Can E-Government Mitigate Administrative Corruption? An Empirical study into the Potential Role of E-Government in Eradicating Administrative Corruption in Sub-Saharan Africa

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Abstract

Africa remains in an unusual position in relation to the debate on corruption, economic performance, and poverty. The debate on addressing corruption in Africa is never ending. Not only corruption hinders economic growth and increases poverty, but it also threatens good governance, undermines the effectiveness and efficiency of public services, and undermine rule of law. The adoption of e-government to provide citizens with information on public services is on the rise in both developed and developing countries, but Africa remains the region with the lowest ranking in the adoption of e-government technology. Using perceived level of corruption, e-government development index, and e-participation index, empirical findings show that e-government has the potential to eradicate administrative corruption within Public Service in developing countries in Africa. This paper recommends developing countries in sub-Saharan Africa to develop e-government as anti-corruption tool to mitigate administrative corruption, reduce poverty, and increase economic growth.

Key words: E-government, Administrative Corruption, Technology, E-participation

Introduction

Public sector organizations have been gradually emphasizing customer-driven service delivery, with more services now delivered online. The latter is often referred to as e-government. The use of e-government to increase transparency and accountability of the public sector has been gaining popularity among practitioners and researchers in both public administration and information and communication technology (ICT).

The literature on the relationship between e-government and corruption is proliferating. Whilst some studies focus on how corruption negatively affects the development of e-government (Bussell, 2011; Ifinedo, 2012), others discuss the potential role of e-government to reduce corruption in the public sector (Bertot, Jaeger, & Grimes, 2010). Scholars argue that corruption threatens good governance because of its perceptible indications through institutional weakness, insufficient enforcement of rules and regulations as well as poor ethical standards (Armantier & Boly, 2011; Bertot, Jaeger, & Grimes, 2010; Dutt, 2009; Ionescu, 2013; Kim, Hyun, & Heejin, 2009). The problem of corruption is further exacerbated in developing contexts and its adverse effect on both the development and growth of developing countries are pronounced. A recent report by UN Economic Commission for Africa indicates that corruption remains one of the single most challenging factors for the eradication of poverty in Africa (UN, 2012). The report further indicates corruption as one of the major factors that hinders investors from investing in industries in Africa (UN, 2012).

The use of Information Communication Technology (ICT) which is directly related to e-government is found to reduce corruption in South Korea, India, and China. Studies show that the increase in e-government services in the country significantly decreases corruption (Kim, Hyun, & Heejin, 2009). Mistry and Jalal (2012) observed that corruption hinders economic growth particularly in developing countries and efforts to eradicate corruption are more challenging in developing countries than in developed countries.

Prior to the development of e-government as anti-corruption tool, administrative reform was considered as an anti-corruption tool to reform public sector organizations. As a conventional approach, administrative reforms reduce corruption because it enhances the quality of the bureaucracy. Some of these administrative reforms include reforms in the form of merit-based promotion and recruitment of personnel through special exams (Armantier & Boly, 2011). Other reforms include well defined job descriptions and the establishment of formalized rules. Personnel accountability and responsibility have also been reformed in order to eradicate corruption in the public sector. The use of business management styles such as CEO-style leadership, performance management, and strategic management have been adopted as measures to reduce corruption in the public sector. However, these approaches have not yielded meaningful results as corruption reducers in the public sector, particularly in developing countries in Africa.

The 54 countries in Africa are developing countries and corruption is a major social and political menace. Various studies indicate corruption as a major challenge facing the entire African continent, a concept validated and recognized by United Nations (UN), World Bank, and other international organizations. The search for solutions to the growing issue of corruption in Africa is incessant. For example, a recent report by UN indicates that despite improvements in governments on the African continent, corruption remains high (UN, 2012). This indicates that corruption is still on the rise even though there are improvements in governance in Africa.

International organizations including United Nations, World Bank, and International Monetary Fund are sponsoring e-government projects in many African countries to improve transparency and accountability within the public sector as well as to increase public sector efficiency. There are on-going e-government projects in Ghana, Sierra Leon, and Nigeria, all supported by Word Bank and IMF. The major question that needs to be asked is, can the development of e-government in these African countries reduce administrative corruption? This question is easy to answer in industrialized countries, but empirical studies are necessary in order to address similar question in developing countries, particularly, in sub-Saharan Africa.

E-government is observed to diminish information asymmetry and empowers citizens with information about the administration of government. Can this assertion be one of the reasons why African countries embrace e-government? Many African countries are currently in the implementation phase, putting up various structures to develop e-government for the public sector. The main goal of the e-government initiative is to improve transparency and accountability within the public sector. A question of considerable interest is whether e-government has the potential to improve transparency and accountability within public sector organizations in developing countries in sub-Saharan Africa? The key research question in this paper is, does e-government report has the potential to reduce administrative corruption in developing countries in sub-Saharan Africa? To answer this question, this paper employs institutional theory to investigate the potential role of e-government as anti-corruption tool in developing countries across sub-Saharan Africa.

Several studies have observed a relationship between e-government and corruption. Findings are consistent that e-government has the potential to reduce corruption (Armantier & Boly, 2011; Bertot, Jaeger, & Grimes, 2010; Dutt, 2009; Ionescu, 2013; Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013; Marquette, 2012). While the relationship between e-government and corruption can be reciprocal, this study focuses on the role e-government can play as a policy tool to reduce corruption. Thus, this paper focuses specifically on the potential role of e-government in mitigating administrative corruption, in developing countries in Africa. While there are two kinds of corruption, this study looks only into administrative corruption. Administrative corruption according to this study includes corrupt actions and practices by public sector employees or bureaucrats.

The rest of the study proceeds as follows. The second section defines e-government and corruption in the context of public administration. The third section reviews the literature on the role of e-government to subvert administrative corruption. The fourth section discusses research design and methodology. While the fifth section presents the results, the sixth section discusses the conclusion and the contributions of the study to public administration.

What is Corruption?

Corruption has a never-ending definition, because the definition depends on the place of the corruption. Corruption exists in the private sector as well as the public sector. There are two kinds of corruption in the public sector, administrative corruption and political corruption. The corruption referred in this study is the corruption that characterized public sector intuitions, also referred to as administrative corruption that happens among bureaucrats.

Dutt (2009) identified petty corruption and grand corruption as the two kinds of administrative corruption. Petty corruption exists among bureaucrats who rely on small tips and kickbacks from citizens to pad their pockets. Grand corruption, on the other hand, exists among higher-ranking officials who decide on large public contracts for their personal benefit. Grand corruption benefits organized groups, such as political party members or management of the organization where the corruption takes place (Dutt, 2009).

United Nations Development Program (UNDP) defines corruption "as the misuse of public office, power or authority for private benefits through various means such as extortion, bribery, nepotism, influence peddling, fraud, speed money or embezzlement" (UN, 2006, p. 14). While the World Bank defines corruption as the abuse or misuse of public office for private gain or private benefit (UN, 2004), Transparency International, the leading UN agency in fighting corruption also sees corruption as the "abuse of entrusted power for personal gain" (TI, 2012, p.6).

Several studies indicate that an administrative corruption can adversely affect the economy of a nation (Lio, Liu, &Yi-Pey, 2011; Marquette, 2012; Singh et al., 2010). The economic effects of administrative corruption include "reduction in effectiveness and efficiency of public services, inflated transaction costs, distorted incentives, and undermining of the rule of law" (Marquette, 2012, p. 16). While corruption is a global menace, it is considerable and prevalent in developing countries, more so than in developed countries, and its social and economic impacts are undesirable.

As cited by World Bank (2011) report, corruption is "one of the single greatest obstacles to economic development and social development; particularly through bribery, fraud and the misappropriation of economic privileges" (p. 15). Corruption holds back investment, retards economic growth, and prevents improvement in the quality of life, particularly, for the rural and poor people, especially, those in developing countries (Ionescu, 2013; Kim, Hyun, & Heejin, 2009). Developing countries are entangled in corruption because of "monopoly of power", lack of accountability and transparency in the public sector (Marquette, 2012, p. 18). Ionescu (2013) advised developing countries to initiate policies that seek to promote transparency and accountability within the public sector, for this will improve efficiency and reduce administrative corruption.

What is E-Government?

E-government is a generic term, as such, has different meanings. E-government refers to the delivery of government services through the internet. E-government is defined by United Nations as the "use of information and communication technology (ICT) and its application by the government for the provision of information and public services to the people" (UN, 2012, p. 14). E-government has revolutionized the delivery of service from focus on administration to customer driven.

E-government is ICT centered, and several studies indicate how the use of ICT to provide public services reduces corruption and increase transparency (Armantier & Boly, 2011; Bertot, Jaeger, & Grimes, 2010; Dutt, 2009; Ionescu, 2013; Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013; Marquette, 2012). ICT also provides higher quality services, and greater citizen engagement in policy processes such as policy formulation, implementation, and evaluation (Bertot, Jaeger, & Grimes, 2010).While e-government helps in better delivery of government services to citizens, other scholars found e-government to improve communication and interactions between government and citizens (Armantier & Boly, 2011; Dutt, 2009). E-government also empowers citizens through access to information.

Scholars identified six reasons why governments adopt e-government. First, countries adopt e-government for cost efficient delivery of services where the cost of production of government services is reduced (Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013; Marquette, 2012). This includes the eradication of paper based processes, where paper based applications are replaced with online application processes. Second, governments adopt e-government for

the purpose of customer focus or customer oriented service delivery (Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013; Marquette, 2012). Countries adopt e-government to provide services that reflect the needs of citizens. Third, countries adopt e-government for the purpose of policy outcomes for achieving policy goals and objectives (Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013; Marquette, 2012). Thus, e-government is used as means of collecting taxes, providing information sharing between government agencies; as well as between government and private sector industries to achieve policy goals (Marquette, 2012).

Additionally, countries across the world engage in the use of e-government for economic reasons. Countries develop e-government in order to reduce corruption through the provision of transparent services and increase in citizens' trust in the government (Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013; Marquette, 2012). E-government is found to improve productivity through the provision of information to the private sector using online tools. This makes communication between the private sector and government much easier. Fifth, e-government is also used as a public sector reform tool (Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013; Marquette, 2012). Studies show that e-government is adopted in a country to transform public sector processes by simplifying government and creating transparency in its activities. Finally, countries adopt e-government as an innovation for the promotion of transparency in public administrations, for improving efficiency in public administration, and strengthen government's relations with citizens. In short, e-government is an innovative breakthrough for the provision of higher quality services and greater engagement of citizens in administrative processes of government (Marquette, 2012).

The use of E-government as Anti-Corruption Tool

Several studies have explored the role of e-government as a tool for improving service delivery within the public sector. The results indicate that e-government has a significant effect on enhancing transparency, efficiency at all levels of government, as well as making government more accountable to its citizens (Bertot, Jaeger & Grimes, 2010). In a field experiment on corruption, Armantier and Boly (2011) document, that corruption prevails in institutions where personnel or bureaucrats are involved in the processing of information. The authors go on to indicate how the process causes delay that lead to economic rent in these institutions, by way of giving incentives in the form of bribery to facilitate and speed-up the processes. The authors opine how it leads to administrative corruption in which the have-nots who cannot afford these incentives are denied services. The authors conclude that e-government reduces costs and delays in processing and delivering of services within the public sector (Armantier & Boly, 2011)

Public officials often intentionally cause some of the delays in various public offices because they expect citizen to offer bribes in order to fast-tract the services. In their studies on the potential role of e-government in reducing corruption, Mistry and Jalal (2012) suggest that the electronic delivery of services such as the use of electronic forms can reduce corruption because this will significantly reduce interactions between citizens and public officials. Thus, as Mistry and Jalal (2012) contend, e-government speeds up processes and reduces human error that characterized public administration. Shim and Eom (2009) also argue that ICT or e-government can reduce unnecessary human interactions between citizens and public officials in administrative processes, which is the likely cause of bribery and corruption. E-government is found to improve public services with less waiting time and cost. Thus, development of e-government in many developed countries is effective in reducing administrative corruption by transforming both the public sector internal work processes and citizens' relationship with public agencies (Shim and Eom, 2009). Mistry and Jalal (2012) observed how effective the Online Procedures Enhancement for civil application (OPEN) system adopted by Seoul Metropolis as anti-corruption e-government initiative since its implementation in 1999 (Mistry and Jalal, 2012).

Bose, Salvatore and Murshid (2008) documented and evaluated studies on threshold effects of corruption in theory and evidence. The authors opine that most public offices are characterized by middlemen or intermediary service providers, coordinating businesses on behalf of citizens for a fee (bribe). These middlemen serve as facilitators, making delivery of services quick and easy. Citizens who fail to make use of these intermediaries find themselves going through long wait times. Some of these intermediaries are intentionally created by public officials, where they are given speedy service because of the financial benefits (Bose, Salvatore and Murshid, 2008). Bose, Salvatore and Murshid (2008) further argue persuasively that e-government eliminate intermediary services that characterized most government agencies which lead to corruption of public officials. By eliminating intermediary services, the authors posit that e-government enables citizens to conduct their own business, particularly online, and by themselves without the help of middlemen. This eliminates the bribery and corruption of public officials by using intermediaries (Bose, Salvatore and Murshid, 2008; Hopper et al., 2009; Singh et al., 2010). For example, Hopper et al. (2009) note that e-government policies are likely to be effective in the elimination of intermediary services which will eventually lead to the fight against corruption (Hopper et al., 2009, Singh et al., 2010). Similarly, Shin and Eom (2008) also discuss how the use of e-government and other anti-corruption tools such as administrative reforms have a positive impact on reducing corruption through elimination of bribery of officials and use of intermediary services in public sector agencies and departments.

Dutt (2009) has documented how the lack of access to information is a major channel by which administrative corruption flourishes in various public agencies and departments. When access to information is difficult, citizens will utilize legal or illegal opportunities to obtain necessary information. For this reason, bribing public officials for access to information becomes prevalent. According to Dutt (2009), e-government enables citizens to gain open access to information through the internet at the convenience of their place and time, eliminating bribery and corruption in public institutions. Ionescu (2013) contends that the benefit for making access to information online is greater transparency. This, according to Ionescu (2013) eliminates the possibility of public official demanding bribes from citizens, because citizens will no longer visit brick and mortar buildings in search of information where public officials will demand bribes before services are rendered (Kim, Hyun, & Heejin, 2009; Krishnan, Teo, & Lim 2013). Consequently, e-government eliminates the opportunity of public officials to solicit bribes. For example, Pathak et al. (2009) document how Pakistani government introduced ICT related e-government in the tax system. This reduced the direct contact between citizens and public officials in the tax administration and significantly reduced the demand for bribes from citizens by public officials (Pathak et al., 2009).

In their studies on anticorruption effects of information and communication technology (ICT) and social capital, Shim and Eom (2009) discuss how e-government enables citizens to conduct transactions themselves using the internet, which in turn leads to a reduction in administrative corruption, because of less interaction with public officials, which in turn results in less demand for bribes. The authors contend that by making services more accessible to the public, e-government is considered to have the potential to systematically reduce arbitrary behavior of public officials such as bribe solicitation (Shim and Eom, 2009).

In their empirical analysis of the relationship between e-government and corruption, Mistry and Jalal (2012) contend that the monopoly of power by public officials is one of the major causes of administrative corruption in the public sector, particularly in developing countries. Monopoly of power, according to Mistry and Jalal (2012) leads to the exercise of discretion. It further leads to lack of accountability and transparency within public officials. To Mistry and Jalal (2012), lack of transparency and discretionary power of public officials in public sector agencies particularly in developing countries are major enablers of administrative corruption. The authors argue that e-government reduces monopoly of power of public officials, which improves transparency and accountability in public sector agencies and departments (Mistry and Jalal, 2012). The authors suggest that e-government has the greatest potential for mitigating corruption in developing countries than developed countries (Mistry and Jalal, 2012). Similarly, Shim and Eom (2009) conclude in their studies that ICT and social capital both have significant and independent roles in reducing corruption.

Singh et al., (2010) explain how the Chilean government introduced e-procurement to reduce administrative corruption significantly. E-procurement was a segment of the e-government initiative to eradicate corruption in procurement services within the public sector in Chile. According to Singh et al., (2010), Chile Compra e-procurement system enables both citizens and public officials to compare costs and bids for services offered by government (Singh et al., 2010). Similarly, the Philippines also introduce e-procurement and had similar results. This eventually resulted in the prevention of price fixing and improved public accountability in the procurement system (Shim & Eom, 2008).

Using Fiji as a case study, Pathak et al. (2009) investigate the focus of anticorruption measures. Pathak et al. (2009) found that previous methods of anticorruption including administrative reforms, law enforcement, and social change focused on economic performance rather than identifying issues such as transparency as an anti-corruption measure in public agencies and departments. Thus, Pathak et al. (2009) contend that corruption was based on only economic incentive. The authors conclude that the evolution of e-government and the foci on information and use of transparency as the measures of corruption are factors that served as anticorruption tools in modern public administration (Pathak et al. (2009). E-government and ICT according to the authors now offer new methods of making governments more transparent. This is achieved through the implementation of ICT related initiatives, which became one of the benchmarks for the measurement of transparency and corruption perception index across the globe (Pathak et al. (2009).

Findings from their studies, Shim & Eom (2008) suggest that ICT has strong potential to reduce corruption through the promotion of "good governance and enhancing relationships between government employees and citizens" (p. 302). It also has the potential to allow citizens to follow the government activities through monitoring the behaviors of public officials (Shim & Eom, 2008).

Analyzing the experiences from Sub-Saharan Africa on e-government in developing countries, Schuppan (2009) identified the lack of public accountability, transparency, and shortcomings in regulatory practices as the underlying causes that lead to bureaucratic corruption. The author suggests that e-government has potential as an anti-corruption tool, particularly as a means of strengthening the effectiveness of internal and managerial control over corrupt behaviors of public officials. This is accomplished through the promotion of accountability and transparency in public administration (Schuppan, 2009). Schuppan (2009) concludes that e-government promotes economic wellbeing of states that adopt and implement it effectively. The developing countries with high implementation levels of e-government are likely to become politically and economically well developed.

Evidence from the literature suggests that e-government has a great potential to reduce administrative corruption. While embarking on e-services, using online tools to deliver public services promotes transparency and accountability. This leads to the two hypotheses in this study:

H1: The use of e-government will result in mitigating corruption, in developing countries in sub-Saharan Africa.

H2: The use of e-participation will result in mitigating corruption, in developing countries in sub-Saharan Africa.

Data and Method

A total of 48 countries were identified as countries that constitute sub-Saharan Africa (WB, 2013). All the data used in this study are from secondary sources. The study uses Corruption perception index as the dependent variable. The corruption perception index according to Transparency International (TI) is the measure of perceived level of corruption in a country (Transparency International, 2012). Transparency International measures perceived level of corruption on a percentage, where 100 percent indicates high level of transparency (not corrupt) and zero percent indicates low level of transparency (highly corrupt). In this study, the corruption perception index is reversed such that a value of 100 indicates high level of corruption and 0 indicate no corruption. The value is converted to a decimal value by dividing the value by 100. For this study, the value of "1" indicates a high level of corruption and a value of "0" indicates no corruption.

The first independent variable of interest is e-government. In order to measure the level of e-government development, the study uses e-government development index (EDI). The e-government index according to UN report (2012) is a composite measurement of the "capacity and willingness of member countries to use e-government for ICT-led development" (UN 2012, 14). This is measured on a scale between one and zero where one represents strong e-government development and zero means no e-government development. The e-government index is a worldwide benchmark for capacity and willingness of countries to use e-government or ICT-led development for the public sector. As a result, the e-government is used as a standard measure of performance of country capacity and willingness to use ICT for service delivery in the public sector. This study predicts a negative relationship between e-government and corruption such that, increase in e-government should reduce corruption.

The second variable of interest is E-participation. E-participation index "assesses the quality and usefulness of information and services provided by a country for the purpose of engaging its citizens in public policy making through the use of e-government programs" (UN 2012, 14). The e-participation encompasses the increase in online information (e-information) to citizens for decision making, increase in online consultation (e-consultation) for deliberative and participatory processes, and increase in online decision-making (e-decision making) by increasing the input of citizens in decision making (UN 2012, 14). This is measured on a scale between one and zero where one represents strong e-participation and zero means no e-participation. This study predicts a negative relationship between e-participation and corruption such that, increase in e-participation should reduce corruption.

The study controls for Gross Domestic Product (GDP), percentage of the population in urban areas, transparency in public sector, and the openness of government. Other variables controlled are rate of unemployment, rate of adult literacy, and the country's freedom status. Table 1 indicates the variables and their measurements. This study uses multiple linear regressions to examine the impact of the independent variables on the dependent variable.

Table 1: Sources of variables and their coverage

Variable	Source	Coverage
E-Government	UN E-Government Survey	2012
E-Participation	UN E-Government Survey	2012
GDP	World Bank	2012
urban population	World Bank	2012
Transparency in PS	World Bank	2012
Open Government	World Justice Project	2012
Unemployment rate	World Bank	2012
Adult literacy rate	World Bank	2012
Freedom Status	Freedom House	2013

Result

Multiple linear regressions analysis was used to develop a model for predicting the potential role of e-government on corruption using e-government index and e-participation index. The results with the regression coefficients are shown in Table 2. The first hypothesis in the study predicted a negative relationship between e-government and corruption. Holding all other factors constant, the result confirms the hypothesis. E-government is negatively associated with corruption and is a statistically significant at 0.05 levels.

The second hypothesis posited a negative relationship between e-participation and corruption. The hypothesis is not supported in this study. Though e-participation is statistically significant at 0.01% level, the relationship is positive. Aside the two variables of interest, three control variables were also statistically significant. Gross Domestic Product, transparency in public service, and adult literacy rate are all statistically significant at 0.01 levels.

Table 2: Results of Regressions of the potential role of E-Government on Corruption in Developing countries in Sub-Saharan Africa

Dependent variable: Corruption perception index

Regressor	Beta	Std. Err
E-Government	-.461*	17.953
E-Participation	.358**	10.835
GDP	0.000**	0.000
urban population	0.074	0.060
Transparency in PS	8.413**	1.978
Open Government	20.308	13.401
Unemployment rate	-0.087	0.077
Adult literacy rate	0.262**	0.071
Freedom Status	0.349	2.076
Intercept	-7.140	3.794
Summary Statistics		
N		48
Adj. R-squared		0.899

These regressions were estimated using the data on developing countries in Sub-Saharan Africa. The individual coefficient is statistically significant at the *5% level or **1% level.

Discussion

This study examines the relationship between e-government and corruption in Sub-Saharan Africa. Two hypotheses were developed to investigate the potential role of e-government in mitigating administrative corruption, in sub-Saharan Africa. The study expects greater use of ICT or e-government will reduce administrative corruption. In other words, countries with high e-government development index should have a lower level of corruption. Multiple linear regressions analysis was used to test the hypotheses.

The first hypothesis tests the relationship between e-government and corruption. The models supported the hypothesis and demonstrated a negative relationship, indicating that as the use of ICT or e-government increases, corruption decreases. Thus, the model suggests that a unit increase in e-government development index may result in a 46.1 unit decrease in corruption. The second hypothesis tests the relationship between e-participation and corruption. The model does not support the hypothesis. The model demonstrates a positive relationship.

Findings from the study suggest that increased in the use of e-government, thus increase in electronic delivery of government services, will result in a reduction in corruption. This suggests that the use of ICT, e-government or online services in the public sector do hold promise for the reduction of corruption in countries in Sub-Saharan Africa. ICT and e-government for that matter has a great potential to limit human interaction, particularly between bureaucrats and citizens who patronize public services. Electronic delivery of government services will limit the time it takes citizens to wait to be served or attended to by bureaucrats. Hence, electronic delivery of services will avoid the time it takes to be served and also prevent unusual delay caused by public servants. Countries in sub-Saharan Africa should endeavor to develop e-government since this effort will result in transparency, accountability and reduction in corruption (Schuppan, 2009). The result from this study support several studies undertaken on e-government and corruption in both developed and developing countries (Bose, Salvatore and Murshid, 2008; Hopper et al., 2009; Schuppan, 2009; Singh et al., 2010).

Conclusion

Fighting corruption in countries across the globe has proven very difficult, regardless of various administrative reforms. The literature review in this paper indicates how industrialized countries developed e-government to improve public sector performance and reduce administrative corruption. Evidence shows this was achieved through improvement in transparency and accountability within the public sector using e-government. Studies also indicate how developing countries like Chile, Pakistan, and Fiji have developed e-procurement and e-government to improve procurement processes and tax system. Notwithstanding, insufficient literature exists on the development of e-government as an anti-corruption tool in developing countries in Africa. This paper serves as one of the initial guide to the development of e-government in Africa.

Based on the result from the analysis in this study on e-government and corruption, this paper concludes that e-government has the potential role to mitigate administrative corruption in countries in Sub-Saharan Africa. There are many studies on the success of e-government as anti-corruption tool in many countries across the globe, but little studies exist to demonstrate whether this can be successful in developing countries in sub-Saharan Africa. This paper fills an important gap in the extant literature on how developing countries in sub-Saharan Africa can develop e-government as anti-corruption tool to mitigate corruption.

This study contributes to the theory and practice of developing e-government as an anti-corruption tool. First, this paper fills a gap in the literature linking e-government as an effective tool to eradicate corruption in sub-Saharan African countries. The focus of this empirical study on sub-Saharan African countries is unique, in that, several literatures focused on either using e-government as anti-corruption tool globally or using e-government as anti-corruption tool in industrialized economies (Hopper et al., 2009; Mistry and Jalal, 2012; Singh et al., 2010).

Second, this paper informs public administrators, policymakers, and politicians regarding the usefulness of online delivery of public services and its impact on saving huge sums of money that is lost through corrupt practices in public institutions. The study achieved this by demonstrating how e-government can subvert corruption and improve efficiency, transparency, and accountability within public administration. Third, this study is significant because this study offers useful insights into the level of impact e-government has and how developing e-government policies will mitigate corruption in developing countries, particularly those in sub-Saharan Africa. This study also contributes to the practice of e-government by showing how highly implemented e-government can reduce corruption among public officials.

This study has some limitations; however, these limitations can serve as an opportunity for future studies on the development of e-government as anti-corruption tool in developing countries. The study is limited to developing countries in Sub-Saharan Africa. Future studies should replicate this study in different countries such as developing countries in South Asia and South America. Additionally, when evaluating e-government and corruption in Africa, it is important to examine cultural and political dimensions. This is because all these factors play critical role in Africa. Africa has different cultural dimensions. Africa also has many political and administrative challenges. In this case, it is important to examine factors related to culture and political dimensions. This can better give a clear picture to the problem and how best to address it. Based on this, this study is limited to factors that impact on Africa culturally and politically. Additionally, future studies should focus on regime type, level of good governance, the administrative structures, as well as ICT infrastructure in various countries.

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