

Towards Good Governance Through E-Government In Developing Countries - A Case Of Kenyan Public Service

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Abstract:

Background: Advances in information and communications technology have aided government agencies at all levels in expanding and improving their ability to provide citizens with information and services online. E-services have the potential to benefit both governments and citizens by lowering service costs while increasing service accessibility. The objective of this study was to determine how e-Government initiatives contribute to Good Governance among Public Sector Organizations in Developing Countries. The specific areas under focus were; efficiency and Effectiveness, transparency and accountability and consistency with the rule of law. The study was anchored on the good governance theory and Unified Theory of Acceptance.

Materials and Methods: The study adopted a descriptive research design and the target population comprised of Kenya civil servants drawn from various public sector organizations ranging from national government, County governments, government parastatals and Kenyan Citizens who are customers of these government institutions. The researcher adopted stratified simple random sampling where the target population comprised of Civil servants and non-civil servants in Kenya. Questionnaires with open and close-end questions and Likert scales were used as the research instruments which were administered through various channels and collected after due completion by the respondents. The collected data was cleaned, coded and analysed using Jeffreys's Amazing Statistics Program (JASP) and Statistical Package for Social Scientists (SPSS). Frequencies, percentages, means, standard deviations, t-tests and ANOVA analysis were done.

Results: The study results indicated that efficiency and Effectiveness, transparency and accountability and consistency with the rule of law were significant factors of governance.

Conclusion In overall, the study findings confirmed that e-government has a positive influence on good governance in public sector organizations.

Key Words: Accountability, e-Government, Good Governance, Efficiency, Effectiveness Rule of Law,

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I. Introduction

World Bank Institute's (2012) defines governance as the manner in which authority is used to manage the nation's economic and social resources for the advancement of society (United Nations, 1977; World Bank, 1998:24). Adesola (2012) postulates the attributes of good governance as popular public participation, adherence to rule of law, transparency and accountability, responsiveness, and consensus-oriented. In developed and developing countries, Governments have sought to integrate technology into the way they operate and the way they serve their citizens. In Kenya and other developing countries, internet connectivity and accessibility has accelerated the use of e-government services with delivery models such as Government to Citizens(G2C), Government to Government (G2G), Government to Employees (G2E) and Government to Businesses (G2B) (Brown and Brudney (2001, p. 1).According to (World bank's World Development Report 2017) demand for better service delivery, improved infrastructure, and better institutions continues to rise, and therefore it is important that government agencies use scarce resources as efficiently and transparently as possible. In the past decade, organizations have focused on the latest technological innovations to overcome their public Sector organizational problems. One such dimension is the implementation of electronic government, referred to as 'e-government'. Research conducted by the Dubai School of Government (2008) confirms that the Middle East face common barriers in their e-government initiatives on the design and development levels. However, there is limited empirical research reported on how e-Government Services can transform governance in developing countries into good governance.

II. Material And Methods

This study adopted a descriptive research design. Population, according to Nassiuma (2010), exists in space and time, and scholars define population in terms of category and geographical location. The population is sometimes defined as the whole collection of factors of interest from which the research intends to draw conclusions (Mugenda & Mugenda, 2014).

Study Design: Descriptive research design

Study Location: Kenyan Public Service.

Study Duration: January to February 2023

Sample size: 138 National/County Government Citizens/Service Seekers

Sample size calculation: The sample size was calculated Using G-power, with the following parameters (Cohen, 1988): Effect size $|\rho|=0.05$ (Which gives a larger effect), The Level of Significance (α) =0.05), Power of test $(1-\beta)=95\%$, which is the minimum accepted level of power and Total number of tested predictors was 5 giving a total sample size of 138.

Subjects & selection method: The population was drawn from Kenyan National Government ministries, County Governments and citizens who are consumers of government services through e-government initiatives. They included:

86 Civil Servants

44 Non – Civil servants

Statistical analysis: The study used primary data collection. A structured questionnaire with closed and open-ended questions was developed. Data was analyzed using descriptive statistics; measures of central tendency and dispersion. Analysis of Variance (ANOVA) was used to determine if there is any difference between the means of efficiency and Effectiveness, transparency and accountability and consistency with the rule of law

III. Result

Personal attributes of the respondents were as follows; regarding gender of the respondents, 38.5% were Female and 60.0% were male respectively. 66.2% of the respondents were Kenyan Civil Servants and 33.8 non civil servants with mean age of the respondents was 40.2. The respondents were from National Government (13.8%), County Government (28.5%), State Co-operations/ Parastatals (47.7%) and Private Sector (10.0%). The respondents had diverse academic qualifications ranging from Certificates to PhD Level where a large percentage of (44.6%) being Master’s Degree holders and the least (0.8%) being Post Graduate Diploma.

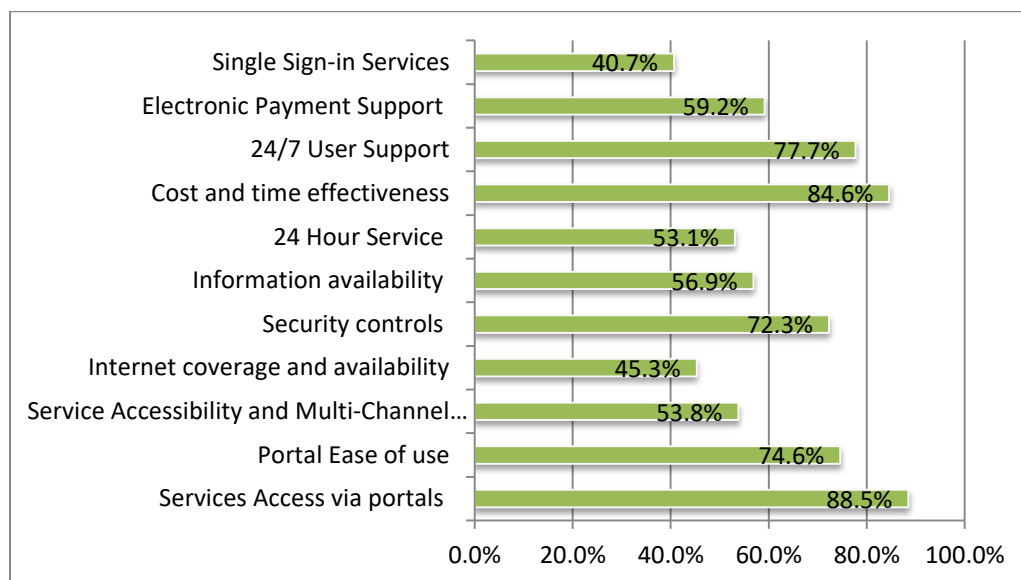


Figure 1: e-Government on efficiency and effectiveness

Figure 1 shows that 88.5 percent of the respondents indicated that access to government Services is done through online portals and 77.7 percent indicated that government services through e-government initiatives are usually available 24 hours 7 days a week. This indicates that majority of the of the users prefer accessing government services via e-government portals which make government services available even after office working hours. On the Contrary, 45.3 percent of the respondents indicated that the major obstacle to access e-government services is network coverage and single sign-in option at 40.7 percent. This clearly

indicates that improving ICT infrastructure can help service seekers and users efficiently and effectively access government services if improved on. Furthermore, 84.6 percent of the respondents indicated that it is cheaper and less time consuming when government services are offered through e-Government initiatives. This means the government can cut on costs of service delivery and also help citizens access services at a minimal cost. These findings mean that there is a strong agreement that e-government implementation has an influence on efficiency and effectiveness in public service delivery by providing services in an easy, cost effective, secure and convenient way.

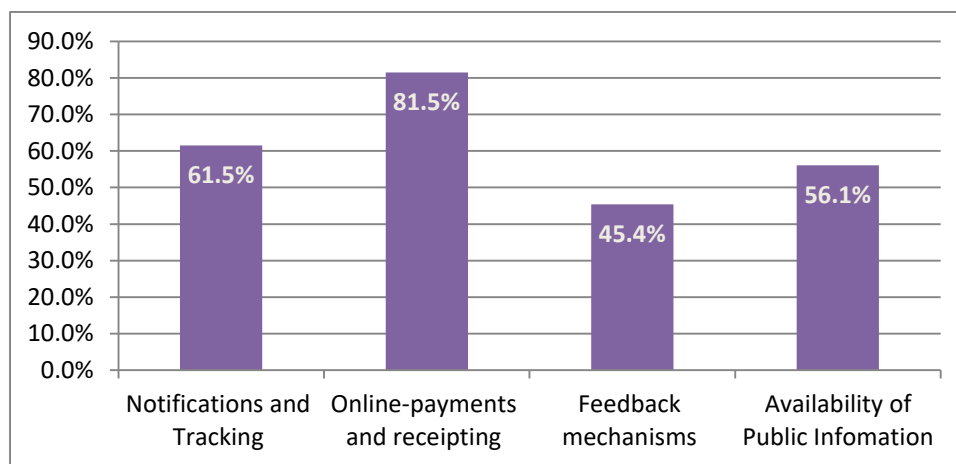


Figure 2: e-Government on transparency and accountability in the public service

Figure 2 shows that there were high levels of agreement that online payment and receipting for services rendered by governments online is available with a rating of 81.5 percent. Users also indicated that they are usually notified about the progress of government services and they are able to track the progress online by a score of 61.5 percent. Government portals having feedback mechanisms where users or service seekers can give feedback about services received a rating of 45.4 percent which is an indication that governments need to put in place a variety of feedback mechanisms to allow citizens air out their needs and issues in an easy and affordable way. E-Governments support on availing of public information about services, policies, fees and charges to those who need it 56.1 percent which is slightly above average meaning e-government initiatives support and enhances information access services. The overall score implies that there is agreement that e-government has influenced transparency and accountability in public service delivery.

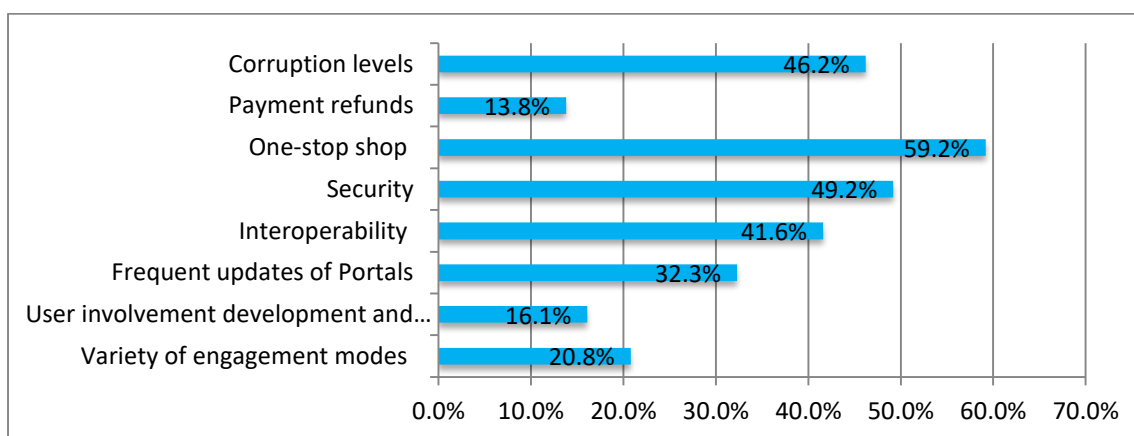


Figure 3: e-Government on consistency with the rule of law in public service

On e-government consistency with the rule of law in public service, the respondents moderately agreed that the Government portals provide a one-stop shop for a number of services they need with a percentage rating of 49.2%. On measures put in place by governments to protect the consumers' personal data, the rating was below average with a score of 49.2 percent which indicates clearly that there is a need to improve on it. On the contrary, respondents lowly rated government portals as having a provision for refunding payments for failed or non-available Services at 13.8 percent and user involvement in the development and implementation of public

service portals at 16.1%. Therefore, the results above indicate low levels of agreement that e-government supports adherence to the rule of law in the public service delivery.

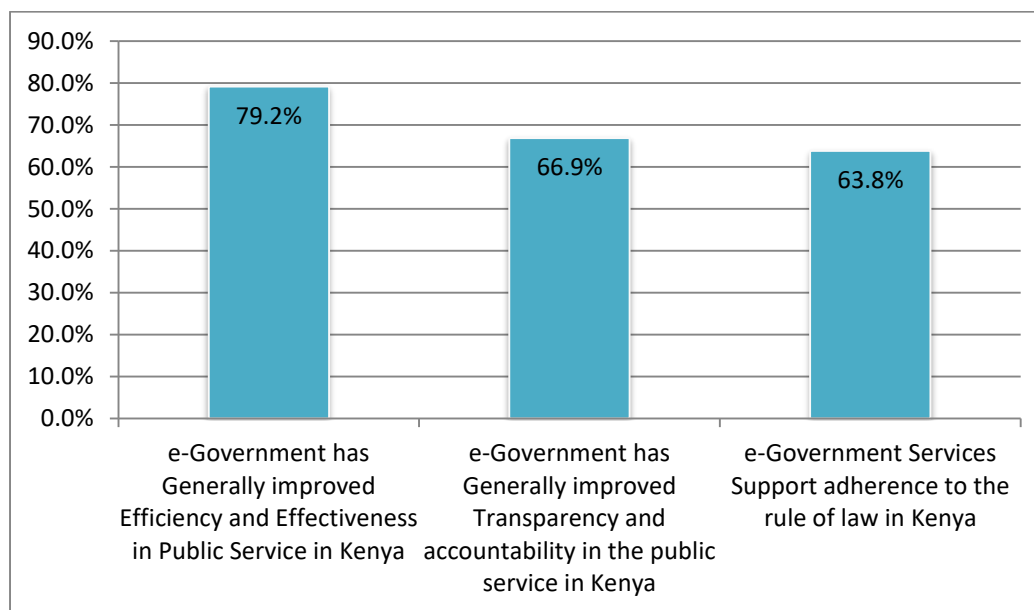


Figure 4: Good Governance

On good governance, 79.2 percent of the respondents affirmed that e-Government has generally improved efficiency and effectiveness in public service delivery. On Transparency and accountability and e-Government support on the adherence with the rule of law, the rating was 66.9 percent and 63.8 percent respectively which is a positive indication of e-government’s influence on good governance.

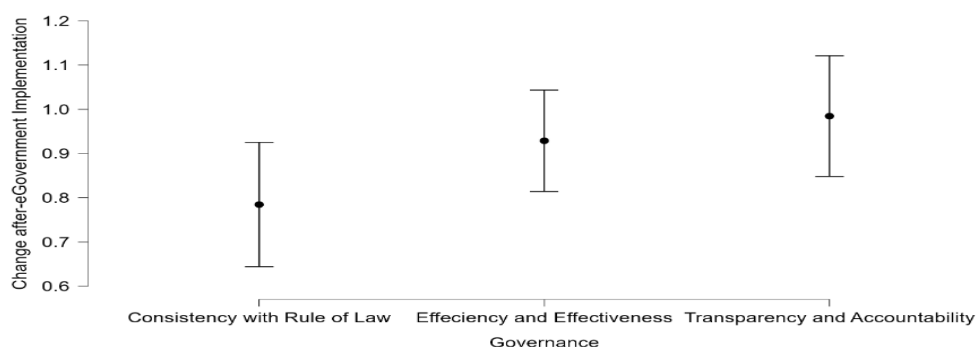


Figure 5: Interval Plots showing Change After eGovernment Implementation

Figure 5 indicates that there is a positive significant change in governance after the implementation of e-government initiatives in the public service. The results above indicate that efficiency and effectiveness and transparency and accountability have roughly the same positive change and consistency with the rule of law recording slightly lower positive change.

Table 1: Significance test on the three governance dimensions

	t	df	P value
Transparency and Accountability	14.139	129	<0.001
Consistency with the Rule of Law	10.948	129	<0.001
Efficiency and Effectiveness	15.876	129	<0.001

Table 1 shows one sample t-test for the three governance dimensions. These findings show that the test value is different from 0 in all dimensions. This means that transparency and accountability, consistency with rule of law and efficiency and effectiveness are significant measures of governance.

Table 2 Significance test on the three governance dimensions based on user occupation

	t	df	p
Efficiency and Effectiveness Civil servants	12.568	87	< .001
Consistency with the Rule of Law for civil servants	7.952	78	< .001
Transparency and Accountability for civil servants	10.543	84	< .001
Efficiency and Effectiveness for non-civil servants	10.077	45	< .001
Transparency and Accountability for non-civil servants	9.064	45	< .001
Consistency with the Rule of Law for non-civil servants	7.138	39	< .001

Table 2 shows the student t-test for six categories. All the six hypothesis test values specify that the mean is different from 0. This means that for each category there is a significant improvement in governance with the implementation of e-government.

Table 3: e-Government Implementation Effects based on governance dimensions Within Subjects Effects

Cases	Sum of Squares	df	Mean Square	F	p
Dimensions	2.153 ^a	2 ^a	1.076 ^a	5.931 ^a	0.003 ^a
Dimensions * Occupation	0.116 ^a	2 ^a	0.058 ^a	0.320 ^a	0.726 ^a
Residuals	46.462	256	0.181		

Table 3 shows the results for the repeated measures ANOVA. These findings show that dimensions test value $p(0.003) < 0.05$ is significant. This means that e-government has contributed positively towards change on governance. On the combined effect of dimensions and Occupation, $p(0.726) > 0.05$ is not significant. This implies that there is no significant difference in the change in governance due to e-government implementation between civil and non-civil servants

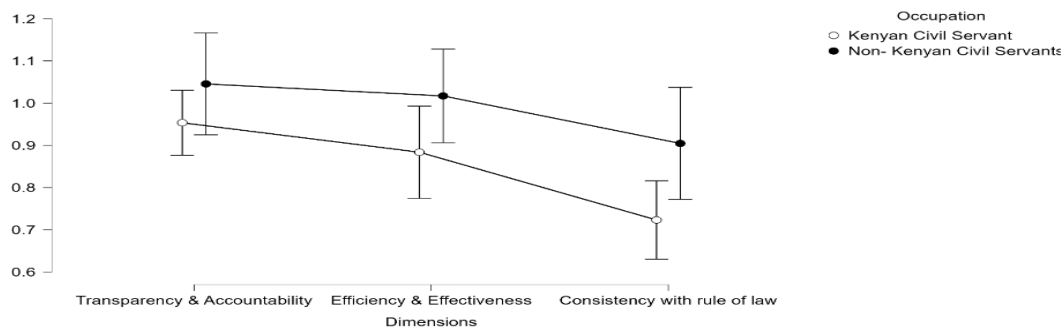


Figure 6: Interval plots for the three Governance dimensions based on User occupation

Figure 6 shows interval plots for the three dimensions (transparency and accountability, efficiency & effectiveness and consistency with rule of law) in relation to user occupation. These findings indicate that there is no significant difference between the three dimensions after the implementation of e-government in both occupations (Kenyan civil servants and non-civil servants). However, there is a slightly low difference in consistency with the rule of law in both occupations.

Table 4: Post Hoc Comparisons on Governance Dimensions after implementation of e-Government

		Mean Difference	SE	t	pholm
Transparency & Accountability	Efficiency & Effectiveness	0.049	0.056	0.879	0.380
	Consistency with rule of law	0.186	0.056	3.324	0.003
Efficiency & Effectiveness	Consistency with rule of law	0.136	0.056	2.444	0.030

A post-hoc test was done to ascertain exactly which of the three governance dimensions differ from each other. The findings in Table 4 indicate that consistency with rule of law ($p(0.003) < 0.05$) is significant. This means that among the three dimensions, only consistency with rule of law is significantly different. This means consistency with rule of law is different from efficiency and effectiveness and transparency and accountability.

IV. Discussion

On efficiency and effectiveness, an average of 76.5% of the users indicated that e-Government has a positive influence on efficiency and effectiveness in public service delivery. In addition, the study's T-test results ($p < .001$) indicated that efficiency and effectiveness was a significant factor for governance. These research findings are in congruence with findings of a study by Chairuel, Widyarto, and Pujani (2015) that e-Government adoption has a positive and significant effect on the efficiency and effectiveness of organizations, and this echoed on improved organizational performance. The outcome of findings showed that adoption of e-government has made government services to be available 24 hours 7 days a week. Citizens prefer accessing government services via e-government portals which make government services available even after office working hours. This untimely access has brought about better and timely decision making among citizens and government entities. The use of online platforms in search for government services has greatly helped the government to cut on costs of service delivery and also helped citizens access services at a minimal cost.

Findings on e-government's influence on Transparency and accountability in public service delivery indicated a positive influence with an average of 74.3 percent of the respondents indicating that e-Government has a positive influence. The results were affirmed by, the study's T-test results ($p < .001$) which indicated that Transparency and Accountability was a significant factor for governance. The above findings are also in agreement with findings by John Carlo Bertot, Paul T. Jaeger and Justin M. Grimes (2011) that e-Government implementation has a positive significant effect on transparency and accountability. These findings clearly imply that e-government has the potential to significantly improve transparency and accountability in developing countries. Through the use of digital technologies, e-government can increase the availability and accessibility of information, enhance citizen participation, and promote good governance practices.

Findings on e-government's support for adherence with the rule of law in public service, showed positive influence with an average score of 62.4 percent. The results were also echoed in the study's T-test results ($p < .001$) which indicated that consistency with rule of law was a significant factor for governance. Furthermore, the results above are reflected in Rónán Kennedy (2015) study about "E-Regulation and the Rule of Law". These findings imply that government portals provide a one-stop shop for a number of services to the citizens. There are few measures put in place by governments especially in the developing countries to protect the consumers' personal data. These government portals do not have a provision for refunding payments for failed or non-available Services. On the other hand, e-government portals in developing countries are not citizen centric and there is usually minimal user involvement in development and implementation. The findings showed that e-government initiatives support inclusivity and they provide service one-stop-shops where citizens can access all required services on a portal without unnecessary navigation from portal to portal. This is evident in Kenya through e-citizen portal system which offers a wide range of government system ranging from business registration, marriages certificates, driving licenses, good conduct, civil registration services among others. However, a small percent of these portals supports different modes of government engagement for service delivery. This means there is limited support for aspects like multilingual support which means many service seekers who need government services may be left out on this engagement which goes against laws of inclusivity and service to all.

The findings revealed also that consistency with rule of law was lower as compared to efficiency and effectiveness and transparency and accountability. This can be explained by the fact that the portals are not citizen centric making it hard to help in reduced corruption levels, low levels of inclusivity in all online government initiatives and lack of e-government support for different modes of engagement for service delivery. This is evident due to lack of good leadership in government organization which has no respect for the rule of law as well as polarized political leadership which does not embrace openness. The creation of the online portals is focused on the host organization creating fragmented system with minimal user involvement.

V. Conclusion

The study concludes that e-Government implementation has a positive significant influence on efficiency and effectiveness of public sector organizations in developing countries. This means that adoption and implementation of e-government (e-administration, e-citizen and services and e-society) drastically influences positively the ability of public sector organizations to produce intended results without waste of time, effort and resources hence added value on service delivery to citizens and better outcomes at all service points. Secondly, e-Government implementation can positively influence transparency and accountability in the public service delivery by opening avenues for citizens participation in policy and decision making which enables greater understanding between Government and citizens and also among citizens themselves through e-government delivery models (G2B, G2G, G2E and G2C). Finally, e-Government activities can positively influence and support compliance with the rule of law in public service delivery because rule of law is one of the key dimensions that determine the country's quality of governance.

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