

# E - Government to Citizens Model and Service Delivery by Government of Kenya

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**Abstract:** ICT plays an important role in the achievement of government's operations effectiveness and efficiency. There has been a multi-million dollar ICT-support initiative by the Kenyan government and World Bank which aims at improving government service delivery. However, there still exists a high failure rate of other government ICT projects. Moreover, there has been an increase in ineffective and inadequate use of e-government services regardless of several developments in e-government in most developing countries. The study adopts the government to citizen's model. The research sought to determine the influence of E-Government to citizen's model on service delivery at Embu Huduma Centre. This study is grounded on Unified theory of acceptance, technology adoption model theory. The study targeted all government agencies offering their services at the centre which comprised of all 56 frontline officers. This made it to be a census study. The study established that the E-citizen portal had greatly influenced service delivery. Further the findings from the correlation analysis indicated that there was significant and progressive influence on E-government to citizen model on service delivery as it had resulted into improved customer satisfaction. The study recommends that further research can be done in other huduma centers across the Country to help in comparison and expansion of the study findings.

**Keywords:** E-Government, Huduma centre, Service delivery.

## I. INTRODUCTION

Due to increased modernization of governments, electronic government has become a fundamental element. Rapid ICT growth and important improvements in digital connectivity become a major problem of many governments (Alateyah, Crowder and Wills, 2013). While citing ITU (2010), World Summit on the Information Society was endorsed by UN in the year 2001. Kanaan, Hassan and Shahzad (2016) reveal that e-government program is citizen centric. In today's business environment, internet cafes and tele-centres are the two main sources of public internet access in developing countries. Additionally, information technology and public internet access promotes good governance through e-government systems. ICT has helped governments to achieve operations effectiveness and efficiency. Open source software (OSS) and cloud computing are technologies used to make e-government more productive and gainful. In which, OSS provides cost benefits, expand adaptability to address localization issues and extensibility, increase ownership and local autonomy while cloud computing boost up the outcomes of e government (Mateen, Sabir & Ullah, 2017). Furthermore,

citizens being one of the key stakeholders of e-government activities need to be aware and ready to accept the use of technology in order to overcome technological challenge in e-government deployment.

Use of e-government enhances cost-effective, efficient delivery of services, good governance and transparency. Globally, Abdulbaqi (2016) argues that since 2011, the Amarah Provisional Council (Iraq) has suggested that the next step be taken to improve the city's ICT sector by implementing e-government to facilitate Amarah citizens' processes, save the city time and money for processing services, and eliminate corruption. Further indications are that advanced activities began by the administration incorporate issuance of new age computerized personality and establishment of government's Huduma centers. Technology affects and facilitates services. It converts it from common services to electronic services (Al-Hawary & Al-Menhaly, 2016). According to Mugambi (2013) administration is characterized as an item or movement that meets scientists further contend that there is have to concentrate on quality with goal to fulfill client needs while remaining monetarily serious. Nevertheless, attributes of a service include; Timeliness; Dependable and reliable; Usability ; Usefulness; Credibility. Malik, Shuqin, Mastoi, Gul, and Gul, (2016). argue that customer satisfaction is attached to service quality. This is because failure in technological customer's satisfaction results in the negative type of perception of functional quality of related service. In addition, customers determine the amount of satisfaction based on the degree to which their expectations are confirmed while examining the real output of the service or product relative to the performance associated with the original expectation.

### 1.2 Embu Huduma Centre

Embu Huduma Centre was established in the year 2014. In addition, The Huduma secretariat was instituted through the Presidential Gazette Notice No.2177 of 31st March, 2014 that established the governance structure of the Huduma Kenya Programme. Huduma centers assist people from a single place to access government facilities and data (Imbamba & Kimile, 2017). According to Rutto and Yudah (2017), Huduma Centre was established in 2013 under the Devolution ministry to provide government services to the Kenyan citizens. *Some of*

the public facilities at the centers were provided. Includes: Stamp duty Assessment and Payment; Community Police; NSSF Registration ; PPOA Reviews and/or complaints related to procurement and disposal ; Public Complaints by the Administrative Justice Commission ; Welfare Group Registration ; Student Loan Application ; Student Loan Repayment Services.

### 1.3 What is the Challenge?

Despite multi-million dollar ICT-support initiatives by the Kenyan government and World Bank which aims at improving government service delivery, there still exists a high failure rate of other government ICT projects (Ondego & Moturi, 2016). There has been several advances in e-government in most developing countries, however, there is increase in ineffective and insufficient use of e-government facilities (Kituyi & Anjoga, 2013). Moreover, public service delivery difficulties remain enormous, hence the need for more innovations and outcome-based strategies such as customer-centric, linked government, capacity building (Rutto & Yudah, 2017).

A study by Mwangi (2015) on e-government adoption by Kenya ministries revealed that the presence E-governance offers numerous advantages to the residents as it can possibly bring numerous fantasies and objectives of good administration into the real world. The examination further learned that administration representatives in various branches of services need to cooperate in a smooth and consistent manner and that can be accomplished using ICT. All things considered, viable utilizations of ICT, joined with other e-government drivers, services can communication with citizens to effectively meet their needs. The previous studies on e-government failed to comprehensively analyze e-government citizen model in relation to service delivery at Huduma Centres. This created a knowledge gap the current study sought to fill answering the question to what extent does E - Government to Citizens Model influence service delivery?

## II. LITERATURE REVIEW

### 2.1 UTAUT Theory

The current study was based on the Unified Theory of Acceptance and Use of Technology (UTAUT) theory. UTAUT theory defines main variables that are, according to Davis (1989), performance expectation, effort expectation, social influence, and circumstances facilitating. It also provides four moderators, including age, gender, experience, and willingness to predict behavioral intent to use technology and current technology mainly in organisational environments (Venkatesh, Morris, Gordon & Da). According to Venkatesh, Thong and Xu (2016) expectation of success, expectation of effort, and social influence were theorized and discovered to impact cognitive intent to use a technology, while behavioral intent and circumstances facilitating determined the use of technology. What influences customers intention to adopt technology is user's expectation on the performance and user's

perception of ease of use Sarfaraz (2017). Therefore customers expect service delivery to conform to their expectations and when this is achieved it gives customers/citizens to continue using technology.

### 2.2 Empirical Review

Wambugu (2018) quoting Stockwell (2006), service delivery is effective whenever its outcomes and accomplishments are of value to its customers. The researchers further articulate that operating effectively enhances better quality services. Mawela, Ochara and Twinomurinzi (2017) reveals that organizations have chosen to utilize ICTs to survive in an increasingly dynamic, demanding and complex world and to achieve value and quality of services.

Alsaghier, Ford, Nguyen, and Hexel (2009) performed a research on conceptualizing citizens' confidence in e-government and revealed that e-government enables citizens to communicate with their government via the internet where they obtain updated government laws, obtain government official records, complete requests, pay taxes and bills, receive payments, etc.

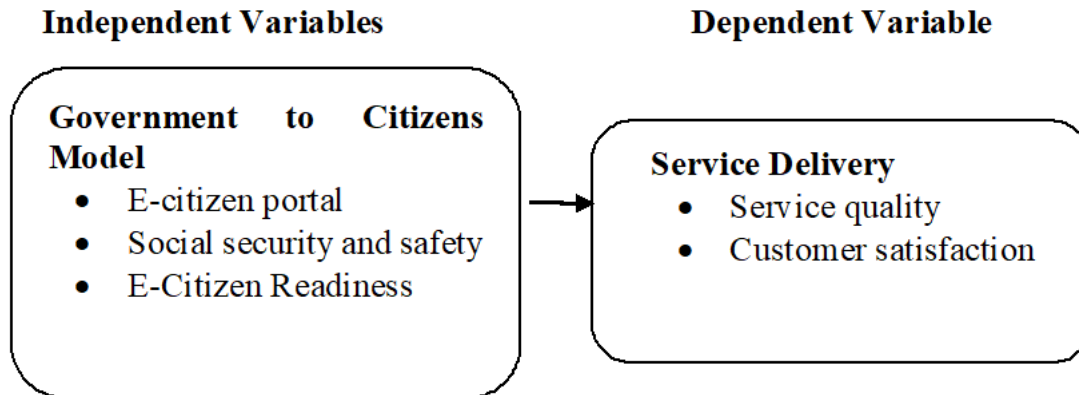
A research by Shuqin, Mastoi, Gul and Gul (2016) claims that information security is a critical issue and that the e-government portal's elevated safety and privacy have a positive impact on the degree of citizens' e-satisfaction. Researchers argue that clients are always posting confidential and personal data on the internet to suppliers. Some of the safety threats, however, include security /cyber-attacks such as shutdown of e-business, data theft, and corruption of malicious files. **Therefore, it is important for security** so as to keep the consumers procure safely hence increasing citizens satisfaction.

Government to citizen model is viewed as a determinant for Embu Huduma centre to achieve service delivery hence the study will focus on how e-citizen will help citizens in saving time as they are able to acquire various services at the same time. The study shall further examine whether Embu Huduma Centre uses security technology (digital signatures and encryption) in order to assure citizens of social security and safety. Lastly, the study will focus on citizen e-readiness and whether citizens take advantage of the opportunities provided by e-government in order to achieve service delivery.

A study by Imbamba and Kimile (2017) reviewed the status of e-government implementation in Kenya. The study focused on the benefits of e-government implementation. However this study failed to look at the how e-government models can influence service delivery. Kaur and Singh (2015) performed a study on E-government: study of factors significantly affects adoption and acceptance in state of Punjab. The researcher only focused on the main constructs of e-government. From the previous literature reviewed, it is clear that these studies failed to analyze e-government models in relation to service delivery hence the need for this study to address such knowledge gap in scope, methodology and concept.

2.3 Conceptual Framework

This study adopted the shown conceptual model where E-Government citizen model was the independent variable while service delivery was the dependent variable.



Source: (Researcher, 2019)

Figure 1: Conceptual Framework

III. RESEARCH METHODOLOGY

The study adopted descriptive research design. A research design includes the arrangement of conditions for collection and analysis of data with an of combining the relevance of the research purpose with economy in procedure (Kothari, 2010). The study was undertaken in Eastern region, Embu town. In each county, there is huduma centre. However for the current study focused on Embu huduma center. *The target population for this study comprised of 56 frontline employees at Embu Huduma centre due to their direct and daily engagement on e-government when carrying out services.*

A structured questionnaire was used to collect primary data. The questionnaire contained closed ended and open-ended **questions**. Questionnaires were then given to the respondents which was accompanied by a notification on information confidentiality. Respondents were given two weeks before collection date to ensure a high response rate. A Pilot study comprising of 7 respondents (employees) from a nearby huduma centre, thika was conducted to establish the reliability and validity of the questionnaire (Sekeran 2003). However, the respondents were excluded from the the main study.

The researcher tested both content validity and construct validity. The test of content validity was done through the use of the study supervisor. On the other hand, construct validity of variables was achieved through covering all aspects of the concepts in the study. Using descriptive and inferential statistics, quantitative information was evaluated. Percentages, ratios, mean scores and standard deviation were the descriptive statistics used. To determine the impact of the independent variable on the dependent variable, multiple regression model and Karl Pearson Correlation Coefficient was used. The multiple regression model for this study took the form;  $Y = \beta_0 + \beta_1 X_1 + \mu$ , Where; Y= Service Delivery,  $\beta_0$ = Constant of Regression which is the value of the

dependent variable when the independent variable is 0.  $\beta_1$  was the coefficients of  $X_1$  respectively,  $X_1$ = Government to Customers model while  $\mu$  = was the unpredictable random element or error term. The researcher sought the requisite permission from the Mount Kenya University, NACOSTI, and the management of Huduma Centre, Embu Town so as to uphold ethics in the study.

IV. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Descriptive Statistics

The study targeted 56 participants from which 53 respondents were able to complete and return the questionnaires. This represents a response rate of 94.6% which is satisfactory for the analysis and conclusions.

Table 1: Response Rate

	Frequency	Percentage
Completed	53	94.6
Incomplete	3	5.4
Total	56	100

Source: Field Data (2021)

The study sought to determine the influence of government to citizen models on service delivery. The respondents indicated their levels of agreement on statements regarding government to citizen models on service delivery. The majority of the respondents agreed that social security and safety improves service quality as shown by a mean of 4.19 and a standard deviation of 0.40, e-citizen readiness improves service quality as demonstrated by a mean of 4.17 and a standard deviation of 0.51 and that social security and safety promotes customer satisfaction as shown by a mean of 4.13 and a standard deviation of 0.39.

The respondents also agreed that e-citizen readiness promotes customer satisfaction as demonstrated by a mean of 4.13 and a standard deviation of 0.71, the E-citizen portal helps on improving service quality as illustrated by a mean of 4.09 and a standard deviation of 0.45 and that the E-citizen portal helps in promoting customer satisfaction as shown by a mean of 3.98 and a standard deviation of 0.54. Consistent to the findings, Alsagher, Ford, Nguyen, and Hexel (2009) also found that government to citizen models enhances service delivery.

Table 2: Influence of Government to Citizens Models on Service Delivery

	N	Minimum	Maximum	Mean	Std. Deviation
The E-citizen portal helps on improving service quality	53	2.00	5.00	4.09	0.45
The E-citizen portal helps in promoting customer satisfaction	53	3.00	5.00	3.98	0.54
Social security and safety improves service quality	53	4.00	5.00	4.19	0.40
Social security and safety promotes customer satisfaction	53	3.00	5.00	4.13	0.39
E-citizen readiness promotes customer satisfaction	53	3.00	5.00	4.13	0.71
E-citizen readiness improves service quality	53	2.00	5.00	4.17	0.51
Valid N (list wise)	53				

Source: Field Data (2021)

The respondents indicated their levels of agreement on statements regarding service delivery. From the findings, majority of the respondents strongly agreed that the adoption of Government to Citizens Model of government has improved service delivery as illustrated by a mean of 4.36 and a standard deviation of 0.48.

Table 3: Service Delivery

	N	Minimum	Maximum	Mean	Std. Deviation
Adoption of Government to Citizens Model of government has improved service delivery	53	4	5	4.36	0.48
Valid N (list wise)	53				

Source: Field Data (2021)

#### 4.2 Correlation Analysis

The section presents findings resulting from correlation analysis involving E-Government Citizen model and its influence on Service delivery. The results showed a positive moderate correlation between government to citizens model and service delivery as established by a correlation factor of

0.406. This positive relationship was found to be statistically significant as the p-value was 0.003 which was less than 0.05.

Table 4: Correlation Analysis

		Service delivery		
Service delivery	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	53		
Government to Citizens	Pearson Correlation	.406**	1	
	Sig. (2-tailed)	.003		
	N	53	53	
**. Correlation is significant at the 0.01 level (2-tailed).				

Source: Field Data (2021)

#### 4.3 Regression Analysis

The section presents and discusses findings resulting from the regression analysis. The R-squared for Government to citizens model explains 38.5% of service delivery.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.620 <sup>a</sup>	.385	.334	.17418
a. Predictors: (Constant), Government to citizens				

Source: Field Data (2021)

According to the finding, the F-calculated (7.513) was greater than the F-critical (2.565) and the p-value (0.000) was less than the significant level of (0.05), which shows that the model is a good fit for the data. This implies that the model can be used in predicting the influence of Government to citizens on service delivery.

Table 2: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	.912	4	.228	7.513	.000 <sup>b</sup>
	Residual	1.456	48	.030		
	Total	2.368	52			
a. Dependent Variable: Service delivery						
b. Predictors: (Constant), Government to citizens						

Source: Field Data (2021)

The multiple regression model becomes:  $Y=2.623+0.429 X_{1+} \mu$

The results show that Government to citizens model had a significant influence on service delivery as shown by a regression coefficient of 0.429 (p-value=0.02).

Table 3: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.623	0.443		5.921	0.01
	Government to citizens	0.429	0.118	0.345	3.636	0.02
a. Dependent Variable: Service delivery						

## V. CONCLUSIONS AND RECOMMENDATIONS

In regards to government to citizen's model the study concluded that there was significant and progressive influence on government to citizen model on service delivery as it has resulted into improved customer satisfaction. Also the E-citizen portal helps in improving service quality and customer satisfaction. The study therefore recommends that Huduma centres should ensure that their E-portal works as swiftly as possible and with less or no downtime. Its capacity should be increased to handle more data as more and more people are coming to learn of it. Training of employees should be made more frequent so as to equip them with current technology based innovations as well as improve on their service delivery speeds. From the findings the study suggests further research to be carried on other huduma centers across the Country to help in omparisson and expansion of the study findings.

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