively defined [16].

It is crucial to keep in mind that local digital technology can accommodate or transmit digital content from other locations. For instance, photographs from high-resolution files are displayed on smartphone devices. Geismer also mentions that all digital artifacts are defined as editable, interactive, open, and disseminated by Jannis Kallinikos [13].

Technology is a new challenge in which leaders must play an important role. The study by Fitzgerald, Kruschwitz, Bonnet and Welch, indicates that leaders to prepare to conduct ICT in their organizations [9]. The study conducted by the author shows that only 5% of respondents are not ready with technology. Apart from that, most of the respondents believe that technology can change their work practices for the better.

Bieza states, the global world is now becoming more modern with the inclusion of ICT in the daily life of society [7]. Digital is almost affecting the environment of society's life in this century. The digital society is seen to apply various needs of today through digital. The Internet is one of the digital tools that support the system. However, the use of digital technology also needs to be controlled to avoid unexpected adverse effects in society.

Information and communication technology (ICT) is seen as a tool that improves government accountability, transparency, and cleanness. ICT has been widely employed as an efficient new technique for the prevention, detection, and punishment of corruption to address the issue. According to earlier studies, ICT facilitates intimate communication between the government and the community and increases accountability and transparency. Mobile websites and apps, as well as rising big data analytics and artificial intelligence (AI) technologies, are some of the most praised tools. By improving public access to information, observing officials' actions, digitizing public services, and facilitating corruption reporting, the tool works to prevent corruption.

The purpose of e-government is to improve the accessibility services of government by the citizen. This method will change the interaction when conventional relations between citizens and the government switch to electronic communication. This new platform also will enhance the quality of accessibility of information and be more transparent.

#### 2.2 Corruption

The definition of corruption varies based on the field involving different research [32]. Corruption refers to several definitions formed by perception, culture, experience, beliefs, and the current situation. Therefore, there is no single definition of corruption. The definition of corruption has taken into different fields such as social, economic, and political. According to Luna-Pla and Nicolás the definition of corruption refers to various disciplines according to the needs of the study [19]. Generally, the definition of corruption is often associated with law and government when it is raised on the issue of abuse of power in a country. However, our society gives the perception that corruption is a certain reward received to get the expected result. Therefore, the definition of corruption can be many interpretations according to the purpose of the research done by the researcher [6].

However, "corruption is taken to be the abuse of public office for private benefit", which is the most used definition by researchers [32]. According to Rousseau, the people can determine the legitimacy of the government. The government is responsible for upholding national sovereignty through effective policy implementation. However, when legitimacy is misused by government administrators, then corruption will occur. It fits the definition of "abuse of public office for private gain" [17].

The behavior of corruption is different based on causes and effects. Corruption relates to the misuse of power to get illegitimate gain [9]. Referring to Turyomurugyendo, Gerald, and Alex McMullan states that "a public official is corrupt if he accepts money or money's worth for doing something that he is under a duty to do anyway, that he is under the duty not to do, or to exercise a legitimate discretion for improper reasons" [10]. Low pay, bureaucratic red tape, greed, agents in the public sector, a lack of integrity, centralization of services, poverty, lack of understanding, high cost of ownership and conversion of land status, absence of valid land qualifications or documentation, political influence, and ignorance of specific procedures are some of the factors that contribute to corruption in society [29]. One of the factors because of legitimacy power through workplace discretion.

Over of discretion will offer the opportunity for involved in corruption by process of bargaining to gain something that interests for parties, giver, and receiver. Therefore, the study states that the significant impact of corruption in the public sector is related to the development of the country involved. Corruption will give an image to the performance of the administration and management of a country. This situation will cause FDI attraction to decrease. This will indirectly affect the economy and development of a country.

So many actions by the government to overcome this problem. One of the actions is digitalization in the public sector such mentioned by Prasad and Machova, a recent example of this dynamic is the growing consensus on the virtues of e-government, that is, electronic technologies of surveillance [20].

# 3. Discussion

The practice of corruption is an offense that has been committed for a long time. Historians found that this practice of corruption occurred simultaneously with the existence of the government and political system <sup>[4]</sup>. Apart from that, this act of corruption does not only happen in the government system but can be said in every type of business such as management, land administration, sports, and even education. A statement from the President of TI-Malaysia (TI-M), Dr Muhammad Mohan who stated that Malaysia's position in the Corruption Perceptions Index (CPI) in 2021 released by Transparency International (TI) continued to fall to 62 out of 180 countries compared to ranking 57 in 2020. Analysis from CPI Malaysia in 2020 also fell six steps from position 51 in 2019 [23]. This proves that corruption has been rooted in Malaysia for a long time.

The growing digital technology has proven that it can control corruption. The latest technology has facilitated government tasks. Therefore, over the last decade, governments have launched an increasing number of e-government initiatives for the task of delivering services to society. In addition to increasing the transparency of financial data, this can aid in monitoring the effectiveness and integrity of social services and a nation's political life. In order to rally people against corruption, digital technologies will also boost campaigning efforts. Technology can limit the reporting of wrongdoing and provide access to official government data.

According to Adam and Fazekas [1], they offer many ICT-based anti-corruption strategies and use systematic analysis: (i) Electronic government and digital public services, Crowdsourcing systems, whistleblower tools, transparency portals, big data, distributed ledger technology, and (IV) Artificial Intelligent. Therefore, digital technology needs to be used overall in order to control corruption in Malaysia. Hence, the next section will discuss the importance of digital technology as a mechanism to control corruption.

# 3.1 The importance of digital technology as a mechanism to control corruption

#### 3.1.1 Digital technology can detect and prevent fraud and corruption

Digital technology disseminated in public management through e-government enables the prevention of fraud and corruption. Digital technology can detect and prevent fraud and corruption [25] [26]. The critical need for medical supplies during COVID-19 has led to international corruption in the pharmaceutical supply chain. Therefore, the authors state that using digital tools, if designed and implemented appropriately, can reduce the risk of

corruption. Fraudulent international drug sales have been controlled through digital. This can avoid fraud in buying and selling as well as opportunities for corruption when sales happen openly through technology.

In a previous study "Benefits of technology to fight corruption, enhance integrity" stated that many countries have implemented digital systems in government management [25]. The Fourth Industrial Revolution (4IR) policy has been a guide for countries such as Slovakia, Cameroon, Argentina, the Czech Republic, Guatemala, the Afghan Police Force and South Korea to fight corruption through digital technology.

#### 3.1.2 Transparency through digital transactions

The National Anti-Corruption Plan (NACP) 2019-2023 has stated digital technology can be used in preventing corrupt activities where complaints are obtained through public sources, transparent processes and mechanisms and accurate information sharing [4]. Rohaniza also stated that the automation process also sees procurement and payments run more smoothly through digital transactions, thus ensuring transparency, and reducing the risk of corruption [4]. The degree of education of the population is one of the critical aspects to emphasize, according to studies on the determinants of financial inclusion [15]. Additionally, it has been demonstrated that education can promote financial stability by enabling individuals to make better use of the limited financial resources available [13]. Low-income and educated individuals favor using cash in all transactions and are reluctant to use financial products and services [21]. Social issues including the population's low level of education contribute to a rise in social exclusion, and those who are socially excluded find it difficult to participate in economic activity and social advancement. Additionally, they struggle more to adhere to the standards and laws of social cohabitation [21].

The potential of education in digital technology to build moral values, which can lead a person away from corrupt behavior and raise aversion to corruption, supports increasing openness in the battle corruption [5]. According to research by Asongu and Nwachukwu (2015), acquired knowledge or lifelong learning has a detrimental impact on corruption in African nations [5]. In a similar vein, Hauser<sup>11</sup> provided evidence that increasing workers' transparency education in digital technologies reduces their propensity to accept justifications for corruption, arguing that ethics and compliance subjects ought to be a constant part of workers' training. Raising voter education can prevent politicians from purchasing votes because more people are aware of the benefits of elections [15].

According to Arif<sup>4</sup> migratory populations with higher degrees of digital technology knowledge are willing to go to nations with lower rates of corruption. In agreement with this, Sarwar and Hayat (2021) provided evidence that political instability and economic growth are both improved by education's ability to minimize violence. Maria (2021) shown that secondary education lowers corruption in G20 nations as well as emerging and developed nations. According to these studies, the most effective ways to combat corruption in Indonesia is through education [8]. Corruption has a favorable impact on the proportion of public funds allocated to public health and a detrimental impact on education. Considering the scanty research offered in this area [27].

#### 3.1.3 Digital Technology in the fight against corruption

E-gov, digital government, online government, and, in some cases, transformational government are all terms used to describe the use of digital technology in the public sector.

According to the United Nations Development Program, it is the use of ICT by the government to collaborate more efficiently, share information, and provide the public with improved services [31]. Simple explanations of the methods by which e-government lowers corruption include a reduction in interactions between corrupt officials and the public as well as an increase in accountability and openness.

Other literary works largely seem to bolster the notion that low-income nations may catch up to high-income nations through digitizing their governments [17]. Productivity gains, lower transaction costs, and a quicker pace of knowledge generation could all have an impact on how ICT affects economic growth in underdeveloped nations [28]. The development of digital technology is intimately tied to corruption prevention strategies. Low growth in digital technology is a result of low productivity, low investment, and an absence of adequate institutions [24]. The e-government's function is to reduce corruption. It is supposed to lessen the discretionary authority of officials and decrease citizen-official engagement. The dissemination of more high-quality information via digital technology, which encourages people and businesses to challenge arbitrary judgments and unjustifiable practices, may help improve accountability and transparency. Therefore, the use of digital technology in government could reduce many potentials for corruption. Contrary to traditional government relationships, corruption would expand interactions between public employees and citizens, increasing their discretionary authority.

Therefore, e-government is a useful tool that must be recognized by decision-makers the fact that it allows citizens more access to information. Hence, it guarantees the necessary supervision for monitoring public officials' decisions. The anti-corruption programs and the e-government can, thus, act as substitutes or complements of economic growth. Using data over the period 2005–2019 for 70 countries, find that the adoption of the internet reduces corruption [17]. In a similar vein suggests that e-government adoption is effective in combating corruption for 100 countries over ten years [3]. Using data from a panel of 175 countries for the period from 2008 to 2019, the correlations between the diffusion of ICTs and corruption, and they drew similar conclusions that digital inclusion acts as an effective tool in the fight against corruption [2].

#### 3.1.4 Increase transparency and detect fraud

Various efforts have been made by the government to deal with the issue of corruption in Malaysia. There are regulations and responsible institutions to ensure that corruption is eradicated more efficiently. In fact, various campaigns have also been done. Therefore, the development of more open ICT becomes a space and opportunity to overcome this problem.

The pressure to fight corruption has led to increased transparency efforts. Digital technology has been used as one of the mechanisms to showcase the internal operations of the government in the process of making decisions and questions online [23]. Petty corruption can be reduced using ICT when there is transparency through ICT in government tasks<sup>1</sup>. Government transparency in displaying certain information to the people will reduce corruption when the process takes place through information and ICT access. In addition, through ICT, centralized power can be exercised in administration[1].

# 4. Conclusion

Corruption is a difficult problem for every country. However, every country that wants to develop and maintain economic progress, continues to make various efforts to overcome the problem. Therefore, one of the mechanisms used by most countries is through digital technology.

E-government is a digital technology action. Through digital technology as one of the mechanisms to deal with corruption is an effort that is helpful towards reducing corruption cases. The benefits of using digital technology to reduce the problem of corruption are trace fraud and corruption, transparency of transaction that can protect the opportunity of corruption, increase transparency, and continue fighting against the corruption.

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