

INFLUENCE OF PRIVACY ON THE IMPLEMENTATION OF ELECTRONIC GOVERNANCE IN ELGEYO MARAKWET COUNTY

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ABSTRACT

Technology-based service is now a must for both public and private enterprises in the changing, aggressive economic climate of modern globalized economy. The majority of devolved governments recently implemented e-Government platforms to enhance service delivery. These platforms enable residents, business associates, employees, other organizations and the government to receive information and services more quickly and at a lower cost. Due to the devolution of governmental duties, the County governments now have to deal with a huge debt load from former administrations as well as subpar revenue collection and service delivery methods. The goal of this study was to evaluate the influence of privacy on implementation of electronic governance in Elgeyo Marakwet County. The study's direction was guided by Technological Acceptance Model. For the investigation, descriptive research was employed. The target population for the study consisted of 272 participants comprising of; 35 public administrators, 140 ward development committees, 7 public participation officers, 50 county assemblies and executives, 5 communication officers, 15 ICT officers, and 15 public administration officers and the General public as its target audience. Simple random sampling was employed to collect data from a sample size of 162 respondents. Questionnaires were used to collect respondents' information for this study. Qualitative data were analyzed using the thematic method. Descriptive and inferential statistics were used to analyze the data with the Statistical Package for Social Sciences (SPSS) version 25 frequencies, percentages, mean and standard deviation are all included in descriptive statistics. Multiple regression analysis and inferential correlations were used to determine the change in the dependent variable caused by the independent variables. Charts and tables were used to present the analyzed data. The results of the study showed that privacy was positively associated with implementation of electronic governance in Elgeyo Marakwet County ($r=0.548$; $p=0.000$). The study concluded that there is security of information while using technology in place used in the implementation of electronic governance in the county, also a policy framework and regulation has been developed by the County Government to support E-Governance. The study recommended that the County government should come up with clear are policy framework and regulation governing the use of innovation technology in the County.

Key words: Privacy, Implementation and Electronic Governance.

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INTRODUCTION

E-Government has become a popular focus of government efforts in many countries worldwide (Verkijika & De Wet, 2018). A growing number of governments around the world are creating and implementing e-government solutions as a means to enhance services, reduce expenses, free up time, and increase productivity and effectiveness in public service. E-government and the Internet have substantially changed the structure, values, culture, and business practices of the entire society by utilizing ICT as a resource in the workplace. E-government aims to do more than simply automate antiquated processes on an electronic network, transform paper-based data into digital information, and make that information available online (Rodrigues, Sarabdeen & Balasubramanian, 2016).

E-Government describes the use of ICT tools, such as fax machines and wireless Palm Pilots, to automate routine governmental tasks (Simonofski, Snoeck, Vanderose, Crompvoets & Habra, 2017). In order to ensure that residents engage in and are happy with the government process, the government has made a constant commitment to improving the interaction between the private citizen and the public sector through improved, cost-effective services. According to the widely accepted definition, e-Government is simply a network-driven activity that may be expanded to increase public access to knowledge, services, and information (Schnoll, 2015).

County Governments of Kenya were established in 47 Counties. The county government structure is similar to that of the National Government, consisting of the County Assembly and County Executive as per the Act of County, 2012). The County Public Service Board mandate ensures checks and balances are adhered to implementing new architecture and change. The County government is required to decentralize and provide services that are efficient in a practical manner. By implementing the E-service portal, the County Government of Elgeyo–Marakwet continuously improves its rate of delivery of services to the business community and its members. This is through the self-help E-portal that offers one-stop-shop services (Chepkoskei, 2020).

Statement of the Problem

The execution of the e-government initiative must overcome a range of technological challenges, including the absence of established standards and an integrated infrastructure across companies and agencies. People's concerns about privacy and secrecy considerably impede the implementation of an e-government program. The adoption of e-government program faces a number of technological obstacles, such as a lack of interoperable infrastructure across organizations and agencies and established standards. The implementation of an e-government program is also significantly hampered by individuals' worries about security and secrecy.

Although there has been a lot of literature on the impacts influencing user adoption of e-government services, the perspective of county governments is weak. The efficiency of e-Government projects depends on how well the people who are its target clients use its solutions. With the introduction of two government levels, analysis of the factors influencing county administrations' adoption of e-government would be highly beneficial. This study therefore is necessary in filling the existing research gap by evaluating the influence of privacy on implementation of electronic governance in Elgeyo Marakwet County.

Purpose and Objective of the Study

The purpose of this study was to evaluate the influence of privacy on implementation of electronic governance in Elgeyo Marakwet County. The research objective was to evaluate the influence of privacy on implementation of electronic governance in Elgeyo Marakwet County. The research was guided by the below question;

- What is the influence of privacy on implementation of electronic governance in Elgeyo Marakwet County?

LITERATURE REVIEW

Technology Acceptance Model (TAM)

TAM broadly asserts that a person's attitude toward using technology and perception of the technology's utility may both be used to describe how strongly they intend to use a particular technology. According to the model, a variety of elements, such as PU (perceived usefulness) and reported ease-of-use, influence customers' choices over how and when to adopt new technologies. It keeps the chain of beliefs, intentions, and behaviours going (Pundir, et al., 2021). Although not everyone in a tax-filing environment has the same opportunity or the necessary skills to use information systems, TAM was developed with the goal of promoting information system usage in various parts of the organization, where access to technological tools, training, information systems experience, and client experience are somewhat homogenous.

One of the basic tenets of the TAM (Technology Acceptance Model) is that the cognitive notions of PEOU (perceived ease of use) and perceived utility fully mediate the impact of external circumstances on information technology usage behavior (PU). Therefore, it is considered that a manager's decision to integrate such technologies in Automation processes is influenced by the perceived utility (PU) of social media. Fatokun (2023) showed how the perceived usefulness of something has an impact on how individuals feel about utilizing it. Additionally, control beliefs affect PBC.

According to this idea, when establishing a technology-based system to help improve service quality, the counties must add features that would catch users' attention and fascinate individuals. The program must also be easy to use and clear of ambiguous terminology. Additionally, no matter how well-developed an IT platform a central government creates to support its operations, the program will fail if the counties or users do not adopt it. A significant example is the current E-Procurement project, which was started by the national government but is facing strong opposition from county administrations. This technology has a major acceptance theory background.

It is argued that, in contrast to the other model, which was asked to predict technical adoption, the TAM model was unable to predict the adoption of ICT (information communication technology). There was adequate data in the study to draw the conclusion that TAM was suggested and that it was unable to take into consideration societal impact, motivating factors for action, or significant precedents for cell use (Chepkoskei, 2020). Another of the paradigm's defenses and criticisms is the notion that the Technology Alignment Model illiteracy. They could be able to explain unusual behavior. However, it has apparently been demonstrated that the TAM is insufficient to account for how customers act while making purchases, rejecting innovations, or accepting them.

Privacy and Implementation of Electronic Governance

Munyoka and Maharaj (2019) conducted a study to examine the effects of safety, trustworthiness, optimism bias, and possible danger on how individuals in the SADC use e-government services. This study offers an e-government usage paradigm. Information was gathered using a quantitative design by surveying of 489 program participants in Zimbabwe and Zambia in order to assess the model fit using structural equation modeling.

Dash and Pani (2016) conducted a study to provide a comprehensive image of e- Government using cloud technology and to illustrate the requirements and obstacles in creating the model in India. The service and distribution models for the installation of the e-Gov cloud can be linked to resources for the e-governance modality. Although distributing e-Gov cloud infrastructure is one of ICT's largest difficulties, security and safety for the public and the government are the real concerns. The study however was done in India while the current study was a case of Kenya.

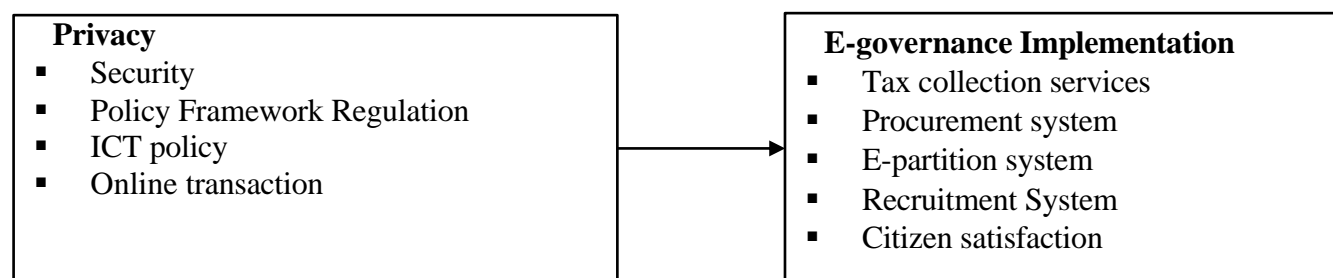
Agbozo, Alhassan and Spassov (2018) conducted study on the challenges to Sub- Saharan Africa's adoption,

use, and growth of e-Government. Private details and personal information are essential for preserving consumer trust in any Information ICT system. Over the past ten years, e-Government projects have changed the civil service of various nations, largely raising the bar for providing citizen services. The security and secrecy issue hinders the growth of any electronic government system and could cause the public to lose trust in such services. The 2016 UN (United Nations) e- Government Report indicates that Sub-Saharan Africa is on the brink of steadily growing e-government, despite the region's general underachievement being attributed to a variety of issues. The study however was done in sub-Saharan Africa while the current study was a case of Kenya.

Elisa, Yang, Chao and Cao (2018) conducted research on the architecture of a safe and confidentiality of electronic government system based on blockchain. A framework is created to acknowledge that the five phases of electronic government might have various effects when six different groups of constituents are taken into account, building on and broadening stages of e-government outlined in past research. The relationships shown in various levels of implementing electronic governance are unique and complex, and they are affected by outside forces and constraints. The implementation and policy of electronic government must take these issues into account. Privacy in e-government problems alter significantly when global factors and constraints are considered throughout the complex architecture of organizational layers by constituency. The study however was not specific on how privacy affects the implementation of e governance.

Conceptual Framework

Figure 1 represents the conceptual framework for this study. The independent variable is privacy while E-governance implementation is the dependent variable.



Independent Variable

(Source: Researcher, 2024)

Figure 1 Conceptual Framework

Dependent Variable

MATERIALS AND METHODS

Research Design

The research design for this study was a descriptive survey. The primary element of survey research is to use questionnaires to elaborate on the intended characteristics of a wide group of people, things, or institutions (Jaeger, 2014). This design was suitable since data was taken from the same place (Elgeyo Marakwet County) from different people. A descriptive study takes data so that it can provide solutions about the questioned status of the subject (Orodho, 2013).

Target Population

The study target population was 272 participants comprising of; 35 public administrators, 140 ward development committees, 7 public participation officers, 50 county assemblies and executives, 5 communication officers, 15 ICT officers, and 15 public administration officers and the General public as its target audience.

The sample size was obtained using the Yamane formula ($n=N/1+N_e^2$) which gave a sample size of 162 respondents.

Research Instruments

The data for this study was collected by administering structured questionnaires to participants. A survey, as defined by Kombo et al., (2017), serves as a research tool for obtaining information from a diverse group of individuals. Verbiest et al., (2018) underscores the role of surveys in providing participants with the opportunity to express their opinions and make suggestions. Opting for individual survey completion was deemed cost-effective, particularly in managing a sizable and dispersed participant pool, especially those with expertise.

Data Analysis Procedures

After data collection, data cleaning and coding was done, computed to the Statistical Package for Social Sciences (SPSS V. 22) for analysis. Both qualitative and quantitative data were gathered for the study. Thematic analysis was used to examine qualitative data. The descriptive statistics used were frequencies, percentages, mean and standard deviation to analyse the quantitative data. Inferential statistics used was Pearson Product Correlation coefficient. Analyzed data was presented in form of frequency tables.

RESULTS AND DISCUSSION

Influence of Privacy on Implementation of Electronic Governance

The study sought to establish the influence of privacy on implementation of electronic governance in Elgeyo Marakwet County. To achieve this, a five-point Likert scale was used where; 1=Strongly Disagree, 2=Disagree, 3= Neutral Agree.4=Agree, 5=Strongly Agree. The findings are shown in Table 1 and Table 2.

Table 1: Descriptive Statistics on County staff Response

Statement	SD	D	N	A	SA	Mean	Std. Deviation
There is security in innovation technology in terms of firewalls	F 9 % 32.1	9 32.1	3 10.7	4 14.3	3 10.7	2.39	1.370
There is security in innovation technology in terms of encrypted password	F 7 % 25.0	10 35.7	4 14.3	5 17.9	2 7.1	2.46	1.261
There are policy framework and regulation governing the use of innovation technology	F 11 % 39.3	6 21.4	4 14.3	6 21.4	1 3.6	2.29	1.301
ICT policy emphasizes on privacy of county government documents	F 8 % 28.6	11 39.3	2 7.1	4 14.3	3 10.7	2.39	1.343
Innovation technology secure environment to transact online	F 10 % 35.7	7 25.0	4 14.3	6 21.4	1 3.6	2.32	1.278

Sources: Research Data (2024)

According to Table 1, 7(25%) of respondents agreed that there is security in innovation technology in terms of firewalls. However, 18 (64.2%) of respondents disagreed that there is security in innovation technology in terms of firewalls. Furthermore, the survey results revealed, in terms of mean and standard deviation, that respondents disagreed that there is security in innovation technology in terms of firewalls (Mean=2.39, standard deviation=1.370).

Also, 7(25%) of the respondents agreed, and 17(60.7%) disagreed that there is security in innovation technology in terms of encrypted password. Further, results also showed that in terms of mean and standard deviation, the respondents disagreed that there is security in innovation technology in terms of encrypted

password (Mean=2.46, standard deviation=1.261).

Further, 7(25%) participants there are policy framework and regulation governing the use of innovation technology. However, 17(60.7%) of the respondents disagreed that there are policy framework and regulation governing the use of innovation technology. Further, the study results also showed mean and standard deviation; the respondents disagreed there are policy framework and regulation governing the use of innovation technology (Mean=2.29, standard deviation=1.301).

Furthermore, 7(25%) participants agreed that ICT policy emphasizes on privacy of county government documents. However, 19(67.9%) of the respondents disagreed ICT policy emphasizes on privacy of county government documents. Further, the study results also showed mean and standard deviation; the respondents disagreed ICT policy emphasizes on privacy of county government documents (Mean=2.39, standard deviation=1.343).

Finally, it was noted that 7(25%) of the participants agreed that innovation technology secure environment to transact online. On the contrary, it was noted that 17(60.7%) disagreed that innovation technology secure environment to transact online g. Further, results also showed, in terms of mean and standard deviation, that innovation technology secure environment to transact online (Mean=2.32, standard deviation=1.278).

Table 2: Descriptive Statistics on Citizens Response

Statement		SD	D	N	A	SA	Mean	Std. Deviation
You prefer travelling to the County Government Offices to get face to face services than online	F	16	31	10	27	52	3.50	1.475
	%	11.8	22.8	7.4	19.9	38.2		
There is security in innovation technology in terms of firewalls	F	34	42	31	23	6	2.45	1.166
	%	25.0	30.9	22.8	16.9	4.4		
There is security in innovation technology in terms of encrypted password	F	14	22	11	51	38	3.57	1.326
	%	10.3	16.2	8.1	37.5	27.9		
There are policy framework and regulation governing the use of innovation technology	F	15	21	14	42	44	3.58	1.369
	%	11.0	15.4	10.3	30.9	32.4		
ICT policy emphasizes on privacy of county government documents	F	14	25	13	42	42	3.54	1.366
	%	10.3	18.4	9.6	30.9	30.9		
Innovation technology secure environment to transact online	F	13	16	25	42	40	3.59	1.285
	%	9.6	11.8	18.4	30.9	29.4		

Sources: Research Data (2024)

According to Table 2, 79(58.1%) of respondents agreed that you prefer travelling to the County Government Offices to get face to face services than online s. In contrast, 47(34.6%) disagreed and agreed that you prefer travelling to the County Government Offices to get face to face services than online. In terms of mean and standard deviation, the survey also found that respondents agreed that you prefer travelling to the County Government Offices to get face to face services than online (Mean=3.50, standard deviation=1.475).

Furthermore, 29(21.3%) of respondents agreed that there is security in innovation technology in terms of firewalls. However, 76(55.9%) of respondents disagreed that there is security in innovation technology in terms of firewalls. Furthermore, the survey findings revealed that, in terms of mean and standard deviation, respondents disagreed that there is security in innovation technology in terms of firewalls (Mean=2.45, standard deviation=1.166).

The study further noted that 89(65.4%) of the participants agreed, and 48(15.4%) disagreed that there is security in innovation technology in terms of encrypted password. Further, the study results also showed, in terms of mean and standard deviation, that the respondents agreed with the statement that there is security in innovation technology in terms of encrypted password (Mean=3.57, standard deviation=1.326).

The study further noted that 86(63.3%) of the participants agreed, and 36(26.4%) disagreed that there are policy framework and regulation governing the use of innovation technology. Further, the study results also showed, in terms of mean and standard deviation, that the respondents agreed with the statement that there are policy framework and regulation governing the use of innovation technology (Mean=3.58, standard deviation=1.369).

Finally, the majority of the respondents, 270(86.8%), agreed that innovation technology secure environment to transact online. However, 27(8.7%) of the respondents disagreed innovation technology secure environment to transact online. Further, the study results also showed, in terms of mean and standard deviation, that the respondents agreed with the statement that innovation technology secure environment to transact online (Mean=3.59, standard deviation=1.285).

Correlation Analysis

The objective of the study sought to determine the perceptions of teachers towards Electronic Governances in ECDE Centres in Uasin-Gishu County. The correlation findings are presented in Table 3.

Table 3: Correlation on Privacy on Electronic Governance

N=271	Electronic Governance	Privacy
Electronic Governance	1	.459**
Privacy	.548**	1

** Correlation is significant at the 0. 01 level (2-tailed).

Source: Survey Data (2019)

The findings in table 3 revealed that the research found that privacy was positively associated with implementation of electronic governance in Elgeyo Marakwet County ($r=0.548$; $p=0.000$). This indicates that as efforts to safeguard privacy increase, there is a corresponding uptick in the adoption of electronic governance practices within the county. The moderately strong correlation suggests that prioritizing privacy concerns is conducive to fostering an environment conducive to electronic governance implementation.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that there is security of information while using technology in place used in the implementation of electronic governance in the county also a policy framework and regulation that has been developed by the County Government to support E-Governance. Further there are rules and regulations in electronic services in addition there is an ICT policy put in place to ensure implementation of electronic governance. However, County staff doesn't trust putting their details online. On the other hand, citizen prefers travelling to the County Government Offices to get face to face services than online. Furthermore, there is no security in innovation technology in terms of firewalls used by County. In addition, also there is no security in innovation technology in terms of encrypted password. Also, there are policy framework and regulation governing the use of innovation technology in the County. Further ICT policy does not emphasize on privacy of county government documents. In addition, the innovation technology is not a secure environment to transact online. Hence prefer travelling to the County Government Offices to get face to face services than online.

The study recommends that the County government should come up with clear are policy framework and regulation governing the use of innovation technology in the County. The policies should emphasize on privacy and security of the data.

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Conflict of interest

The authors declare no conflicts of interest regarding the publication of this paper.

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