

## **THE ROLE OF E-GOVERNMENT IN FRAUD PREVENTION IN THE GOVERNMENT SECTOR: A SYSTEMATIC LITERATURE REVIEW**

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### **ABSTRACT**

Fraud is an act or behavior that can harm government agencies, which in turn can hinder development and effective governance. This is particularly true in less developed countries (LDCs) and emerging and developing countries (EDEs). Academics have paid great attention to fraud in recent decades, but there are still diverse and varying perspectives regarding connection among fraud also the e-government. Therefore, further study is needed to produce more focused and validated results. Nonetheless, previous research has limitations in gathering disjointed observation to further study. Then to deal with that, the 87 articles about governance also fraud with a systematic literature review (SLR) was conducted. An exhaustive sythesis of the state of the art in this area has been presented. Specifically, a subject-matter classification of earlier research is provided, demonstrating the primary gaps in the literature and identifying the characteristics and approaches that earlier researchers employed as a starting point for later research.

**Keywords:** Electronic Government, Fraud

### **INTRODUCTION**

The common vision from government for the digital ages has been fulfilled through employment of e-government optimization as the tool to improve every facets in it. The implementation of e-Government is currently a major highlight in an effort to prevent fraud in the government sector. The ] Information and Communication Technology (ICT) useis considered from many to be an effective also practical method when promoting openness, transparency, and reducing corruption levels (Bertot et al., 2010). Furthermore, the Association of Certified Fraud Examiners using asset misappropriation, corruption, also financial statement fraud are several main categories when categorizing workplace fraud. An employee could engage in acts of theft or misuse of the resources of the organization, including embezzling the money of the organization, committing fraud during billing schemes, and generating expense reports, under the age of the category of asset misappropriation. In an act of corruption, an employee member may influence business transactions in violation of his or her obligations to the employer by receiving benefits, either directly or indirectly. Bribery schemes, conflicts of interest, accepting illicit gratuities also economic extortion are several instances of corruption practice. However, in financial statetement fraud is when someone purposefully falsifies of omits facts from the financial statent of the company. This can include recording revenues that do not match reality, understating expenses that should be reported, or increasing the value of assets in an inaccurate way in financial statements. (Said et al., 2017).

The more a country's economy develops, it will be able to encourage an increase or need for funding to finance development projects that are being implemented in that country. Fraud on well-known organizations such as employee embezzlement or employment frau. The Association of Certified Fraud Examiners (ACFE) (2016) highlights when each year organizations losing the 5 percent of fraud revenue.

With the average loss percage of \$2.7 million in their reviewed cased resulting the total lose more than \$6.3 billion (Said et al., 2018). Fraud cases experience enormous losses, globally recorded losses caused by fraud reached 1,822 cases with total \$2.9 trillion reported by ACFE, cases that often occur in employment fraud, where these cases experience losses up to \$140,000. More than 20 percent of these incidents resulted in losses of at least \$1 million (Yusuf et al., 2020). According to periodic surveys conducted by the ACFE, the estimated loss to organizations is typically 5% of turnover (ACFE, 2022), equivalent to £224 billion per year from the total turnover of £4.5 trillion across organizations. (BEIS, 2022).

To prevent fraud, government governance must be able to do implemented well, the term of e-government describes the creation also application of IT (information and communication technology) to streamline the offering of public goods and services for citizens, the business sector, and public institutions (Carter & Bélanger, 2005). It has been projected that using ICT will better way to deal with disticnt problem the issues which surface internal the system of public administration. In particular, ICT plays an instrumental part in shifting the delivery of public services from offline into online methods, also e-Government platforms symbolizes a new kind of conduit between the public also the private sectors. (Chan - Service Design and Citizen Satisfaction with E-Government Services A.Pdf, n.d).

E-Government creates new opportunities when it comes to transforming overall governance, sharing public services and information with stakeholders through e-Government aims to maximize the standard or quality, accountability and efficiency, while strengthening the linkages between various social actors. The development of e-Government links transformations at the technical and organizational levels, showing that e-Government is not only related to the application of ICT by the government to optimize business processes, but also links structural changes at the organizational level, but also emphasizes the utilization of digital transformation opportunities as a whole. (Zou et al., 2023).

In the last decade, e-Government has seen a shift in focus from improving access to information when asserting that regulations can be transparently obtained by the public, thus enabling the tracking the government policies also acts. In the end, the change helps to lower the prevalence of corruption (Bertot et al., 2010). Fraud is generally divided into three types, namely Deviation over assets (Asset Misappropriation), false statements or misstatements in financial statements (Fraudulent Statement) · 3. Corruption. The rise of corruption cases has had the biggest impact on government governance. According to Peters and Welch, 1978 public officials can be considered corrupt if seen by the following three criteria: 1. According to the legality criterion, public corruption occurs when a public official violates the formal duties of his or her public role involving election or appointment, due to wealth or status acquisition related to his or her private field such as personal interests, close family, or private groups. In this framework, corruption referring to a variety of illicit action such as bribery, embezzlement, theft, fraud, and others. 2. The public interest becomes an alternative criterion on which the definition of corruption is based. In this context, the behavior of public officials is considered corrupt if it violates their responsibility to public order or society and these actions damage the system. In other words, an act is considered corrupt if it harms the public interest. 3. The public opinion approach states that an act is considered corrupt if public opinion defines it as such. This approach emphasizes that there is a stark difference between what the law in a country regulates and how the majority of citizens view an act as corruption. While the public opinion approach highlights that corruption is socially constructed, it has limitations as it focuses on the public interest. (Monteduro et al., 2016).

## **METHOD, DATA, AND ANALYSIS**

To collecting the data research, the author conducted preliminary data searches on widely recognized databases, for example Scopus and Web of Science (WoS), as well as online publication platforms such as "Elsevier Science Direct" and "Emerald Insight". This search was conducted to find relevant literature on e-government in an effort to prevent fraud in the government sector. The articles retrieved were from the last twenty years, ranging from 2004 to 2023. The English-language, peer-reviewed publications published in scientific journals were the main focus of the study. Searches in the database were conducted using specific keywords, such as "Fraud," "Corruption," "e-Government vs. corruption," "Influence of Religion and National Culture on Fraud," and "Governance in preventing fraud".

The researchers used various keyword combinations when identifying the entire inventory of pertinent papers. The first set of research resulted about 574 articles, and through additional searches, 29 articles were retrieved from various databases, bringing the total number of articles to 603. Of these, 602 articles were screened based on title as well as abstract. Articles related to categories such reports, reviews from book and papers, conference papers, also data articles have not been included in the selection process. Articles that successfully passed the screening stage were further critically analyzed by reviewing the manuscript assessing the relevance of E-government in preventing fraud. The total of 602 papers went through the manuscript review and selection criteria, resulting in 208 articles at the initial selection stage. These articles were then further examined by reading their entire content and determining their quality. After scientific assessment, publications deemed irrelevant were eliminated. To find articles that may not have been detected through online searches, reference tracing was conducted. The final evaluation results showed that in Table 1 shows the distrubution of articles by nation and indicated there are 85 most pertinent articles originated from 27 different countries.

**Tabel 1.1** Country of Origin and Number of Articles

No.	Country	Number of Articles
1	India	13
2	Nigeria	9
3	South Korea	6
4	Jordan	3
5	Kazakstan	3
6	Nepal	3
7	Bangladesh	2
8	Ethiopia	2
9	Greece	2
10	Mexico	2
11	South Afrika	2
12	Rusia	2
13	Vietnam	2

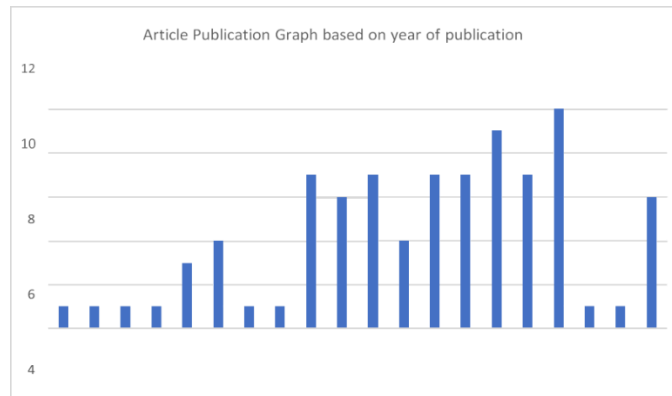
14	Fiji	2
15	Jamica	2
16	Korea	3
17	Amerika Serikat	6
18	Meksiko	2
19	Midwestern1	1
20	Malaysia	1
21	Swedia	1
22	Jepang	1
23	Pakistan	1
24	Inggris	1
25	Yordania	1
26	Eropa	1
27	Indonesia	2
28	Negara Lainnya	11
Total		87

Based on the data above, it can be concluded that India, Nigeria, and several other countries have the highest number of publications relevant to the topic of this research. Where the country with the largest number of publications is India with a total of 13 scientific publications, followed by Nigeria with a total of 9 publications and followed by the country of Korea with a total of 6 research publications.

## RESULT AND DISCUSSION

After collecting articles and finding 87 articles relevant to the research topic, the articles were then organized through an assessment of the literature and arranged into so that the data could be better analyzed. Every piece of writing was carefully examined in order to photograph knowledge in each applicable category effectively. Microsoft Excel serves as a tool for recording content that supports information analysis. This literature review identifies several categories, such as chronological studies and journal studies, which include related publications.

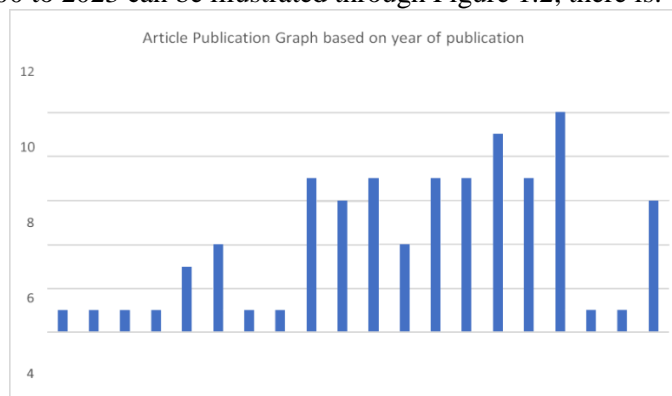
This is a description of journal output based on the year of publication of the 87 articles determined in accordance with the research topic. It includes information about the research place, its target audience and industrial sectors, the techniques used, theories/frameworks, and models used in the study. The following graph shows the distribution of article publications on appropriate topics from 2004 to 2023, which can be explained in Figure 1.1. following:



### ***Descriptive Findings***

The result of this study shows that in the fraud field in the government sector are spread across several developing countries, where if you look at the research publications, 28 countries that have conducted research in the field of fraud in the government sector.

An outline of research trends relating with the e-government application to prevent the fraud in the government sector from 2000 to 2023 can be illustrated through Figure 1.2, there is:

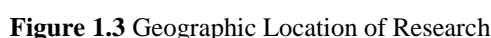


**Figure 1.2** Research Trends by Year

From the data above, it can be concluded that the research trend that is appropriate to this research topic is in 2018, where in 2018 there were 9 published articles, then the research trend in 2020 where the number of published articles was 10 articles.

### ***Geographical Location of Research***

Geographical location in this study reflects a description or explanation related to a particular area or location that is the center of attention in this study. The literature review documented 87 studies involving 28 countries, as illustrated in Figure 1.3:



From the online platforms, people can easily express their opinions at any time without having to make physical efforts. When coordination costs are reduced with the use of ICT, it's expected to the people more involved and ask the information from the government, which will increase the programs' openness and transparency (Shim and Eom, 2008; Wang et al., 2020; Zheng, 2016).



Through the e-government, the people can be more consistent to identify and report the encounters with corruption practices such to participate to against the corruption (Kim et al., 2009). E-participation platform give the citizen government to interact through the feedback, consultation and make a decision (Krishnan et al., 2017) also challenge irrational government actions also protocols, lowering the likelihood of corruption among public servants (Choi, 2014; Wang et al., 2020).

### 3. Capacity building

According to the several studies from the consideration, a nation must develop the capacities with the aid of cutting edge of ICT infrastructure, expertise also funding to fulfill the commitment of the e-government as the anti corruption tool (e.g. Cho and Choi, 2004; Kim et al., 2009; Kochanova et al., 2020; Lee et al., 2018; Wang et al., 2020). Complementary resource theory, emphasizes the value of resource or capabilities that allow the organization profit from strategy, technology or innovation which compatible with the idea to build capacities is necessary (Teece, 1986). Where the presence of another resource or capacity such the ICT infrastructure will multiply the quality or impacted the resource or capability such the e-government (Wang et al., 2020). Therefore, the public will able to access the government information more readily and the government will able to provide services more quickly and effectively through the accessibility also the affordability of ICT.

### 4. Information and Communication Technology

ICT is the general term of to several kind of communication devices or application, for example is satellite system, radio, phones, computer, network, hardware and software, such as the numerous services and the application such the video conference and remote learning.

In particular, ICT can be implemented as the electronic government which can assist to minimize the corruption (e-Government) (Pathak et al. 2007; Bhuiyan 2010). The internet and WWW providing individuals with government information also the services as the e-government. In particular, it provides electronic access to inform the concerning government operations.

Using information technology can provide greater convenience and benefit for its users, especially in the process of procuring goods and services. Where by using information technology you can connect directly between users and providers of goods and services. This is known as an electronic goods procurement system or called e-procurement. Where goods and services procurement transactions are carried out in one online system. Users and providers of communication goods and services through available systems. Using this system can provide efficiency and effectiveness in the process of procuring goods and services. And by using the e-procurement system, fraud can be prevented. Fraud is a problem that often occurs in the traditional procurement process for goods and services. The existence of information technology can certainly prevent fraud in the process of procuring goods and services.

### 5. Government Effectiveness

Research conducted by Chon-Kyun Kim resulted in a study that has implications for preventing fraud in the government sector, where it shows that if e- Government and the effectiveness of a country's government interact with each other, this would be the most effective tool for curbing corruption. Moreover, the most potential prediction is the interaction among e-government with the effectiveness. When the model incorporated the interaction among the application with the effectiveness shows the connection between economic wealth with government potential. Supremacy of law.

The research conducted by Chon-Kyun Kim has important implications regarding fraud prevention in the government sector. From the investigation shows the e-Government also the

effectiveness level of the government country interacts beneficially, which suggests where e-Government can be an indispensable tool when tackling corruption. Not only that, the predictor variable that has the most significant impact is the connection between e-governemnt and the law rule also the relation between digital and efficiency of government. Another crucial component of the model is the integration of relationship with regard to be e-government, the efficiency of public institutions and financial resources.5.

### ***Approach and Methods***

The research about e-governemnt and fraud prevention in government generally used a survey approach with questionnaire method distributed to several respondents using quantitative, qualitative also mixed approach, where the 71% Is the quantitative approcech and the 19% more is qualitative and the rest is 10% is mixed. It concluded that from the literature synthesis of several prior studies. This can be seen in the research design image below:

### ***Theory Findings***

The results show that a number of researchers adopted various theories and models as the basis for their research. Some of these include institutional theory, as used by Kim et al. (2009), agency theory (or principal-agent-client model) familiarized by Garcia-Murillo (2013), Krishnan et al. (2013), Neupane et al. (2014a, 2014b), Ojha and Palvia (2012), Srivastava et al. (2016), Zhao and Xu (2015), deterrence theory studied by Starke et al. (2016), modernization theory created by Nam (2018), normalization theory, as used by Inuwa et al. (2020), the Resource-Based View theory established by Kangwon Lee, Sang ok Choi, Jinha Kim, and Mijin Jung, criminological theories such as Cressey's fraud triangle recognized by Dominic Peltier-Rivest, as well as other theories such as technology determinism theory, general deterrence theory, public space perspective theory by Jithesh Arayankalam, Anupriya Khan, and Satish Krishnan, Technology Acceptance Model (TAM) utilized by David Valle-Cruz, Rodrigo Sandoval-Almazan, and J. Ramon Gil-Garcia, Delone and Mclean's information system success model used by Hu Xinli, COSO theory, contingency theory by Nanang Shonhadji, BUFFER/CONDUIT theory by Philip Beaulieu and Alan Reinstein, Public Value theory by Qi Zou, Zijun Mao, Rongxiao Yan, Shuai Liu, and Zheng Duan, and Field theory adopted by Mark Button, Branislav Hock, David Duan.

### ***Discussion***

E-governance can effectively act as an anti-fraud tool by optimizing transparency, creating a level playing field, stopping structured corruption, shaping new cultures and behaviors, and eliminating all "middleman" opportunities. This research has several important dedications with respect to the e-Government literature. First, this study is one of the first to extensively and systematically examine the relationship between digital governance and fraud in the public sector, significantly contributing to the fields related to government administration, information systems, and accounting contexts. In the context of e-Government, fraud has become a hotly debated issue (Khan and Krishnan, 2019). While there is a wide range of opinions on whether e-Government initiatives can effectively prevent fraud (see, for example, Basyal et al., 2018; Elbahnasawy, 2014; Nam, 2018), the diverse and unorganized views in this field make it difficult to thoroughly summarize the topic and determine future research directions.

Using the Systematic Literature Review (SLR) method, This research not only provides a structured overview of the literature on e-Government and fraud, but also examines research gaps that need to be filled. These findings provide researchers with direction for future research. In addition, this research outlines six thematic foci derived from various theories, These include agency theory, TCE, NPS, TAM, economics of crime, and the concept of compatibility. In terms of e-Government's influence on corruption, these themes shared insights into how e-Government can address corruption through



prevention and enforcement strategies, optimizing public participation, and optimizing capacity. Discussions relating to this thematic focus also include alternative viewpoints, such as the view that e-Government may not be a suitable solution when addressing corruption. This research shares systematic insights into the themes that characterize the literature on e-Government engagement and corruption, which it is hoped will assist researchers in studying this focus area and inform future research.

Practically speaking, this study confirms that e-Government is not a suitable solution when addressing corruption risks. Although some previous studies have shared empirical evidence on the ability of e-Government to prevent corruption (as mentioned in the works of Abu-Shanab et al., 2013; Anderson, 2009), recent studies through more sophisticated data analysis methods have shown findings that are inconsistent with this view (as expressed by Basyal et al., 2018; Melon and Spruk, 2020). In addition, some studies have shown that conventional anti-corruption approaches, along with e-Government implementation, can play the most important role when preventing corruption (as shown by Park and Kim, 2019; Shim and Eom, 2008; Wu et al., 2020). As such, the impact of e-Government effectiveness when combating corrupt behavior is likely to vary depending on the type of corruption being addressed (e.g., petty corruption, grand corruption) as well as the interconnectedness of specific national institutions (e.g., executive, legislative, judicial). A similar approach is found in the research conducted by Wu and colleagues (2020), where they recognize different types of corruption and understand the extent of e-Government's success when combating it.

## CONCLUSION

Fraud is an action that can harm individuals and groups, in this case the entity. Fraud is certainly a problem that must be handled well, one way is by using e-government. The theories and variables used in preventing fraud have been presented in the discussion above. Other factors that can be studied in preventing fraud in the procurement of goods and services are national culture, religion and the effectiveness of government administration. Fraud problems do not only occur in Indonesia, but in several other developing countries, fraud is a serious problem that can harm the government in general. Hopefully the problem of fraud can be prevented properly, especially in the procurement of goods and services in the public sector.

The main objective of this research is to examine further e-government regarding fraud prevention and find other factors that can be used in research on the same topic. This research also aims to examine further the research variables used and develop relevant theories used in research.

The findings show that several articles used in this research prove that e-government can prevent fraud, where good e-government implementation can increase the effectiveness of government performance which has an impact on preventing fraud in the procurement of goods and services.

Research on fraud has now been widely carried out, however, specifically studying the influence of e-government on fraud prevention, there is still little done. This can certainly be an alternative for developing research that is relevant for the future by developing some of the limitations of previous research.

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