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ORGANIZATIONAL CULTURE AND ADOPTION OF E-GOVERNMENT FOR IMPROVED SERVICE DELIVERY IN KAJIADO COUNTY, KENYA

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Abstract

Rapid growth in technology in the last two decades has made governments to start e-government intiatives as a way of ensuring effective and efficient operations. E-gernment has been shown to improve accountability and transparency as well as delivery of services in a timely and cost-effective manner. The purpose of this study was to establish the influence of human resource capacity on adoption of e-government in Kajiado County. The study was based on pragmatic paradigm. Descriptive survey was used in this study. A sample of 335 respondents was drawn from the target population of 2660 employees from the devolved 10 ministries in Kajiado County using Cochran (2007) formulae. Quantitative data was collected through open and crossed-ended questionnaires while qualitative data was collected through an interview guide. Regression models and correlation were used to analyze inferential data and test hypotheses. Qualitative data was analyzed using content analysis. The study found that human resource capacity had a strong positive influence on adoption of E-government (r= 0.595, p-value=0.000). The study concludes that human resource capacity has a significant influence on the adoption of E-government in the County Government of Kajiado. The study recommends that the county government of Kajiado should develop frequent training programmes for all the employees in the County. The training programmes should be preceded by training needs analysis for identify the training needs of the employees in regard to the use of ICT. This study also recommends that the County government of Kajiado should make use of financial and non-financial rewards to motivate the employees. In regard to financial rewards, the County government should offer more competitive salaries to the employees.

Keywords: *Organizational Culture, E-Government, Service Delivery*

Introduction

Over the last decades, dramatic advances in the information and communication technology (ICT) especially the internet and the World Wide Web (WWW) has profoundly changed the perception and way in which information is shared, and services are rendered by both public and private organizations. According to the United Nations E-government Survey 2016, there has been a high increase in the number of countries using E-government to provide online services through one-stop-web-portal platform. The report noted that in 2003, only 45 countries had one-stop-web-platform and only 33 countries could provide online transactions. According to the 2016 Survey, over 90 countries had one or more single entry web portal offering public services online while about 148 countries have advanced web portal that provide some form of online transaction services. Most countries in Europe were among the earliest adopters of E-

government. The Australian Government adopted one-stop-web national portal both at the federal and local levels, ranging from birth certifications to Medicare, taxation, job search, Child support and aged care services, among others (Dwivedi & Lal, 2007). They established Digital Transformation office as a commitment to advancing government commitment to transform services using "technology to make services easier, clear and faster for Australian families and businesses".

Africa continent is said to be lagging behind globally with its EGDI at 0.2882 falling far below the highest European EGDI of 0.7241. This is attributed to the global challenges that face Africa such as food security, climate change and poverty. Many countries in Africa have not realized the benefits of E-government. However, some countries in Africa have been ranked best in adoption of E-government, these includes Mauritius, Tunisia, south Africa, Morocco and Seychelles, rated high due to their commitment in E-government, high level of human capital as well their technological and telecommunication infrastructure. Bwalya (2007) examined factors affecting adoption of E-government in Zambia. The findings revealed that inadequate ICT infrastructure, provision of content in English instead of local languages, poor change management procedures, non-contextualization of E-government practices; contribute much to the delay in appropriate E-government adoption in Zambia.

Kenya is ranked number 119th globally while position 10th in Africa (United Nations E-government Survey 2016). It's E-government strategy was approved in year 2004 and the National ICT policy in year 2006 under the Ministry of Information and Communications (MoICT). Services offered through E-government include online tax claims, online passport applications, online police operations, tax filling, driving licenses renewal, birth registration, among many. Several E-government system projects and initiatives have been undertaken with an aim of enhancing democracy, efficiency and transparency of public administration and services.

Organizational culture is one of the factors that influence the adoption of E-government. A strong organization culture is crucial for organization development, the experience and history of its members help in coping with external adaptation and internal integration enabling the organization to survive turbulent situations (Bwalya, 2007). The implementation of devolution of services by the Government has seen County governments inherit a lot of debt, poor revenue collection and ineffective service delivery mechanisms from the previous councils and thus in order to improve service delivery, most county governments have implemented E-government in order to ensure faster and cheaper services and information to citizens, business partners, employees and other government agencies. This enables the counties to increase citizens participation in order to enrich the development process and the public e-Services which is expected to reduce conflict between the government and the locals who have been complaining of being sidelined by the government in key decision making (Wairiuko, 2014). With the Kenyan government being in two tiers, it has been now almost three years since the adoption of the county government and this need to be evaluated about whether it has been able to improve the quality of services at the local level through the adoption of E-government.

Digital transformation is a paradigm shift throughout the world caused by rapid growth of ICT and many governments just like the private sector have realized the importance of E-government as a tool for responsive governance. Implemented and adopted ICT has potential to transform delivery of services in public institutions. Benefits of E-government adoption are undisputed. It's evident that E-government is an effective driver for economic growth and saves time as well as bringing accountability, effectiveness, and openness in government, but there are many

challenges that hinder the exploration and realization of its opportunities such as ICT infrastructure, organization culture (Al-Sebie and Irani 2005).

There is a high rate of failure of E-government projects, particularly in developing countries, despite the advantages and benefits that E-government technology provides. A report on E-government implementation projects in developing countries indicated that 35% failed, 50% partly failed, and only 15% were successful (Heeks, 2003). Raguseo & Ferro (2011) noted that public administration is lagging behind the private sector in the usage of ICTs for conducting their back-office activities. Most of them have not fully incorporated ICT in automating their activities. According to Raguseo (2011) operational features, new managerial skills, new abilities of defining adequate policies, new capabilities of planning activities to conduct, new aptitudes to increase the citizens' involvement in public activities as well as the availabilities of new ICTs, combined with the organizational changes and the new competences creation is necessary for public administration to overcome organizational internal barriers in order to realize the value of E-government adoption.

According to Lau (2003, November), Budget time horizons, can pose a problem or E-government, most of these projects are multi-year in nature, and thus require commitments to spend resources over a long period, which sometimes is beyond the annual or multi-year budgeting horizon. Such projects represent a commitment to spend future revenues, and governments are understandably reluctant to tie up future spending. Government may not commit to have such spending unless on short term projects. The difficulty of measuring costs and potential benefits for E-government projects makes it hard to develop funding cases for projects and compare alternatives in a budget-setting context. As many countries commit to IT investment, research on change management suggests that potential benefits of IT systems within organization remain unrealized (Huang, 2010). While Neufeld et al. (2007), noted that most IT projects, do not get close to achieving anticipated results. According to Aiman-Smith and Green (2002), the cost of projects in most cases exceeds initial budget due to time overruns leading to project failures. Wood-Harper et al. (2004), declared that studying factors that lead to successful E-government implementation and adoption is crucial. There a need to identify key success conditions, indicators and factors in order to develop an understanding on why and how E-government initiatives should be successfully implemented and adopted.

The study was guided by the following research hypothesis:

H_3 Organization culture has a significant influence on the adoption of E-government in the county government of Kajiado.

Literature Review

Adoption of E-government for service delivery

E-government or digital government refers to the use of ICT, IT and other web-based technologies to improve efficiency and effectiveness of service delivery in the public sector. It's the use of internet and other technological devices by governments to deliver services to the public (Young-Jin and SeangTae, 2007, Bhatnagar, 2004). Digital government or E-government entails computerizing the back and front office using ICT tools as well as modifying organization internal operation processes of the public sector (Liikanen, 2003). It also involves office automation through online services and transactions to improve government services (Huang, 2010). The government is able to become more responsive, transparent and accountable to the public through open government data initiatives as well as reduce bureaucracy. Government is able to increase its efficiency and offer better quality services. Successful implementation and

adoption of E-government benefits all stakeholders such as employees, citizens, NGO, communities as well as businesses.

Adoption of technology has two aspects, adoption at organization level and adoption at individual level (Fichman, 1992). Organization adoption deals with analyzing adoption decisions by large aggregates such as companies, business units, agencies or departments, whereas individual adoption deals with an individual behavioral intention to adopt an innovation or actual adoption behavior (Fichman, 1992). According to Hall and Khan (2003), contributions of new technology innovations in organizational performance can be realized if and when the new technology is widely accepted and adopted. The understanding of organization and individual decisions to adopt technology is essential for technological change management. To successfully implement and adopt E-government for service delivery, the government must have a vision and the system must be accepted and adopted by the intended users (Graafland-Essers & Ettedgui, 2003). Kyobe (2011) found that capacity to "adopt and use ICT" and "exposure" are remarkable determinants of adoption of ICT in South Africa. ICT adoption in the developing nations is influenced by income, availability of computer and internet skills. E-government adoption brings fundamental change in the public-sector structure, its culture and values and ways of conduction business. The radical change is surrounded by human, cultural, organizational, political and technological issues that must be dealt with for successful adoption. It brings about transformation changes to process, structure, culture and individual behavior in the public sector (Abdullah, Rogerson, Fairweather, & Prior, 2006).

E-government adoption has no universal model applicable to all countries and regions. According to Moon (2002) and Layne and Lee (2001) many government around the world adopted E-government solutions ranging from simple website, one-way communication, two-way communication and integrated websites with online transactions. Many scholars such as Lyne and Lee (2001) and Moon (2002) came up with stages of E-government development stages, with a general agreement on essential stages such as publishing, transactional and integration, however the approaches in terms of technological and organizational perspectives seems to differ in the E-government life cycle.

County Organization Culture and Adoption of E-government

Culture refers to values and beliefs of individuals within a group. According to Ein - Dor, Segev, & Orgad (1993), it's the totality of socially transmitted behavior patterns, arts, beliefs, institutions, and all other products of human work and thought characteristic of a community or population. A number of definitions exist but most agree that culture is "holistic, historically determined, socially constructed, soft and difficult to change". Culture creates a distinction between organizations, conveys a sense of identity for its members, facilitates commitments towards organization's goals, enhances the stability of social system, reduces ambiguity and serves as a common mechanism that guides and shapes attitude and behavior of the employees. Culture is based on a group which could be a nation, organization, profession, function area or a team and this can be referred as national culture, organization culture, professional culture and team culture. According to researcher's culture is known to play a unique role in technologies like internet and global systems that provide information and services to the individuals and organization. An individual work behavior and commitment is likely to be influenced by organizational and professional norms.

Organizational culture refers to common values and beliefs shared by individuals within an organization. It's is important for an organization to evaluate the importance of the organization culture and its impact on information system implementation and adoption. Several researchers

have investigated the role of organizational culture on absorptive capacity and information technology success, information technology adoption and diffusion (Grazioli & Jarvenpaa, 2010), information technology implementation (Guilmot & Vas, 2014), information technology infrastructure flexibility and user computer efficacy. Other studies have looked at impact of organizational culture on specific technologies such as knowledge management (Heeks, 2003) and implementation of data warehouses. A study done by Dasgupta and Gupta (2010), the role of culture in internet adoption, found that organizational culture has an impact on individual acceptance and use of Internet technology in a government agency, and therefore should carefully managed for the successful adoption and diffusion of Internet and other technologies.

Denison and Mishra (1995) identified four traits of organizational culture: involvement, consistency, adaptability, and mission. This framework has been used in various empirical study to examine cultural issues in different environments such as organization culture and adaptation on technology in Kenyan universities, organization culture and adoption on internet in India among others. Involvement is the subjective psychological state of users which is practiced in forms of participation through behavior and activities. This enables the members to gain a sense of responsibility because they are involved in organization activities. Denison and Mishra (1995), adds that highly involved people are more productive, more committed and responsible towards organizational interests, and this leads to achievement of organization goals. Low involvement affects the belief and attitude of the user hence difficulties in responding to environmental change. Successful E-government can be achieved through highly committed leaders and employees' participation to achieve integration and collaboration of E-government systems.

Adaptability focuses on the external situations by developing norms and beliefs that support its capacity to respond to the need for change. These external situations could be pressure and demand from global expectations, citizens and other stakeholders for transparent better services and access to information, which forms the basis of E-government to enable access to services and information 24/7 basis. Mission is a cultural factor that provides purpose and meaning to an organization, as well as giving direction while identifying goals that guide an organization. A mission of an organization is established based on the principals of the organization, which in turn influences the progressive development of an organization. Bureaucratic culture refers to an organization's culture that has clear lines of responsibility and authority based on control and power. Wallach (1983), argues that organizations are managed with strong explicit rules, are hierarchical, cautious, solid and procedural, and their people work in a systematic and an organized way in an environment where responsibility and authority are in clear lines.

According to Heeks (2002), E-government research has been criticized for minimal research in the area of culture. Culture is viewed to be probably the most difficult factor to isolate, define and measure and yet has a powerful impact upon the diffusion of information systems (Heeks, 2002; Hossan, 2015). E-government takes radical changes in organization structure, values and culture in all levels of public sector. Employees in the sector are strongly influenced by the culture they live in and understanding how culture has an impact on the adoption process is a vital element for successful adoption of E-government (Al-Busaidy, 2011). This will enable solve emerging political, organizational, technological, cultural and social levels in the organization for successful adoption of modern technology information technology systems.

Theoretical framework

The study was anchored on Technology-Organization-Environment (TOE). For conceptualizing individual end-user acceptance many researchers have used TAM and UTAUT while for

adoption of technology by organization is limited, Oliveira and Martins, 2011). TOE framework has been extensively used to study e-business. It has three components impacting the process of organization's adoption, implementation and use of innovations, namely; technological, organizational and external environmental factors. According to Tornatzky and Fleischer (1990), technology, organization and the external environment are predictors of decision making for technology adoption in organizations (Baker, 2012, Zhu and Kraemer, 2005, Tornatzky and Fleischer, 1990b). According to TOE framework, organization advancement through availability of relevant new technologies (e.g. Internet, technological tools and development processes), organizational structures and resources (organization culture) and the social environment around the organization (such as regulations and economic structures) are fundamental in technological innovation decision-making (Tornatzky and Fleischer, 1990). TOE framework has been validated by Information system researchers in different settings as a technology acceptance model at the organizational level (Borhani, 2016).

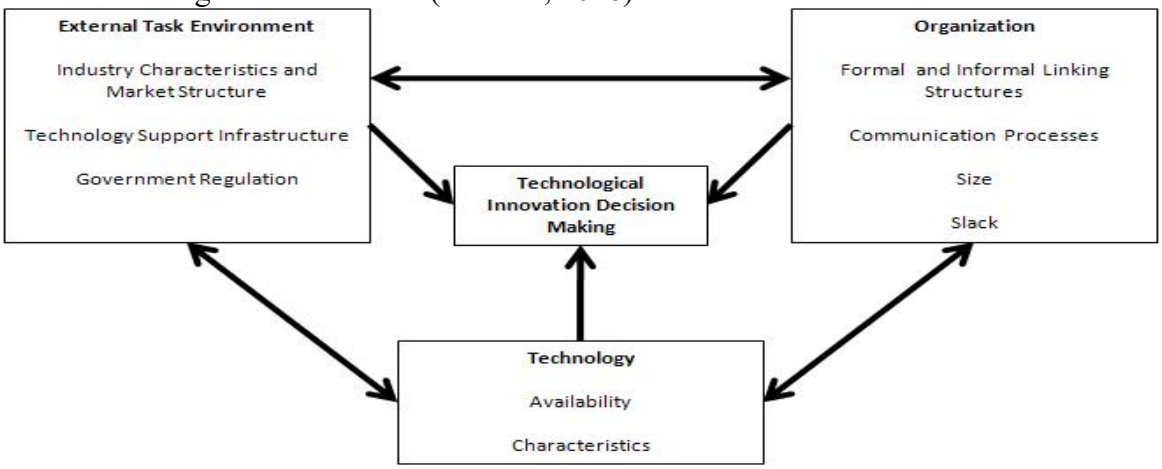

Figure 1: Technology-Organization-Environment Framework (TOE) framework

Conceptual framework

The aim of this study is to investigate the influence of County organizational culture on the adoption of E-government in county government. The relationship between the independent and dependent variables is shown in Figure 1. The relationship between the study variables is shown in Figure 2.

Independent Variable

County Organization culture
- ✓ Shared Mission, vision and goals
- ✓ Adaptability
- ✓ Involvement
- ✓ Bureaucracy
- ✓ Monitoring and evaluation

Dependent Variable

Adoption of E-Government for Service delivery
- ✓ Sharing of data
- ✓ Cost reduction in service delivery
- ✓ Reduced workload for employees
- ✓ Easy storage and retrieval of records
- ✓ Reduced Service delivery through online service delivery
- ✓ Efficient and effective communication

Figure 1: Conceptual Framework

Research Methodology

The study adopted mixed method approach which used pragmatic system of philosophy. According to Johnson & Onwuegbuzie (2004), in a single study the researcher can combine quantitative and qualitative methods, approaches and techniques to make logic inquiry of induction, deduction and abduction. The study also combined a correlational and cross-sectional

descriptive survey research design. This enabled the study to use inferential and descriptive analysis of data for better results. The Target population for this study was employees of Kajiado County government. The total population for this study was in forty-three departments and 2660 employees working in said departments within the devolved ministries.

The sample size for the employees working under the county government of Kajiado in various department under the ten ministries was based on Cochran (2007) formulae. The same is verified in the formula below:

$$n = \frac{Z^2 * p * q}{e^2}$$

Where;

n =refer to the desired sample size when the entire survey population is greater than 10,000.

Z =the standard normal deviate usually set at 1.96 which corresponds to the 95% confidence level.

p=Target population estimated to have a particular characteristic, 50% is normally used because it is the recommended measure if there is lack of reasonable estimate.

q =1.0 – p

e =degree of accuracy desired in this context set at 0.05.

The sample size of 335 employees was obtained by substituting in the formula above as indicated below:

$n=\frac{(1.96)^2(0.5)(0.5)}{(0.05)^2}= 384$

where the above sample size was be adjusted using equation 2:

$nf= \frac{n}{1+\frac{(n-1)}{N}}$

Where: nf= the sample size, n= the sample size in equation 1; and N= is the population size

Given that the population of interest is 2660 (population size N=2660), the corrected sample size was obtained as illustrated mathematically using Krejcie and Morgan model as:

$nf = \frac{n}{1+\frac{(n-1)}{N}}$

n= 384/ [1+ (384/2660)]

n= 335

This study adopted mixed method of sampling, that is, proportional sampling technique, simple random sampling technique, and purposive sampling technique. For this study, a proportional sampling was used to sample of the respondents in each department. From a sample of 335 respondents, one (1) respondent was purposively selected in each department who particularly deals with ICT to provide unique information on how E-government services are carried out in their department. This contributed to 43 respondents who provided information through responding to questions designed in the interview guide. On the other hand, random sampling technique was used to select 292 respondents from the departments; these respondents formed the part of respondent that answered the questions captured through the questionnaire concerning how E-government services are handled.

Table 1: Selected Samples

Ministry of Government	**No. of Department**	**No. of employees per department**	**Samples**
Ministry of Agriculture, Livestock, Fisheries and	4	273	34

Cooperative			
Ministry of Health services, Medical Services and Public Health	2	1045	132
Ministry ICT Gender and Social Services	5	20	3
Ministry of Education, Youths, Sports and Social Services	4	733	93
Ministry of Public Works, Roads and Transport, Housing and Energy	5	76	9
Ministry of Environment, Water and Irrigation	2	77	10
Ministry of Trade, Tourism, Culture & Wildlife	4	48	6
Ministry of Public Services Administration and Citizen Participation and E-government .	3	162	20
Ministry of County Treasury	5	196	24
Ministry of Land, Physical Planning and Natural Resources	7	30	4
Total	**43**	**2660**	**335**

This study used primary data, where data was collected using a structured questionnaire and an interview guide. A pilot testing was conducted using the questionnaire to 35 employees of various departments in a nearby County-Kiambu to test the reliability and validity of the questionnaire. The pilot study was conducted through random sampling. According to Creswell (2013), the pilot test should constitute 10% of the sample, therefore, the pilot test is within the recommendation. The study used both content and constructs validity to ascertain the validity of the instrument. To ensure content validity, the questionnaire was given to experts in the area of project planning and management to give their views and suggestions for improvement of the questionnaire. Construct validity was ensured by reviewing empirical and theoretical literature in order to understand the relevant concept by constructing instruments items based on previous studies. The research instruments in this study were examined by the supervisors and other experts in research methodology. Reliability analysis was also carried out using the Alpha coefficient (Cronbach's alpha, 1951). Higher scores generate more reliable scale. According to Nunnaly (1978), a score of 0.7 is an acceptable reliability coefficient.

Qualitative data was analyzed based on the content matter of the responses. Responses with common themes or patterns were grouped together into coherent categories. Quantitative data was presented in tables and explanation in prose. Data collected was coded and entered into Statistical Packages for Social Scientists (SPSS Version 17.0) and analyzed using descriptive and inferential statistics. Descriptive statistics involved use of absolute and relative (percentages) frequencies, measures of central tendency and dispersion (mean and standard deviation respectively). Inferential statistics such as correlation and regression analysis were used to establish the nature and magnitude of the relationships between the variables and to test the hypothesized relationships. The research hypotheses were tested at 95% level of confidence. Pearson's product moment correlation (r) was derived to show the nature and strength of the relationship. Coefficient of determination (R2) was used to measure the amount of variation in the dependent variable explained by the independent variable.

To obtain the effect of the independent variables on the dependent variable, simple regression analysis was used. To get the effect of human resources capacity on adoption of E-government (model 1) was used. The model was specified as follows:

E-gov= β_{0+} β_1OC+μ……. (3.1)

Where; E-gov= is a composite score for E-government; β_0 =Constant; β_1 = Beta Coefficients (slope); OC= is a composite Score for Organizational Culture; u= error term

Research Findings and Discussions

The study sample size was 335 employees working in various departments in the County Government Kajiado. Out of 335 questionnaires which were distributed, 282 were duly filled and returned. Therefore, the response rate was 83.92%. According to Nulty (2011), a response rate of 75 per cent is adequate for analysis, for making conclusions and making inferences about a population. In addition, Fincham (2010) indicates that a response rate of 60% and above is acceptable for analysis. This implies that the response rate (83.92%) was adequate for analysis, drawing conclusions and reporting.

Demographic Information

The background information consisted of the respondents' age, gender, highest level of education, their level of ICT training and duration in the organization.

Distribution of Respondents' Age and Gender

The study sought to understand the background information of the respondents based on their age and gender. As a result, the respondents we asked to indicate their age as per the given age brackets and also were required to indicate their gender. Data derived was presented in Table 2.

Table 2: Distribution of Respondents by Age and Gender

Category	Frequency	Percent
Age		
18 - 24	18	6.4
25 - 34	126	44.7
35 - 44	84	29.8
45 - 55	42	14.9
55+	12	4.3
Total	**282**	**100.0**
Gender		
Male	174	61.7
Female	108	38.3
Total	**282**	**100.0**

Table 2 shows that a good number 126 (44.7%) of respondents were between 25 and 34 years of age, followed by 84 (29.8%) who were between ages 35 and 44. Ages between 18 to 24 and above 55 years recorded very few respondents of 18 (6.4%) and 12 (4.3%) respectively. The findings indicate that majority of the respondents were between ages 25 and 55 years with the youth aged below 34 years forming majority. According to Venkatesh, et al. (2003) in the UTAUT theory, age of individuals moderates technology adoption, where the young individuals tend to adopt technology more and better than the older people. Most of the staff in the County government of Kajiado were youth (below 34 years), which implies that most of the staff in Kajiado County were adopters of technology. This is contrary to Njoroge, Nyonje and Gakuu (2015) findings that technology was more acceptable among the older people as compared to the younger generations.

Table 2 also shows that 174 (61.7%) of the respondents were male while 108 (38.3%) were female. The findings indicate that majority of the respondents (employees working in Kajiado County government) were male. This showed that there was a relatively skewed distribution in favour of men while the female formed the minority. According to UTAUT theory, gender moderates the adoption of technology. While performance expectancy influences behavioral

intention to adopt a technology among men, effort expectancy influences behavioral intention to adoption a technology among women. Nonetheless, men are considered in the UTAUT theory as better and easier adopters of technology that women. This is in agreement with Njoroge, Nyonje and Gakuu (2015) findings that men were better adopters of biogas technology than women.

Respondents' Highest Level of Education and ICT Training

The study sought to determine the level of education and ICT training of the respondents. As such the respondents were requested to indicate their highest level of education and ICT training based on the stated categories in each case. The data driven was as presented in Table 3.

Table 3: Respondents' Highest Level of Education and ICT Training

Category	Frequency	Percent
Highest level of education		
Post University	42	14.9
University	135	47.9
Higher National Diploma	27	9.6
Diploma	57	20.2
Certificate	21	7.4
Total	**282**	**100.0**
level of ICT training		
Degree	33	11.7
Diploma in ICT	60	21.3
Certificate Proficiency packages	168	59.6
Others (specify)	21	7.4
Total	**282**	**100.0**

Table 3 shows that a good number of the respondents 135 (47.9%) had undergraduate degrees, followed by 57 (20.2%) with diploma certificates, and 42 (14.9%) with post graduate degrees. In addition, 27 (9.6%) had higher National diploma certificates and 21 (7.4%) had other academic certificates. The findings indicate that majority of the employees had undergraduate and post graduate degrees. More educated individuals are considered to be better adopters of technology as compared to the less educated. Differences in personality traits including level of education determine the way individuals behave, think and make decisions regarding adoption of technology. These findings agree with Njoroge, Nyonje and Gakuu (2015) findings that the more educated people are the better they adopt technology. This implies that the staff in the County government of Kajiado were easier adopters of technology as most of them had at least an undergraduate degree.

Table 3 shows that majority of the respondents, 168 (59.6%), had proficiency package certificates, followed by 60 (21.3%) with diploma certificates in ICT and 33 (11.7%) with ICT degrees. In addition, 21 (7.4%) of the respondents had other forms of training on Information and Communication Technology. The findings indicate that majority of the respondents in this study had proficiency package certificates in ICT. As indicated by Davis (1989) in the Technology Acceptance Model, skills and knowledge on perceived usefulness and perceived ease of use, which is influenced by Level of ICT training, influence behavioral intention to adopt or not to adopt technology. This implies that most of the staff working in the County government of Kajiado were adopters of technology.

Respondents' Department of Work and Duration

The study sought to establish the departments in which the respondents were working as well as the duration of time they had been working in their organization's departments. Therefore, the

respondents were requested to indicate their departments as well as the duration of time they had working in their organization as per the categories presented. The data driven was as presented in Table 4.

Table 4: Respondents Department or Work and Duration

Category	Frequency	Per cent
Department of work		
Administration	84	29.8
Procurement	15	5.3
ICT	6	2.1
Finance	45	16.0
HR	3	1.1
Others (Specify)	129	45.7
Total	**282**	**100.0**
Duration in the organization		
Less than 1 year	12	4.3
I year	12	4.3
2 years	63	22.3
3 years	42	14.9
more than 4 years	153	54.3
Total	**282**	**100.0**

Table 4 shows that a good number of the respondents 129 (45.7%) were working in other departments other than the ones indicated in the study, followed by 84 (29.8%) working in administration department, 45 (16.0%) working in the department of finance, 15 (5.3%) working in the procurement department. ICT department recorded very few respondents of 6 (2.1%) and human resource department recorded 3 (1.1%). The findings indicated that less than half of the respondents were working in administration, procurement, information and communication technology, finance and human resource.

Table 4 shows that majority of the respondents 153(54.3%) had worked in their departments for more than 4 years, followed by 63 (22.3%) who had worked for 2 years, 42 (14.9%) who had worked for 3 years, 12 (4.3%) indicated for one year and the same percent indicated for a period less than one year. The findings show that majority of the respondents in this study had been working in the County Government of Kajiado for a period of four years.

Adoption of E-government for Service Delivery

The study sought to obtain the extent of implementation of E-government in the provision of services in various ministries. As such, the respondents were requested to indicate the extent to which the implementation of E-government affected provision of services in their respective ministries. The data driven was as presented in Table 5.

Table 5: Adoption of E-government for Service Delivery

	Frequency	Percent
Very little extent	57	20.2
little extent	18	6.4
Moderate	63	22.3
Great extent	96	34.0
Very great extent	48	17.0
Total	**282**	**100.0**

Table 5 shows that a good number of the respondents 96 (34%) indicated that implementation of E-government affected provision of services in their ministries to great extent, followed 57 (20.2%) with very little extent, 48 (17%) with very great extent and 18 (6.4%) with little extent. The findings show that the implementation of E-government affected provision of services in various ministries to great extent and very great extent.

Influence of Adoption of E-government for Service Delivery

The study sought to determine influence of Adoption of E-government on Service Delivery in the County government of Kajiado. As such, the respondents were requested to indicate the influence of E-government adoption on service delivery in the County. Table 6 presents the results.

Table 6: Influence of Adoption of E-government for Service Delivery

	Mean	Std. Deviation
E-government has reduced cost of delivering services	3.776	1.104
Major function we do in our ministry are done electronically	3.712	1.079
This ministry I work in has an electronic payroll system that's pays salaries and keeps records for tax information	4.074	1.134
The county government has established an e-learning platform that enable staff access information in regards to training and learning opportunities	2.914	1.262
Management of records and sharing of information has improved immensely since implementation of E-government systems	3.648	1.100
Time taken to process any transaction has been reduced as the government has implemented E-government in service delivery	3.585	1.116
Am able to store and retrieve records when delivering services	3.819	1.011
Through E-government suppliers can bid for various government tenders electronically	3.744	1.140
There is a website developed that publishes information and gives the public access to different services	3.329	1.334
Since introduction of E-government , the nature of my work has gradually moved from handling a lot of paper to being paperless	3.606	1.152
Electronic communication has improved service delivery	3.946	0.951
Composite	**3.650**	**1.125**

Table 6 shows that the staffs agreed with a mean of 4.074 and a standard deviation of 1.134 that their ministries have electronic payroll system that pays salaries and keeps records for tax information. This implies that the County government of Kajiado had adopted electronic payroll system in payment of salaries and record keeping. They also agreed with a mean of 3.946 and a standard deviation of 0.951 that electronic communication has improved service delivery. This implies that the County government of Kajiado had adopted electronic communication, which is an important component of e-government. These findings agree with Liikanen (2003) argument that E-government entails computerizing the back and front office using ICT tools as well as modifying organization internal operation processes of the public sector. Moreover, the respondents that they were able to store and retrieve records when delivering services as shown by a mean of 3.819 and a standard deviation of 1.011. The adoption of electronic record keeping enabled easier storage and retrieval of records thus improving service delivery in the County government of Kajiado.

With a mean of 3.776 and a standard deviation of 1.104 the respondents agreed that E-government has reduced cost of delivering services. The respondents further agreed with a mean of 3.744 and a standard deviation of 1.140 that through E-government suppliers can bid for various government tenders electronically. This implies that the adoption of e-government had led to an improvement in the tendering process and in the reduction of cost in service delivery. Further, the respondents agreed that major function in their ministries were done electronically as shown by a mean of 3.712 and a standard deviation of 1.079. With a mean of 3.648 and a standard deviation of 1.100 the respondents agreed that management of records and sharing of information has improved immensely since implementation of E-government systems. Besides enabling easier storage and retrieval of information, electronic record keeping enabled easier sharing of information in the County government of Kajiado .

They also agreed that since the introduction of E-government, the nature of their work has gradually moved from handling a lot of paper to being paperless as shown by a mean of 3.606 and a standard deviation of 1.152. This implies that the adoption of E-government led to a reduction in the utilization of paper. These findings are in line with Huang (2010) argument that E-government involves office automation through online services and transactions to improve government services.

Further, they agreed that time taken to process any transaction has been reduced as the government has implemented E-government in service delivery as shown by a mean of 3.585 and a standard deviation of 1.116. This implies that the adoption of e-government in the County government of Kajiado led to timely delivery of services. These findings concur with Huang (2010) argument that by use of E-government, the government is able to increase its efficiency and offer better quality services.

However, they moderately agreed that there was a website developed that published information and gave the public access to different services as shown by a mean of 3.329 and a standard deviation of 1.334. These findings agree with Layne and Lee (2001) argument that many governments around the world adopted E-government solutions ranging from simple website, one-way communication, two-way communication and integrated websites with online transactions. Finally, the moderately agreed that the County government has established an e-learning platform that enable staff access information with regards to training and learning opportunities as shown by a mean of 2.914 and a standard deviation of 1.262. This implies that the establishment of e-learning platform that enable staff access information with regards to training and learning opportunities was not as effective as it should be.

E-government involves the use of ICT, IT and other web-based technologies to improve efficiency and effectiveness of service delivery in the public sector. The study found that ministries in the County Government of Kajiado have electronic payroll system that pay salaries and keeps records for tax information. The study found that the management of records and sharing of information has improved immensely since implementation of e-government systems. In addition, the study found that electronic communication has improved service delivery. These findings agree with Liikanen (2003) argument that e-government entails computerizing the back and front office using ICT tools as well as modifying organization internal operation processes of the public sector.

Moreover, the study found that most of the staff were able to store and retrieve records when delivering services. The study also found that since the introduction of e-government, the nature of their work has gradually moved from handling a lot of paper to being paperless. These findings are in line with Huang (2010) argument that e-government involves office automation

through online services and transactions to improve government services. In addition e-government has reduced cost of delivering services and through e-government suppliers can bid for various government tenders electronically.

The study found that time taken to process any transaction has been reduced as the government has implemented e-government in service delivery. These findings concur with Huang (2010) argument that by use of e-government, the government is able to increase its efficiency and offer better quality services. The study established that there is a website developed that publishes information and gives the public access to different services, although it is not very effective. These findings agree with Layne and Lee (2001) argument that many governments around the world adopted E-government solutions ranging from simple website, one-way communication, two way communication and integrated websites with online transactions. In addition, the County government has established an e-learning platform that enables staff access information with regards to training and learning opportunities.

County Organization Culture

The third objective of this study was to assess the influence of organization culture on the adoption of E-government in the County Government of Kajiado.

Extent of organization culture influence on e-Government adoption

The respondents were asked to indicate the extent in which on organization culture influenced e-Government adoption in the county government. As shown in Table 7, 53.2% of the respondents indicated that organization culture influenced the e-government adoption in the county government to a great extent, 22.3% indicated to a very great extent, 18.1% indicated to a low extent, 4.3% indicated to a very low extent, This shows that organizational culture influences adoption of e-government in County Government of Kajiado to a great extent.

Table 7: County Organization Culture

	Frequency	**Percent**
Very low	12	4.3
Low	51	18.1
No extent	6	2.1
Great	150	53.2
Very Great	63	22.3
Total	**282**	**100.0**

Culture in Supporting Adoption and implementation of E-governance

The respondents were asked to indicate whether cultural supported implementation and adoption of e-government. According to the results, as shown in Table 8, 76.6% of the indicated that culture in their organization supported the implementation and adoption of e-government while 23.4% indicated that culture did not support the adoption of e-government. This implies that the culture supported the implementation of e-governance in the County government of Kajiado.

Table 8: Effect of Culture on Adoption and Implementation of E-governance

	Frequency	**Percent**
Yes	216	76.6
No	66	23.4
Total	**282**	**100.0**

Influence of Organization Culture on Adoption of e-government

The respondents were asked to indicate their level of agreement on various statements on the aspects of organization culture on adoption of e-government. A shown in Table 9, the respondents agreed with a mean of 4.308 and a standard deviation of 0.852 that successful E-

government could be achieved through highly committed leaders and employees' participation to achieve integration and collaboration of E-government systems. They also agreed that clear regulations and hierarchies helped an organization and its members to gain better coordination in accomplishing their tasks as shown by a mean of 4.127 and a standard deviation of 0.949. In addition, they agreed that organizational culture has an impact on individual acceptance and use of Internet technology in a government agency as shown by a mean of 4.010 and a standard deviation of 0.906. They also agreed that organizations are managed with strong explicit rules, are hierarchical, cautious, solid and procedural, and their people work in a systematic and an organized way in an environment where responsibility and authority are in clear lines as shown by a mean of 3.978 and a standard deviation of 1.022.

Moreover, with a mean of 3.936 and a standard deviation of 0.999 they agreed that organization culture was known to play a unique role in technologies like internet and global systems that provided information and services to the individuals and organizations. Further, they agreed that organizational culture has an impact on individual acceptance as well as on the use of internet technology in County government, for successful adoption and delivery of services as shown by a mean of 3.893 and a standard deviation of 0.985.

With a mean of 3.840 and a standard deviation of 0.983 they agreed that in E-government adoption, the presence of bureaucratic culture would benefit the process of the adoption because of clear and explicit regulations and hierarchies support supervision so as to reduce the chance of errors, disobedience, and negligent behavior among them. Moreover, they agreed that employees in the County government were strongly influenced by the culture and understanding how culture has an impact on the adoption process was a vital element for successful implementation and adoption of E-government as shown by a mean of 3.755 and a standard deviation of 1.109.

Table 9: Aspects of Organization Culture and Adoption of e-government

	Mean	Std. Deviation
Successful e-government can be achieved through highly committed leaders and employees' participation to achieve integration and collaboration of e-government systems	4.308	.852
Organization culture is known to play a unique role in technologies like internet and global systems that provide information and services to the individuals and organization	3.936	.999
Organizational culture has an impact on individual acceptance and use of Internet technology in a government agency	4.010	.906
Organizations are managed with strong explicit rules, are hierarchical, cautious, solid and procedural, and their people work in a systematic and an organized way in an environment where responsibility and authority are in clear lines	3.978	1.022
Employees in the county government are strongly influenced by the culture and understanding how culture has an impact on the adoption process is a vital element for successful implementation and adoption of e-government	3.755	1.109
Clear regulations and hierarchies help an organization and its members gain better coordination in accomplishing their tasks	4.127	.949

In E-government adoption, the presence of bureaucratic culture would benefit the process of the adoption because clear and explicit regulations and hierarchies support supervision to reduce the chance of errors, disobedience, and negligent behavior among	3.840	.983
Organizational culture has an impact on individual acceptance and use of Internet technology in county government for successful adoption and delivery of services.	3.893	.985

Testing Hypotheses

Correlation Analysis for Organizational Culture and adoption of E-government

Correlation analysis was used to examine the existence of an association between organizational culture and adoption of e-government in the County government of Kajiado. A shown in Table 10 the results show that there is an association between organizational culture and adoption of e-government in the County government of Kajiado (r=0.562, p-value=0.000).

Table 10: Correlation Coefficients

		Adoption of e-government for service delivery	**Organizational culture**
Adoption of e-government for service delivery	Pearson Correlation	1	.562**
	Sig. (2-tailed)		.000
	N	282	282
County Organizational culture	Pearson Correlation	.562**	1
	Sig. (2-tailed)	.000	
	N	282	282

**. Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis for Organizational Culture and Adoption of E-government

The r-squared for the relationship organizational culture and adoption of e-government was 0.313, implying that the County organizational culture could explain 31.3% of the adoption of E-government in the County Government of Kajiado.

Table 11: Model Summary for Organizational Culture and Adoption of E-government

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.562[a]	.316	.313	.58557

As shown in Table 11, the significance level (0.05) was greater than the p-value (0.000) and the F-calculated (129.289) was greater than the F-critical (3.8415). This implies that the regression model could be used for predicting the influence organizational culture on the adoption of E-government in Kajiado County Government.

Table 12: ANOVA for Organizational Culture and Adoption of E-government

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	44.332	1	44.332	129.289	.000[b]
	Residual	96.009	280	.343		
	Total	140.341	281			

The results in Table 12 indicated that County organizational culture has a significant influence on the adoption of E-government of Kajiado as shown by regression coefficient (0.568) and a p-value (0.000). Therefore, we can accept the alternative hypotheses indicating that "organization culture has a significant influence on the adoption of e-government in the county government of Kajiado."

Table 13: Coefficients for Organizational Culture

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.530	.192		7.982	.000
	County Organizational culture	.568	.050	.562	11.371	.000

The key informants were asked to indicate how organization culture affects e-Government adoption implementation in the County. The study found that there was ICT adoption resistance due to people being used to manual process. Some key informants felt that the employees are always willing to adopt the new system, though some people feel they don't want to be monitored. Other organizational culture related challenges include lack of forums to improve adoption, lack of motivation and poor reward system, lack of management support and lack of technical support.

Conclusions and Recommendations

The objective of the study was to assess the influence of organization culture on the adoption of E-government in the County Government of Kajiado. The inferential statistics showed that organization culture has a significant influence on the adoption of E-government in the County Government of Kajiado. Therefore, we can conclude that organization culture has a significant influence on the adoption of E-government in the County Government of Kajiado.

The study found that there was resistance to change in the adoption of e-government. Therefore, the study recommends that the County government of Kajiado should make use of change management practices such as employee involvement in decision making and provision of on-job training. In addition, the County government top management should show support for the use of e-government and show leadership on the same.

Suggestions for Further Research

The study was delimited to Kajiado County, which is one of the counties in Kenya. All county governments in Kenya are expected to use E-government. Different counties in Kenya have different experiences in the adoption of E-government due to differences in resources, community cultures, and literacy levels among other factors. Therefore, similar studies should be conducted in other county governments of Kenya on the influence of human resource capacity on the adoption of E-government.

The study was limited organizational, which explains 31.3% of the adoption of E-government. Therefore, further studies should be conducted on other factors influencing adoption of E-government in County governments of Kenya. The government of Kenya has developed various policies regarding the adoption of E-government. These policies include ICT policy. Therefore, further studies should be conducted on the influence of government policies on the adoption of adoption of E-government in County governments of Kenya. The study was also carried out in one County. More counties can be included in a study for bench marking and comparison.

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