



## **INFLUENCE OF E-GOVERNANCE STRATEGY ON SERVICE DELIVERY IN DEVOLVED UNITS: A CASE STUDY OF KISII COUNTY, KENYA**

<sup>1\*</sup> **Andrew Onserio**  
andyonserio@gmail.com

<sup>2\*\*</sup> **Professor Willy Muturi**  
wmuturi@ihrd.jkuat.ac.ke

<sup>1,2</sup> *Jomo Kenyatta University of Agriculture and Technology*

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**Abstract:** *E-Government is a massive automated project that uses Information and Communication Technologies (ICTs) to promote more efficient and effective of government, facilitate more accessible government services, and make government more accountable to citizens. In Kenya, e-government was introduced to make service delivery effective. However, statistics indicate that service especially in the devolved units that were instituted by the new Constitution of 2010 is poor. Kisii County has ranked poorly in service delivery too. The present study therefore sought to link e-governance strategy to service delivery in Kisii County. The main objective of this study was therefore to assess the effect of e-government strategy on service delivery in devolved units using Kisii County as a case study. Results show e-procurement strategy has a positive significant influence on service delivery in Kisii County; e-tax has an insignificant effect on service; e-health has a positive significant influence on service delivery, and e-human resource management has a positive significant effect on service delivery in Kisii County. It is concluded that e-procurement strategy is important in improving service delivery in Kisii County; use of electronic means in tax matters does not improve service delivery in Kisii County; service delivery is highly dependent on making health systems electronic, and; e-health is an important positive and significant predictor of service delivery in Kisii County. It is recommended that Kisii County emphasizes the use of e-procurement in its quest to improve service delivery; the County management increase the use of electronic means in delivery of health services, and management improves the use of electronic means in human resource management in its effort to improve service delivery. The findings of the study may benefit policy makers in new policy formulation, investors on how to partner with the County in e-government decisions and future researchers in the area of e-government studies for theory formulation.*

**Keywords:** *Devolved Units, E-procurement, Service delivery, E-Government Strategy*

### **Introduction**

E-government strategy is an important aspect for developing countries such as Kenya. As noted by Waema (2012), the government of Kenya has recognized e-government as key driver to the provision of effective and accessible services to citizens, business organizations and public agencies. For instance, the Kenya Vision 2030 recognizes ICT as a key pillar to development and success of government service provision. As a result of this, commendable efforts have been made on e-applications, capacity building and infrastructural growth by government agencies. Moreover, the foundation for e-government legal framework for devolved units is premised in the new constitution of Kenya of 2010, which rebuilt the nation's political and managerial structure

by devolving a great deal of power to the new county government entities, and which sets out some core principles of administration.

According to Mungai (2017), the government of Kenya started to implement e-government strategy with intentions of achieving an effective and operational government. The first application introduced was the Integrated Personnel Payroll Data (IPPD), which is meant to cater for payroll of government employees. Later, the Integrated Financial Management Information System (IFMIS) was introduced to take care of financial aspects of government and governance. Before IFMIS and IPPD were acquired the function of data processing and payroll processing was done at a central place at the department of statistics within the ministry of finance. Progressively, other e-government applications have been initiated such as Human Resource Information System, Government e-tax, Land Information Analysis System (LIAS), Education Management Information System (EMIS), Health Information System (HIS) and Community Information System (CIS). These applications have replaced the traditional way of interaction between citizens, businesses, employees and government. The emergence of such systems was meant to bring government services closer to its citizenry in an effective and efficient way. However, the effect of these systems on service delivery has not been empirically investigated since statistics indicate poor service delivery in a number of government institutions.

A number of empirical studies have been conducted on e-governance. In the global focus, most governments started their e-government initiatives with a focus on providing information and services to the citizens while service delivery platforms remained separate and parallel across various government agencies such as those in the United States of America and in Europe (Oakland, 2003). In this model, service delivery was built around individual agency functions, structures, information, systems and capabilities. With the private sector leading the way, advances in accessibility and a greater use of technology have allowed an expansion of innovative ICT solutions. Based on this model, citizens and businesses around the world are increasingly demanding that their governments adopt the system so as to enhance service delivery in governance.

France and Lemuria (2008) conducted a study on e-government in America and reported that citizens prefer those online services that do not expose them too much, by requesting too much of their personal information. This was evidenced by two parallel surveys done in America on an online search for books from public libraries and declaration by police department which required people to disclose a great deal of private information. The two surveys recorded distinct results where online search for books recorded high preference since in book searching, one is not required to reveal much of their personal data as opposed to police department request of personal details like names, resident location and social security details. A study by Glover *et al.* (2010) in Pakistan established that the citizens in most cases are willing to embrace any online service as long as their privacy and security of their personal information is guaranteed.

Locally, Mungai (2017) conducted a study on e-government strategy implementation and performance of the public sector in Kenya. The study findings were that there is a significant relationship between e-government performance and ICT infrastructure. The study recommended improvement of infrastructure in government institutions in order to improve performance of the public sector in Kenya. In a similar study, Muraya (2015) conducted a study on factors affecting successful adoption of e-government in Kenya's public sector. The study concluded that policy, security and social factors affect the successful adoption of e-government. The study recommended that the government should enhance internet connectivity to enhance easy e-government adoption and service delivery. Moreover, the existing infrastructure should be regularly maintained to enhance availability and accessibility. The study also recommends development and regular review of existing ICT policies, standards and regulations to enable the government keep up with the pace of the requirements of e-

government adoption. Elsewhere, Mungai (2009) carried out a study on the challenges facing e-government projects in Kenya. The study established that information sharing policy-related barriers to advancement of the e-government project include: legalistic obstruction to the flow of information; unauthorized access by a section of the employees; prohibited access by members of the general public; fear of breach of confidentiality; and lack of innovativeness in secure information-sharing within the Government agencies. Yator (2014) in a study on the role of ICT on services delivery in Kenya reported that service delivery is still poor in many government departments in Kenya, and especially in the devolved units.

According to the Kenya National Bureau of Statistics (KNBS), Kisii County is one of the poorest county in service delivery in Kenya. The Auditor General of Kenya has also raised several issues regarding service delivery in the county. A study by Yator (2014) reports that most counties in Kenya have poor service delivery because they have not embraced ICT. Even though Kisii County has embraced ICT in service delivery in such matters as procurement, healthcare and taxation, their influence has not been studied empirically. This study therefore sought to investigate the influence of e-government strategy on service delivery in Kisii County.

### ***Statement of the Problem***

The focus on service delivery is becoming intertwined with an emphasis on achieving cost savings and enhancing efficiency in service delivery. The role of ICT in public service delivery has accordingly being revisited to enable effective inter-organizational linkages and consolidation of government systems through e-government services. Initially the political and managerial focus was on developing e-services within each public institution, with limited consideration being given to cross-organizational coherence, the focus today has clearly shifted towards coordinated services offering one-stop shops to citizens and businesses. Now citizens and businesses around the world are increasingly demanding that their governments follow suit. While e-government has resulted in efficiency gains in some instances, much of the research reports that cost savings have been sporadic, uneven and often overshadowed by both upfront and escalating investments. Furthermore, studies have indicated that service provision among several government agencies is still poor. Moreover, no specific studies have addressed the effect of e-government strategy on service provision in devolved units. Therefore, this study therefore assessed the effect of e-government strategy on service delivery in devolved units using Kisii County as a case in study.

### ***Objectives of the Study***

The specific objectives were:

- i. To establish the effect of e-procurement strategy on service delivery in Kisii County;
- ii. To analyze the role of e-tax strategy on service delivery in Kisii County;
- iii. To evaluate the effect of e-health on service delivery in Kisii County; and,
- iv. To assess the effect of e-human resource management on service delivery in Kisii County.

### **Empirical Literature Review**

#### ***E-procurement Strategy and Service Delivery***

According to France and Lemuria (2008) who conducted a study on e-government in America, citizens prefer those online services that do not expose them too much, by requesting too much of their personal information especially on e-procurement practice. This was evidenced by two parallel surveys done in America on online

procurement of books for public libraries and declaration by police department which required people to disclose a great deal of private information. The two surveys recorded distinct results where online procurement recorded high preference since one is not required to reveal much of their personal data as opposed to police department request of personal details like names, resident location, social security details etc. Therefore, these two surveys display a clear indication of people valuing their personal information and thus people would have reservations on systems that request much of their private information. Governments need to work hard to instill trust and security that are much needed in E-procurement initiatives, and therefore, a country has to have an institution based trust from independent institutions like judiciary which should have sound judicial system with necessary powers to be used for arbitration in case of infringement of E-government user rights

Yator (2014) conducted a study on the role of information communication technology on service delivery at the ministry of interior and coordination of national government using the immigration service as a case study. This research study adopted a descriptive approach on the Impact of Information Communication Technology (ICT) on Service delivery and especially e-procurement in public sector in Kenya; a case of Immigration service. The study revealed that lack of an enabling environment to the staff affect service delivery at immigration services in Kenya to a large extent; that innovativeness affects service delivery to a large extent; that inter-organizational systems availability affects service to a large extent; while channel relationships to access immigration service affects their efficiency to a large extent. The study concluded that customer quality, variability in demand, customer service management, forecast accuracy, client loyalty in services offered are lacking in the immigration services to a large extent. The study did not cover the devolved units and focused only on the impact of ICT on service delivery.

### ***E-tax and Service Delivery***

A study by Glover *et al.*, (2010) in Pakistan established that the citizens in most cases are willing to embrace any online service as long as their privacy and security of their personal information is guaranteed. The study further established that citizen's disposition to trust worthy aspects of government affects positively E-tax adoption. Citizens seem to trust and have regard to those aspects of government that are capable to provide secure services. Citizen confidence in the ability of an agency to provide online services is imperative for the widespread adoption of e-government initiatives and thus citizen's trust on any government agency has a strong impact on the adoption of a technology. Further, Glover *et al.*, (2010), suggest that before endorsing E-government initiatives, citizens must believe government agencies possess the astuteness and technical resources necessary to implement and secure these systems. Candid, non-fraudulent interaction with E-government service providers will enhance citizen trust and acceptance of E-government services. On the contrary, unfulfilled promises and dishonesty from government officials and employees will decrease trust and increase opposition to these initiatives.

According to Nyokabi (2012), who studied the role of ICT in empowering the local community in Kenya in taxation issues, multinationals and other firms came to the fore and viewed ICT as a tool for delivering economic growth through participatory development in Kenya. To date, many are optimistic that ICT has a role to play in national development and that there is no way a country can survive the global era without this digital platform. The study therefore recommended that governments accelerate the adoption of ICT in tax purposes.

### ***E-health Strategy and Service Delivery***

Joseph (2002) who studied the role of ICT in healthcare provision in Australia views ICT contribution as involving ICT growth and ICT diffusion where the former implies contribution in output, employment and export-earning, resulting from the production of ICT-related goods and services that are limited to just one segment of the economy. The latter is ICT induced growth through enhanced productivity, competitiveness, growth and human welfare resulting from the use of this technology by different sectors of the economy and society. Conversely, Sein and Harindranath (2007) assert that the nature of the link between ICT and development remains unclear due to lack of clarity on how ICT is conceptualized.

Aminuzzaman (2008) in a study on governance of local communities found out that some invisible but serious issues characterize the quality and process of participation in project identification and governance of the rural local governments in India. Most critical ones included continued centralized control over the community projects maintained through the administration and the limited resources at its disposal; the critical and often hidden role of the Members of Parliament and other political stakeholders in development planning and management; and lack of effective institutional mechanism which gives the poor and marginalized to take part in the development project planning, supervision and or implementation. The study found out that these factors have a direct impact on the level and quality of local level accountability and popular participation of the common people into the affairs of the development project. Aminuzzaman (2008) also observed that women and marginalized are excluded from major decision-making arenas in the rural power play and privileged distribution. This study did not also give the ICT role to community participation.

Another study on community participation on development projects identification was conducted by Khan (2009) in Nigeria. This study revealed that a community's participation in development projects through local government is still a misnomer. The study found out that the participation of the poor and the marginalized in rural development projects identification has not increased significantly. There was a general assumption that the interest of the poor and the disadvantaged cannot be safeguarded in the exploitive social structure unless it is protected by legislation. In this context, the study revealed that despite the oversupply of legislations to protect the rights of the underprivileged, the rural elites have been consolidating their strong repressive influence on local development interventions. Legal coverage, therefore, were not provide any meaningful role in integrating local people into development project cycle. The study did not consider the impact of ICT in participatory community development.

Mansuri and Rao (2004) carried out a study on the role of communities in project cycle in India. The study which was prompted by mass failures of community projects in India used the census design. According to the findings, the cornerstone of community based initiatives is the active involvement of members of a defined community in a least some aspects of project design and implementation. The study concluded that although participation occurs at many levels, a key objective is the incorporation of local knowledge into the project's decision making process. The Mansuri and Rao (2004) study was carried out in a large area and used a census design. Furthermore, it did not cover any aspect of ICT in community participation which the present study seeks to fill.

### ***E-Human Resource Management Strategy and Service Delivery***

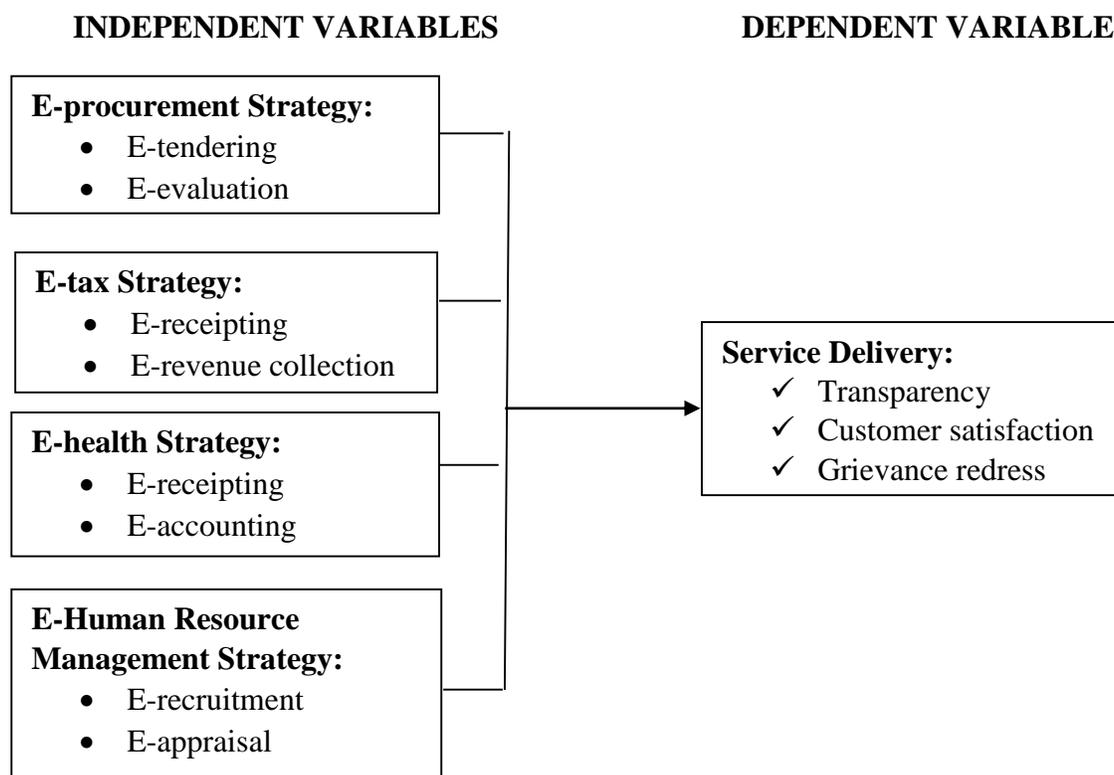
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**Conceptual Framework**

The conceptual framework that guides the present study is shown in Figure 1.



**Fig. 1: Conceptual Framework**

The independent variables of the study are the e-government strategy that will be operationalized by e-procurement, e-tax and e-health sub-strategies. The dependent variable is the effective service delivery which will be measured by transparency in operations, customer satisfaction and grievance redress. The conceptual framework above shows how the independent variable of e-government is hypothesized to be influencing service delivery. The figure shows that the three sub-variables of e-procurement, e-tax and e-health are likely to influence service delivery as shown in previous empirical research.

**Research Gaps**

The review of literature in the preceding section was meant to elicit the research gap. The review was on the research dependent variables of e-governance. Generally, from the review, is evident that there are minimal research studies that have been conducted on the effect of e-governance strategy on service provision in devolved units. The review shows that most of the studies have been general and not specific. Moreover, some of the studies have been conducted in developed countries which are at a different level of development unlike Kenya. Additionally, no study has focused on the three strategies of e-government.

**RESEARCH METHODOLOGY**

Correlation research design was employed for the study. The study’s target population was the 36 ICT Managers and 600 members of the public who averagely seek services in the County daily. Stratified random sampling was used to select 96 respondents for the study. Both primary data collected using questionnaires and secondary data collected from statistical abstracts was used for the study. Cronbach’s Alpha and Content Validity Index (CVI) was used to establish the reliability and validity of the research instruments respectively. Descriptive statistics such as the mean and standard deviation and inferential statistics using Pearson correlation and multiple regression were used to analyze data. The analysed data was presented in tables and figures.

**RESEARCH FINDINGS AND DISCUSSION**

*Extent of E-procurement Strategy*

The first objective of the study was to establish the effect of e-procurement strategy on service delivery in Kisii County. Before establishing this, it was necessary that the extent of e-procurement use by the respondents be established. In this regard, the respondents were asked to indicate the option which best described their assessment of the level of ICT use in procurement. using a Likert scale with a scale of 1 for Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree and 5 Strongly Agree. The results and analysis are shown in table 1 below.

**Table 1 Extent of ICT use in Procurement**

<b>Factor</b>	(1)	(2)	(3)	(4)	(5)	$\Sigma fi$	$\Sigma wif_i$	$\frac{\Sigma wif_i}{\Sigma fi}$
Tender advertisement is done online	71	54	39	24	2	190	402	2.1
Tender evaluation is clearly shown in ICT tools	92	44	33	14	7	190	370	1.9
Tender allocation is transparently done online	132	54	4	0	0	190	252	1.3
Payment for tenders done is done online	103	55	13	10	9	190	337	1.8
Grievances address on tendering process is done using an ICT platform	107	60	11	6	6	190	314	1.7
All goods and services are procured using the ICT platform	108	53	19	10	0	190	311	1.6
<b>Average</b>								<b>1.7</b>

Results in table 1 shows that generally, all the measures for the extent of use of ICT in procurement received weighted average means of about or below 2.0 indicating that the respondents generally disagreed that the ICT is used in procurement. These results were supported by the average weighted mean of 1.7. This was an indication that the use of ICT in project identification in the area was still very low. These findings are in tandem with what Ali *et al.*, (2013), Joseph (2014) and Nyokabi (2015) found out that use of electronic means in procurement, as a strategy in the developing countries was still very low.

**Extent of E-Taxation Strategy**

The second objective of the study was to analyse the effect of e-taxation strategy in service delivery in Kisii County. In this regard, the respondents were asked to tick the option which best described their assessment of the level of ICT use in taxation in Kisii County Government in a Likert scale with a scale of 1 for Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree and 5 Strongly Agree. The results and analysis are shown in table 2 below.

**Table 2 Extent of ICT use in Taxation**

Factor	(1)	(2)	(3)	(4)	(5)	$\Sigma fi$	$\Sigma wif_i$	$\Sigma wif_i /$
All revenue is collected by using ICT tools	81	44	49	14	2	190	382	2.0
Revenue receipting is done electronically	87	49	43	10	1	190	359	1.9
Revenue is accounted for electronically	100	67	13	10	0	190	313	1.6
Residents are trained on payment of taxes using ICT tools	97	60	10	14	9	190	348	1.8
Provision of Feedback on e-tax is fast	102	65	16	3	4	190	312	1.6

The results in table 2 above indicate that the extent to which ICT is used in taxation and revenue issues in Kisii County is very low. This is shown by the weighted average means of 2.0 and below which indicate that the respondents generally disagreed that ICT is used during the process of community project implementation. Studies by Joseph (2013) and Nyokabi (2015) also found out that the use of ICT in taxation issues was still low.

**Extent of E-Health Strategy**

In seeking to answer the third objective which was to evaluate the effect of e-health strategy on service delivery in Kisii County, the respondents were asked to indicate the option that best described how effective the use of ICT in e-health. The results were analysed using the weighted average method and the results are shown in table 3 below.

**Table 3 Extent of E-health**

Factor	(1)	(2)	(3)	(4)	(5)	$\Sigma fi$	$\Sigma wif_i$	$\Sigma wif_i /$
All processes in the hospitals are automated	34	46	49	20	2	190	382	2.0

Diagnosis of diseases is done electronically	87	49	43	10	1	190	359	1.9
Medicine dispensation is sometimes done electronically	100	67	13	10	0	190	313	1.6
All systems in the county government hospitals are inter-linked	97	60	10	14	9	190	348	1.8
There is a clear e-health policy in the County	81	65	22	13	9	190	374	2.0

Information in Table 3 above shows that the extent of application of ICT in health provision in the County is still low. This is shown by the weighted average of less than 2.0 for each of the measures of e-health. Among the measures of e-health that were used, medicine dispensation by electronic means received the lowest rating with a weighted mean of 1.6 indicating that the respondents disagreed that electronic means were used to dispense medicines in the hospitals.

**Extent of E-Human Resource Management**

In seeking to achieve the fourth objective which was to assess the effect of e-human resource management use in the County, the respondents were asked to indicate the option that best described how effective the use of ICT in human resource programmes. The results were analysed using the weighted average method and the results are shown in table 4 below.

**Table 4 Extent of E-HRM**

Factor	(1)	(2)	(3)	(4)	(5)	$\Sigma fi$	$\Sigma wif_i$	$\Sigma wif_i/\Sigma fi$
All job advertisements are done through electronic means	42	47	53	21	27	190	514	2.7
Job descriptions are posted electronically	51	45	21	40	33	190	529	2.7
Human resource trainings are clearly indicated online	87	53	24	23	3	190	372	2.0
There is a clear policy on employee tracking electronically	56	60	30	23	21	190	463	2.4
There is a clear e-human resource management policy in the County	72	61	22	33	2	190	402	2.1

The results in table 4 above indicates that the respondents felt that ICT use in HRM was moderately effective in the County. This was evidenced by the weighted average mean of between 2.0 and 2.7.

**Regression Analysis of the Study Variables**

The main objective of this study was to assess the effect of e-government strategy on service delivery in devolved units using Kisii County as a case study. The specific objectives of this study were: to establish the effect of e-procurement strategy on service delivery in Kisii County; to analyze the role of e-tax strategy on service delivery in Kisii County; to evaluate the effect of e-health on service delivery in Kisii County; and, to assess the effect of e-human resource management on service delivery in Kisii County. To answer the research

questions, a regression analysis was run with the following model to establish the relationship between variables:

$$SERV = \beta_0 + \beta_1 PROC + \beta_2 TAX + \beta_3 HEAL + \beta_4 HRM + \varepsilon \dots \quad (3.1)$$

Where: *SERV* is service delivery,

*PROC* represents the e-procurement strategy;

*TAX* represents e-tax strategy, and;

*HEAL* represents the e-health strategy;

*HRM* represents the e-human resource management strategy;

$\beta_0$  is the constant term  $\beta_1, \beta_2, \beta_3$  and  $\beta_4$  are the coefficients for e-procurement strategy, e-tax strategy, e-health strategy and e-human resource management strategy respectively.

$\varepsilon$  is the error term which was assumed to be normally distributed.

The data was analysed using the computer programme Statistical Package for Social Sciences (SPSS) version 24. The results are as shown in the tables 5 to 6 below.

To test the degree to which the identified e-strategies predicted service delivery in Kisii County as predicted by the whole model, a regression model summary was obtained after the regression. Table 5 shows the model summary.

**Table 5: Relationship between the Identified E-strategies and Service Delivery**

**Model Summary**

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.821 <sup>a</sup>	.674	.667	.35047

a. Predictors: (Constant), *PROC, TAX, HEAL, HRM*

Based on the output in Table 5 above, it is shown that generally, there is a high correlation between the identified e-strategies and service delivery. This is shown by the correlation coefficient (R) of 0.821 that indicates that cumulatively, a 0.821 joint increase in the e-strategies leads to 0.821 increase in service delivery.

The coefficient of determination ( $R^2 = 0.674$ ) value shows that the combined e-strategies predict 67.4% of service delivery with the remaining 33.6% being predicted by other variables that were not identified in the study. This generally implies that the model can be relied to predict service delivery in Kisii County.

**Table 6: ANOVA**

model	Sum squares of	df	Mean square	F	sig
<b>Regression</b>	46.807	4	11.702	95.135	.000 <sup>a</sup>
<b>Residue</b>	22.600	184	.123		
<b>Total</b>	69.407	188			

a. Predictors: (Constant), *PROC, TAX, HEAL, HRM*

b. Dependent Variable: *SERVICE DELIVERY*

The analysis of variance (ANOVA) result shows that the regression model overall predicts participation significantly well. This is shown by the F-ratio of 95.138 which is significant at  $p = 0.000$  indicating that the regression model results are significant. This implies that the combined e-strategies of e-procurement, e-taxation, e-health and e-human resource management significantly predict service delivery.

**Table 7: Influence of e-governance strategies on service delivery (Coefficients)**

Mode	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	Beta	Std. Error	Beta			
<b>1</b>						
	<b>(Constant)</b>	.316	.144		2.194	.030
	<b>PROC</b>	.183	.090	.265	2.039	.043
	<b>TAX</b>	.182	.095	.291	1.904	.058
	<b>HEAL</b>	.497	.068	.629	7.286	.000
	<b>HRM</b>	.312	.023	.219	13.56	.000

a. Dependent Variable: **SERVICE DELIVERY**

Results in Table 7 show that holding all other factors constant, the constant level of service delivery in Kisii County is 31.6% ( $\beta = 0.316, p = 0.30$ ). This indicates that although the level of service delivery in the county is seemingly low, it is significant.

Results in the table also show that holding all other factors constant, a unit increase in e-procurement strategy leads to 18.3% significant increase in service delivery in Kisii County ( $\beta = 0.316, p = 0.043$ ). This result in agreement with results by Yator (2014) and Mungai (2017) who found that improving procurement by electronic means significantly improves service delivery. It is also shown that holding all other factors constant, the use of electronic means in taxation, e-tax has an insignificant effect on service delivery ( $\beta = 0.182, p = 0.58$ ) indicating that the use of e-tax has no significant effect on service delivery. These results contradict results by Muraya (2015) and Nyokabi (2012) who found that using e-taxation helps improve service delivery.

The regression results in Table 7 also show that e-health has a positive significant influence on service delivery ( $\beta = 0.497, p = 0.00$ ) which shows that holding all other factors constant, a unit increase in e-health leads to 49.7% increase in service delivery. This result is in tandem with what Joseph (2002) and Aminuzzaman (2008) who also found that using e-health in public organizations increases service delivery. The use of e-human resource management was also found to have a positive significant effect ( $\beta = 0.312, p = 0.00$ ) on service delivery in Kisii County. This implies that holding all other factors constant, a unit increase in e-human resource management leads to a 31.2% increase in service delivery. Nyokabi (2012) and Glover *et al.* (2010) found similar results in their study.

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### Summary of Findings

The main objective of this study was to assess the effect of e-government strategy on service delivery in devolved units using Kisii County as a case study. The specific objectives of this study were: to establish the effect of e-procurement strategy on service delivery in Kisii County; to analyze the role of e-tax strategy on service delivery in Kisii County; to evaluate the effect of e-health on service delivery in Kisii County; and, to assess the effect of e-human resource management on service delivery in Kisii County.

Results showed that holding all other factors constant, the constant level of service delivery in Kisii County is low but it is significant. Results based on the first objective also show that holding all other factors constant, a unit increase in e-procurement strategy leads to a significant increase in service delivery in Kisii County.

Results based on the second objective show that holding all other factors constant, the use of electronic means in taxation, e-tax has an insignificant effect on service delivery indicating that the use of e-tax has no significant effect on service delivery.

Based on objective three that was to analyze the role of e-tax strategy on service delivery in Kisii County results show that e-health has a positive significant influence on service delivery that shows that holding all other factors constant, a unit increase in e-health leads to an increase in service delivery.

Results based on the fourth objective which was to assess the effect of e-human resource management on service delivery in Kisii County showed that the use of e-human resource management was also found to have a positive significant effect on service delivery in Kisii County.

### ***Conclusions***

Based on the findings above, the study came up with the following conclusions. Based on results on the first objective which show that holding all other factors constant, a unit increase in e-procurement strategy leads to a significant increase in service delivery in Kisii County, it is concluded that e-procurement strategy is important in improving service delivery in Kisii County.

On the basis of findings based on the second objective which showed that holding all other factors constant, the use of electronic means in taxation, e-tax has an insignificant effect on service delivery indicating that the use of e-tax has no significant effect on service delivery, it is concluded that the use of electronic means in tax matters does not improve service delivery in Kisii county.

Based on objective three that whose results showed that e-health has a positive significant influence on service delivery that shows that holding all other factors constant, a unit increase in e-health leads to an increase in service delivery, it is concluded that service delivery is highly dependent on making health systems electronic.

Results based on the fourth objective which was to assess the effect of e-human resource management on service delivery in Kisii County showed that the use of e-human resource management was also found to have a positive significant effect on service delivery in Kisii County. It is concluded that e-health is an important positive and significant predictor of service delivery in Kisii County.

### ***Recommendations***

Based on the present study's results and conclusions, the following recommendations are made. Based on results on the first objective that showed that holding all other factors constant, a unit increase in e-procurement strategy leads to a significant increase in service delivery in Kisii County, and the conclusion that e-procurement strategy is important in improving service delivery in Kisii County, it is recommended that Kisii County emphasizes the use of e-procurement in its quest to improve service delivery.

On the basis of findings based on the second objective which showed that e-human resource management has an insignificant effect on service delivery and the conclusion that the use of electronic means in tax matters does not improve service delivery in Kisii county, it is recommended that e-taxation is given proper attention since it has been shown previously that it helps to improve service delivery.

Based on objective three that whose results showed that e-health has a positive significant influence on service delivery and the conclusion that service delivery is highly dependent on making health systems electronic, it is recommended that the County management increase the use of electronic means in delivery of health services.

Based on results for the fourth objective which showed that the use of e-human resource management has a positive significant effect on service delivery in Kisii County and the concluded that e-human resource management is an important positive and significant predictor of service delivery in Kisii County, it is concluded that the County management improves the use of electronic means in human resource management in its effort to improve service delivery.

### ***Suggestions for Further Research***

This study was limited by constraints in terms of the few variables that were included in the research. The study suggests that the following studies are done to supplement the present study:

A study on factors affecting service delivery in governance.

A study investigating the effect of e-governance on service delivery in other counties.

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