



**INFORMATION COMMUNICATION TECHNOLOGY STRATEGY IMPLEMENTATION ON PERFORMANCE OF HUDUMA CENTRE. A CASE STUDY OF MURANG'A COUNTY**

**Kimemia, B. W., & Amuhaya, J.**

---

**INFORMATION COMMUNICATION TECHNOLOGY STRATEGY IMPLEMENTATION ON PERFORMANCE OF HUDUMA CENTRE. A CASE STUDY OF MURANG'A COUNTY**

<sup>1</sup> Kimemia, B. W., & <sup>2</sup> Amuhaya, J.

<sup>1</sup> MBA Candidate, Department of Business Administration, School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture and Technology, Kenya

<sup>2</sup> Lecturer, School of Business and Entrepreneurship, Jomo Kenyatta University of Agriculture and Technology, Kenya

**Accepted: April 8, 2023**

---

**ABSTRACT**

*The ICT strategy is paramount in determining how ICT is integrated and consequently support organizations vision, mission, and objectives. This study explored Information Communication Technology strategy implementation on performance of Murang'a Huduma Center-Kenya. The objectives of the study were; To establish the effect of a communication plan on performance of Huduma Centre in Murang'a County, to determine the extent of ICT aided decision making on performance of Huduma Centre in Murang'a County, and to determine the effects ICT governance on performance of Huduma Centre in Murang'a County. This study was guided by three theories which the researcher found relevant because they have many aspects related to the variables of the study and the objectives. These theories were; Technology Acceptance Model, Resource Based View theory and the Knowledge based theory. The study used a descriptive research design and employed a qualitative approach. It targeted employees of Murang'a Huduma Center. A systematic random sampling technique was used and a sample size of 50 employees was identified for the study. A structured questionnaire (closed and open-ended) was the instruments of measure used to collect data. The data collected was cleaned, coded and analyzed using descriptive and thematic analysis. The study found that Communication Plan, ICT decision making, ICT governance and ICT infrastructure have positive effect on performance of Huduma center. The study concluded that organizations should consider the ICT as a pillar of all the artificial intelligence that an organization needs to adopt to spur growth to attain its goals and objectives. This study therefore recommended that organizations should strive to conduct research and development to employ cost effective ICT infrastructure which would lead to enhance systems security, data storage during ICT strategy implementation and increase the service delivery to great levels.*

**Key Words:** *Communication Plan, ICT Aided Decision Making, ICT Governance, Public Service Delivery*

---

**CITATION:** Kimemia, B. W., & Amuhaya, J. (2023). Information communication technology strategy implementation on performance of Huduma Centre. A case study of Murang'a County. *The Strategic Journal of Business & Change Management*, 10 (2), 167 –181.

---

## INTRODUCTION

Before the inception of the Huduma center services in Kenya in 2013, many citizens had mixed reactions regarding the quality of the service delivery in various public offices. Most of the services were manually done and this came with shortcomings such as delays, corruption, and lack of transparency, especially from public employees with poor work ethics. The researcher worked in the Ministry of Immigration and Registration of Persons between 2007 and 2011 and during that period, she witnessed the inefficiency and ineffectiveness associated with manual processes. For example, the processes of applying for critical documents such as affidavit for lost documents, Identity Cards, NHIF cards was tedious and marred by massive kickbacks for the service delivery to be hastened. By the time the Government of Kenya initiated Huduma services in 2013, the researcher had barely worked for two years in the ministry of Finance and National Planning. The experience was somehow different compared to the manual processes in the previous workstation. Service delivery was more efficient, rates of corruption reduced because no physical payments were allowed, services were delivered quickly and there were also high levels of transparency.

The global advancement in Information Communication Technology continues to gain popularity from the recent past. Efficiency and effectiveness in the organizations can be attributed to growth in ICT. Information is a strategic resource for success for both public and private sector. To realize their short term and long term goals, organizations should adequately transform strategic intentions into actions. Organizations without a clear strategy in the changing business environment are likely to perform poorly due to lack of a strategic roadmap (Kabeyi, 2019). The Huduma Centers use the ICT information for better service delivery, which the study will establish. The Huduma program which gave birth to the Huduma Centers was the Jubilee Government Vision 2030 flagship project initiated in 2013. President Uhuru

Muigai Kenyatta opened it at the General Post Office (GPO) Nairobi. According to the president and his administration, provision of public services through Huduma centers would boost the access and delivery of the Government Services to all Kenyan citizens. As of May 2021, there were 52 Huduma Centres in Kenya (Huduma Kenya, 2022). The program is coordinated and implemented by the Ministry of Public Service, Youth and Gender Affairs.

Information and Communication Technology (ICT) has become one of the key enablers of the quality service delivery to the citizens by the government. ICT is comprised of technologies designed to access, process and transmit information (Garson, 2016). Electronic governance or e-governance is the application of ICT to deliver government service through the exchange of information, communication transactions, integration of various stand-alone systems and services between government-to- citizen (G2C) government-to-business (G2B), government-to- government (G2G), government-to-employees (G2E) as well as back-office processes and interactions within the entire government framework. Through e-governance, government services are available to citizens in a convenient, efficient, and transparent manner (Kobia, 2016).

Public Service delivery in Kenya was riddled with lengthy and manual processes, long queues, poor customer service plus many others and this had to be transformed. Again, Studies have revealed some members of the public are not satisfied with ICT implementation strategies in some Huduma Centers-something that leads to poor quality services. Wambura (2017) established that a number of Huduma centres lacked ICT-based customer feedback mechanisms to assess performance. Other service seekers complained about speed, operating hours and unsatisfactory management processes. Still, others identified limited resources, system breakdowns and delays in some counters as some of the main challenges. Similar experiences have been reported by other

citizens seeking services in different Huduma Centres in the Country. The structure and core business of Huduma Centre requires a comprehensive strategy for the successful implementation of its vision and mission. The Huduma Centres aid in giving every Kenyan citizen a one-stop shop to access several public and government services require increased investment on ICT-based strategy implementation. Before 2013, many Kenyans acquired public services from specific government offices and through conventional ways. Although some offices had adopted ICT but implementation was low.

### **Statement of the Problem**

In the current dynamic organizations, there is a shift towards increased investment in Information Technology to improve business processes and service delivery. The usage of IT applications is significant in maintaining the competitive edge of organizations (Mutuku, 2018). ICT strongly supports the organization's strategic goals and objectives. The biggest issue with ICT use in Kenya is possibly the inadequacy in the strategic implementation process. Studies by Kamel and Rateb (2015) in the developed world have attested that without the proper infrastructure, IT cannot be an enabler for socioeconomic development. Countries that have successfully implemented ICT strategies in their public sectors have experienced economic growth. For instance, through ICT usage, the United States gross domestic product (GDP) increased by 7.8%, Singapore by 8.3%, UK by 8.0%, and Australia by 8.4% (Kamel, Rateb & El-Tawil, 2015). An evaluation of the strategic use of IT applications in attaining and maintaining competitive edge done by Madadipouya (2015), concluded that IT is a success contributing factor if it is used in a strategic manner and at the appropriate time. Local studies have revealed the same trend in different organizations in Kenya. Organizations with high rates of ICT use record significant success in service delivery while those with low ICT adoption record correspondingly low achievements.

Sangoro, Roman, and Oirere (2016) established that there were significant effects of level of technology, management style, and government policy on the performance of Kakamega Huduma Centre. Similarly, Mokaya & Njuguna (2013) noted that despite its immense benefits, ICT adoption and e-government was inadequate in some public offices due to poor ICT strategy implementation. The study further claimed that despite the efforts by the National Government to improve adoption of ICT projects through ICT Authority, adoption of ICT strategy has not been fully implemented. Thus, notwithstanding its benefits as a whole, the researcher strongly felt that ICT implementation strategy is the backbone to the success of ICT adoption in Huduma Centres in Kenya. Therefore, the researcher intent was to establish the relationship between ICT strategy implementation and organizational performance by conducting a descriptive study at the Murang'a Huduma Centre.

### **Research objectives**

The general objective of the study was to establish the effect of information communication technology strategy implementation on performance of Huduma Centre. The study was guided by the following specific objectives:

- To establish the effect of communication plan on performance of Murang'a County Huduma Centre.
- To determine the extent of which ICT aided decision making affect performance of Murang'a County Huduma Centre.
- To determine the effects of ICT governance on performance of Murang'a County Huduma Centre.
- To find out the effects of ICT infrastructure on performance of Murang'a County Huduma Centre.

## LITERATURE REVIEW

### Theoretical framework

#### Technology Acceptance Model (TAM)

The theory is designed to measure the adoption of new technology based on customer attitudes. Based on TAM theory, there are two major factors that influence an individual's intention to interact and use a new technology. These factors are; the user's perceived ease of using the technology, and the user's perceived usefulness of the Technology. The researcher uses these two concepts (ease of use and perceived usefulness) to analyze how Murang'a Huduma center applied this concept in ensuring that ICT was accepted to be an integral part of its functions.

The greatest strength of this theory is that it is specific to ICT usage, particularly, when applying the concepts of ease of use and usefulness. It is easy to comprehend/understand and has demonstrated a high level of predictiveness in its main contexts. Another strength of TAM is that it considers other external and social influences.

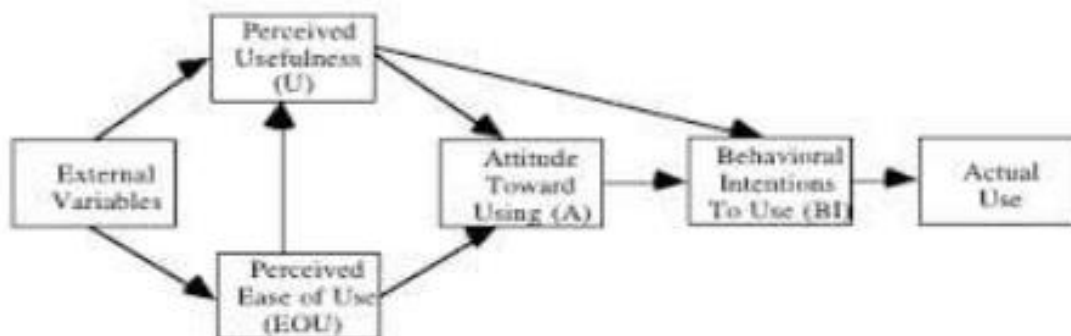


Figure 1: Technology Acceptance Model

#### Resource Based View Theory (RBV)

The theory illustrates the essence of resources as a capability in an organization, which is clear in heterogeneous firms, and are imperfectly mobile which, in turn, makes this heterogeneity persist over time. The RBV theory's school of thought explains the role played by resources owned and possessed by an organization in differentiating it from other organizations in the industry. ICT is one of the integral resources at Huduma Center-

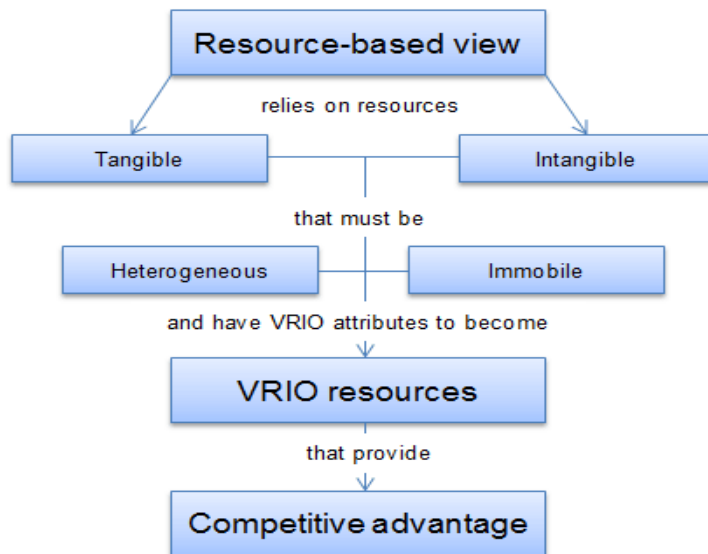
Additionally, a myriad of studies has established that TAM reliably explains a substantial proportion of the variance in usage intentions and behaviors with a variety of information technologies. TAM is also powerful, robust, and an effective model for predicting user acceptance of information technologies. This is opposed to other ICT related theories such as the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) which are perceived to be difficult to understand and never considered the behavior of the users in their creation and application. There did not consider the end-user and only assumed the users will automatically accept and use new technologies.

Despite the many strengths, TAM has a few weaknesses which the researcher is aware about them. For instance, critiques of this theory claim that although it robust, it ignores a number of critical theoretical constructs. Again, they claim that TAM does not mirror the variety of user task constraints and environments. Nevertheless, TAM remains relevant and directly relatable to the topic and variables of the present study.

Murang'a and thus, the researcher identified this theory to help dissect the interplay between ICT as a resource and organizational performance. According to Mbithi (2016), RBV explains the differences in competitive positions that are enjoyed by various organizations in a given industry. Through the resources owned and utilized in the production process, organizations are able to outperform their competitors and emerge winners. Most RBV researchers the resources affect an

organization's ability to execute its game plan strategies which in turn affects organizational performance. This theory is relevant for this study

because it explains the role played by internal resources as ICT controlled by an organization in the level of performance recorded.

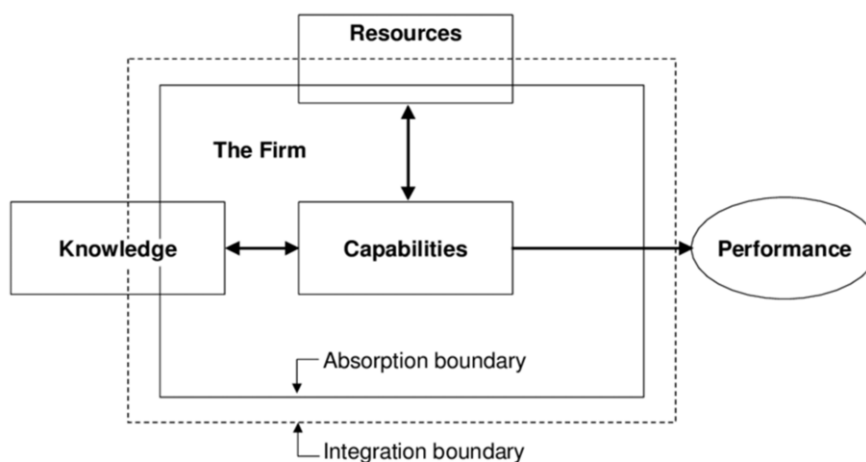


**Figure 2: Resource Based View**

**Knowledge-Based Theory (KBV)**

Knowledge is a key intangible resource that is the primary source of a sustainable competitive advantage (Yli-Renko et al. (2020). The role of the firm is not simply to acquire an assortment of resources and capabilities, but rather to develop its organizational knowledge to produce a sustainable competitive advantage. (Yli-Renko et al., 2020). The knowledge-based theory rests on the assumption that resource and capability-based advantages are

derived from superior access to and integration of specialized knowledge (OECD, 2016). Knowledge is created and held by individuals, but can become embedded within the organization as organizational processes and routines are performed repeatedly (Yli-Renko et al. (2020). Through ICT the Huduma centre apply knowledge-based computer systems in the daily operations. The study will be anchored upon this theory since it will help in explaining ICT information sharing as well.



**Figure 3: Knowledge-Based Theory**

## Conceptualization of the study Constructs

### ICT Strategy

Huduma Centers use the Wide Area Networks (WAN) in their operations. The government uses the Internet services provided by Safaricom and Telkom Kenya. Computers serving customers at the Huduma centers are virtually linked to the mother ministries. For example, the application for passport services are linked with the Ministry of State for Immigration & Registration of Persons. The sharing of data among Huduma data centers is achieved by connecting through the government's common core network to the ministries, departments, and agencies (MDAs) back-end systems which are in turn managed by the ICT Authority (Amir,2015). Information technology networking team assigned at the Technology Operating Center of the Huduma Secretariat monitors all Huduma ICT systems in real time. The networking team also provides the centers with continued support by responding to issues, raised via electronic tickets, helping through remote access, or walk-in support depending on the need and the nature of the problem. The major technological contributors to the success of the Huduma Kenya's positioning as an antithesis to corruption and inefficiency are, ICT- enabled communication between centers and the Secretariat, closed-circuit television monitoring, and automated data collection. The CISCO collaboration system architecture has facilitated group and individual conferencing between the Secretariat and the Huduma Centers and among the individual centers.

Making strategic decisions comprises of having a vision about the long-term course of actions one will take through an expansive competitive environment. Dyer et. al (2021) indicated that strategy offers the direction for operations. It outlines the current operating environment, the goals to be achieved and the different options that can be taken to achieve the strategic objectives. The objective of strategy is to bring about a useful and convenient environment that enables specific

actions to be carried out. Strategy is an intermediating force between the organization and its environment. Yatich (2018) states that strategy is an essential vehicle for attaining competitive advantage. Furthermore, Yatich (2018) noted defining an organization's mission and vision, devising and selecting a course of action and allocating resources are necessary to realize the strategic objectives.

ICT strategy is a broad outline used by an organization's ICT management to guide the vision and mission of an organization. It provides an overall structure that ensures effective administration of ICT infrastructure and processes in line with corporate objectives and the changing business environment (Mwori, 2016). According to Rwanda's National ICT Strategy and Plan of 2015, the country's government believes that ICT can enable the country to rapidly advance in the vital stages of industrial and economic growth and development. As such, ICTs have been incorporated into most of the economic segments to act as a crucial driver for economic transformation, and align the country's development agenda to global developments so that the country becomes competitive.

In Kenya, as detailed in the National ICT Master plan 2017, some of the ICT strategies that ICT Authority has adopted aims at delivering ICT systems that will facilitate e-government service delivery. ICTA is therefore, pursuing the following set of strategies: On information security, ICTA ensures that there is pro-active measures setup to identify and mitigate threats and risks poised on ICT infrastructure and processes. It also encourages enterprise and innovation by providing mentoring and opportunities of partnerships. It also builds, maintains and operate infrastructure that enables efficiency and effectiveness in access to government services and reduce the cost of communication.

### ICT Strategy Implementation

ICT Strategy Implementation is the process of turning an ICT-based strategy plan into action. It is

the phase where the organization executes the real action through the desirable strategic management process. The primary purpose of strategy implementation is ensuring that the firm effectively and efficiently utilizes its organizational structure, culture and control systems in the ultimate delivery of a strategic plan (Rani, 2019).

OECD (2016) elaborates that a successful ICT strategy should have the following components. First, it should have an assessment which clearly defines the existing status of the organization and its environment, with a critical view and comparative study identifying the needs and challenges, and provides the basis for formulating the strategy and building plans of actions. Second, it should entail a consultation plan that should be an on-going process and should include all stakeholders at the different phases of developing an ICT strategy increasing the probabilities of success of ICT strategy which will be due to meeting the needs of stakeholders and priorities of people and Strategic plan that explains the organization objectives, the goals that need to be achieved and the actions plans to be undertaken by all parties involved to reach these targets; Action strategy for implementation that contains the how projects would be prioritized, resources available for project implementation, the work plans needed to achieve the strategies, and the risks that may challenge successful implementation of the strategy. Monitoring and evaluation mechanisms that requires attention be given from the start to methodological aspects, that is, appropriate tools to monitor and gauge progress, and institutional and strategic aspects that aid to adjust to local constraints and maximize ownership by stakeholders.

Information technology strategy is an organization's general policy that entails purposes, values, and procedures that relate to usage of technologies in a given organization or institution (Mwori, 2016). OECD (2016) elaborates that "strategy directs the body of policies and provide a framework for their implementation with clear goals". OECD (2016)

furthermore elaborates that, some of the areas where ICT Strategy focuses on includes new and creative ways of using ICT for better value provisioning for system users and sharing of public infrastructure. Efficiencies are through consolidation of resources and structures. Increased output and efficiency via adoption and use of digital infrastructure to progress and advance the relationship between the general population, companies and government, increasing efficiencies through integrated services and increased data sharing to facilitate improved decision making, increased openness and transparency between Government and its citizens, provision of advanced user experience and superior services to the general public. The success of ICT strategy depends upon the efficacy of implementation and therefore top priority of strategy implementation is building a capable organization. It involves developing a responsive internal organization structure, building and nurturing skills and competencies and selecting people for key positions (Jayanagara, Darmanto and Istianda, 2022).

### **Strategy Implementation and Organizational Performance**

Effective strategy implementation enables organization record great benefits in terms of improved customer satisfaction, loyalty and repeat purchase. Signs of poor strategy implementation could involve low self-esteem among employees; low employee retention, low customer satisfaction and struggling organizational performance found that companies, which emphasize on good strategy implementation, sustained twice-financial success compared to poor implementers. Sometimes implementation is hard to get right, yet success of organizations depends on effective implementation. Mbithi (2016) highlighted that without effective implementation of strategy, establishment of the organizational route of operation and the formulation of the organizational strategy. Therefore, for performance to be realized, measures have to be put in place to ensure effective implementation of the strategy.



The ICT strategy implementation on performance is subject to soft factors, which are the factors related to human capital like commitment, communication, and consensus, hard factors like hierarchy of positions in the organizational and administrative systems) and mixed factors. Most organizations do not report good performance outcomes because the organizations and their managers forget the vital role of strategy implementation (Narikae, 2017). Research has established that in the modern era, organizations worldwide spend slightly above 50% of their new investment funding on ICTs (Kariuki, 2015). How organizations manage these large investments is of critical importance to organizational efficiency and effectiveness. Further, Information Technology is often the link between the business model and the critical drivers of success. Many organizations have been unsuccessful with their IT-based investments because of poor alignment of IT with the business.

Performance measurement systems of organizations are either financial measures or non-financial measures. Financial measures are quantifiable and involve the measure of the financial results that come about from the execution of the decisions made by the management. These financial measures include profit inventory turnover, return on equity, asset turnover rate and working capital. Non-financial measures are qualitative and based on the organizational strategy (Amhalhal, 2021). Measures founded on the organization's current and potential competitive position. They possess predictive ability and have useful information that complements financial measures. They include customer satisfaction, operating efficiency, reliability, workflow improvements, and data storing capability, innovation, employee performance and skill development.

### **ICT and Governance**

Information Systems (IS) research has recognized the necessity of a focus on IT governance and the business value creation of IT (Vejseli & Rossmann, 2017). Also, some examples of large organizations

IT project failures (Pearlson and Saunders, 2013), have elevated the importance of the topic of IT governance, from both research and practical perspectives (ISACA, 2015). There are a number of factors that may influence IT governance performance, such as environmental factors, internal resources, leadership styles, organizational culture and structure (Huygh et al., 2017; Jeston J. & Nelis J. 2014; Van Grembergen and De Haes, 2017).

### **ICT Infrastructure**

There is strong evidence of ICT use in all levels of government, whether it is through phones, versatile/wireless, organize switch, Personal Computers, workstations, or tablet. As a result, these and numerous other devices are regarded as indispensable in the field of government, as they enable employees to communicate with subjects, accomplices, and one another, plan and transmit archives and records, browse the web, and lead a wide range of electronic exchanges. Such technology is regarded as fundamental to an organization; however, it is frequently not used to its full potential to improve its execution.

Much work is needed in both the private and public sectors to improve client understanding, and technology can be a huge supporter of that change (Sharma, 2017). Organizational network systems at both the intra and inter-organizational levels have advanced, so that even correspondence now relies on computerized interchanges rather than manual and physical stages. Such help to scatter data and facilitate the manner in which work is done (Kanyua, 2015).

ICT frameworks play an important role in generating information from a variety of sources, including inventory control, web analytics, seals, and industry data. If they are properly cared for, they will serve as a driving force in making critical decisions and will also advocate for the use of innovation. The technologies have drastically changed to a level never imagined before. In fact, it serves as a strong alternative for many services. Technologies

streamline jobs that would have been erroneously done manually.

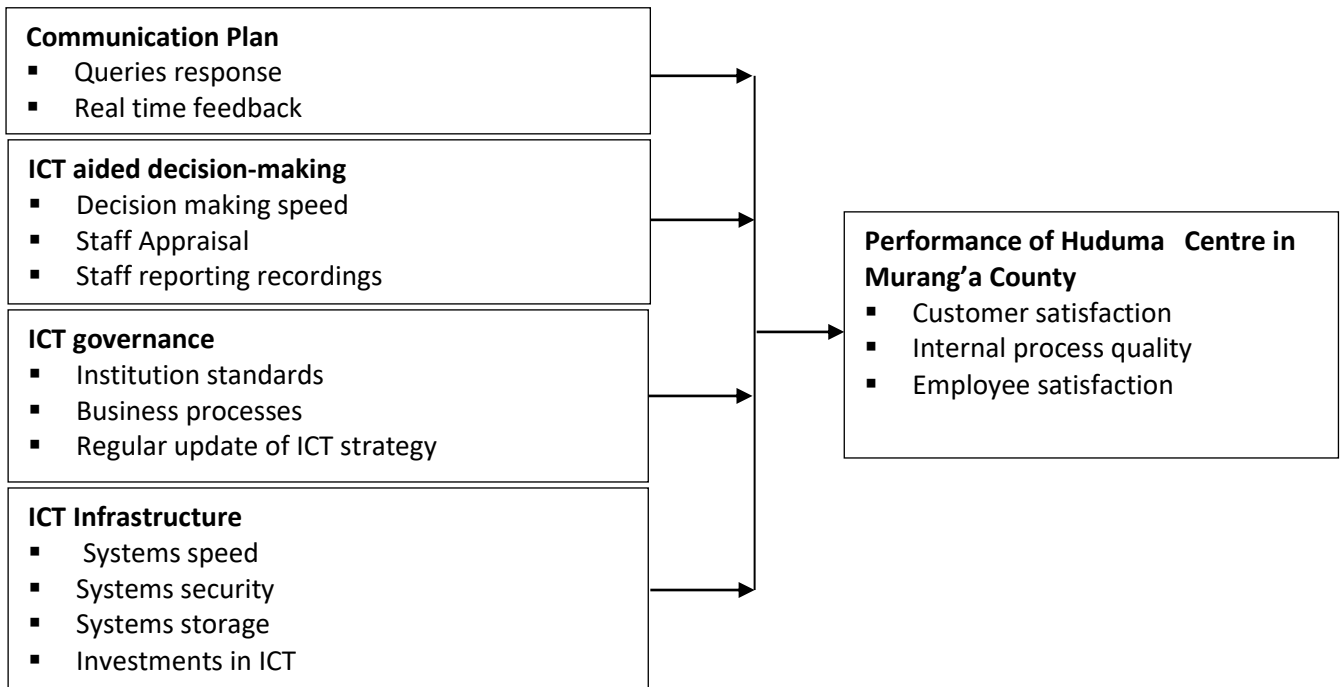
**Performance of Huduma Centres**

Huduma Kenya is a programme by the Government of Kenya that was established in 2013. The major objective of establishing the centers was to transform Public Service delivery by providing citizens’ access to various Public Services and information from One Stop Shop citizen service centres called Huduma Centres and through integrated technology platforms. Huduma Centres in Kenya provides Efficient Government Services at the Convenience of the citizen. This means that Kenyans will be able to get birth certificates, national identity cards, passports, registration of business names, and applications for marriage certificates, drivers’ licenses, police abstracts and many other services in one place. Others are introduction of Huduma platform to offer M-Government services to citizens from their mobile phones and a Huduma call centre to provide

customer service using a single dialling prefix (GoK, 2016).

Through the Huduma Kenya platform, the government aims at enabling citizens to access integrated public services via their phones, computers and personal digital assistants (PDA). The new portal is also expected to enhance service delivery and eradicate graft loopholes. Tenders and vacancies in the public service will also be accessible on the platform. Users will also be able to directly post their comments and complaints regarding government services (Government of Kenya, 2016). Both local and foreign investments have been hindered or slowed down by the cumbersome bureaucratic requirements from different government agencies before licences or approvals were obtained. To many Kenyans, obtaining even some of the most basic and simple services such as national identification card or a trading license for a small business had become impossible and often led to frustrations (GoK, 2015).

**Conceptual framework**



**Independent Variables**

**Dependent Variable**

**Figure 4: Conceptual Framework**

## METHODOLOGY

This study used descriptive research design. The target population for this study was 50 employees working at Murang'a Huduma Centre. The study used purposive sample to pick the specific employee categories from where respondents will be obtained (such as Center managers, IT department, and lower management among others). Due to the small number of staff at the Murang'a Huduma Centre, the researcher considered administering questionnaires to all of them, therefore, total of 50 respondents. Consequently, the researcher used the census method to collect data from these respondents. The

returned questionnaires formed the basis for the analysis. The questionnaires were cleaned, verified, coded and tallied according to the themes. The researcher used the Statistical Package for Social Sciences version 25 (SPSS v.25) to analyze quantitative data from the questionnaires with the help of descriptive statistics.

## FINDINGS

### Effect of communication plan on performance of Huduma Centre

The respondents were requested to rate statements on effect of communication plan on performance of Huduma Centre.

**Table 1: Effect of communication plan on performance of Huduma Centre**

Statements	Mean	Std Dev.
Organization receives real-time queries	3.74	0.032
Management responds to queries in real time	3.81	0.630
Junior staff can relay information to seniors in real time	3.52	0.641
Customer complaints are made on real time	4.00	0.052
Customer's feedback is made on efficiently	3.89	0.42

From the study findings in table 1, the respondents indicated to a great extent organization receives real-time queries as shown with a mean of 3.74, Management responds to queries in real time as shown with a mean of 3.81, Junior staff can relay information to seniors in real time as shown with a mean of 3.52, Customer complaints are made on real time as shown with a mean of 4.00, Customer's

feedback is made on efficiently as shown with a mean of 3.89.

### Effect of ICT aided decision making on performance of Huduma Centre

The respondents were requested to rate statements on effect of on performance of Huduma Centre.

**Table 2: Effect of ICT aided decision making on performance of Huduma Centre**

Statements	Mean	Std. Dev.
ICT has led to high speed in strategic decision making	4.00	0.311
ICT has improved process of strategic decision making.	3.75	0.214
ICT ensures there is high Involvement of all management levels.	3.65	0.321
ICT facilitates Online application by employees	3.61	0.451
ICT enables Online information processing	3.78	0.342
ICT enables recording of Staff reporting	3.76	0.221
Through ICT Staff appraisal has been made easy	3.62	0.214

From the study findings in table 2, the respondents indicated to a great extent ICT has led to high speed in strategic decision making as shown with a mean of 4.00 ICT has improved process of strategic decision making as shown with a mean of 3.75, ICT

ensures there is high involvement of all management levels as shown with a mean of 3.65, ICT facilitates Online application by employees as shown with a mean of 3.61 and ICT enables Online information processing as shown with a mean of

3.78, ICT enables recording of Staff reporting as shown with a mean of 3.76, Through ICT Staff appraisal has been made easy as shown with mean of 3.62.

### Effect of ICT governance on performance of Huduma Centre

The respondents were requested to rate statements on effect of ICT governance on performance of Huduma Centre.

**Table 3: Effect of ICT governance on performance of Huduma Centre**

Statements	Mean	Std Dev.
ICT enables Business processes	3.52	0.023
ICT aids in enhancing Institution standards	3.63	0.521
The institution has measured the value of ICT governance in meeting institutional ICT requirements.	3.78	0.431
ICT strategies are regularly reviewed and updated in line with institutional strategy changes.	3.98	0.721
The institution has a documented ICT strategy, or equivalent document.	3.73	0.212

From the study findings in table 3, the respondents indicated to a great extent that ICT has led to high speed in strategic decision making, as shown with a mean of 4.00, ICT has improved process of strategic decision making as shown with a mean of 3.75, ICT ensures there is high Involvement of all management levels as shown with a mean of 3.65, ICT facilitates Online application by employees as shown with a mean of 3.61, ICT enables Online information processing as shown with a mean of 3.78, ICT enables recording of Staff reporting as

shown with a mean of 3.76, through ICT Staff appraisal has been made easy as shown with a mean of 3.62 and the Clients feedback is easily monitored by management and shown with a mean of 3.91.

### Effect of ICT Infrastructure on performance of Huduma Centre

The respondents were requested to rate statements on effect of ICT Infrastructure on performance of Huduma Centre.

**Table 4: Effect of ICT Infrastructure on performance of Huduma Centre**

Statements	Mean	Std Dev.
ICT strategy has enhanced system security in the organization	3.95	0.453
Through ICT Personal data from clients is secured	3.74	0.743
There is high investment on ICT in the organization	3.88	0.451
ICT strategies are geared towards high storage of data	3.71	0.321
The institution has clear ICT strategy for strong network Infrastructure	4.0	0.541

From the study findings in table 4, the respondents indicated to a great extent, ICT strategy has enhanced system security in the organization as shown with a mean of 3.95, Through ICT Personal data from clients is secured as shown with a mean of 3.74, there is high investment on ICT in the organization as shown with a mean of 3.71, The institution has clear ICT strategy for strong network Infrastructure as shown with a mean of

The institution has clear ICT strategy for strong network Infrastructure as shown with a mean of 4.0.

### Overall performance of Huduma Centre

The respondents were requested to rate statements on overall performance of Huduma Centre.

**Table 5: Overall performance of Huduma Centre**

Statements	Mean	Std. Dev.
Connectivity among different department has made interactions easier hence serving the customer faster	4.11	0.021
Time to realize challenges is almost immediately since the feedback is available	3.86	0.631
Customer are happy when we are being served within our premises	3.75	0.611
Infrastructure available are modern and are able to serve customers better compared with the previous once	3.82	0.024
We receive more customers period after period	3.92	0.311
There are no long queue within the premises	3.81	0.231
Customers are mostly well organized and calm while they are being served	3.74	0.314

From the study findings in table 5, the respondents indicated to a great extent connectivity among different department has made interactions easier hence serving the customer faster as shown with a mean of 4.11, time to realize challenges is almost immediately since the feedback is available as shown with a mean of 3.86, customer are happy when we are being served within our premises as shown with a mean of 3.75, Infrastructure available are modern and are able to serve customers better compared with the previous once as shown with a mean of 3.82, we receive more customers period after period as shown with a mean of 3.92, there are no long queue within the premises as shown with a mean of 3.81 and customers are mostly well organized and calm while they are being served as shown with a mean of 3.74.

### Regression analysis

A multivariate regression model was applied to determine the relative importance of each of the four variable affecting performance of Huduma Centers. The regression model was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon_0$$

Whereby;

Y = Performance

$x_1$  = Communication Plan

$x_2$  = ICT decision making

$x_3$  = ICT Governance

$x_4$  = ICT Infrastructure

$\beta$  = Coefficients

$\epsilon$  = Error Term

The following regression equation was established from the data;

Using the values of the coefficients ( $\beta$ ) from the regression coefficient established multiple linear regression equation takes the form of;

$$Y = 5.056 + 0.161X_1 + 0.422X_2 + 0.178X_3 + 0.207X_4$$

Where;

Constant = 5.056; when value of the independent variables is zero, the procurement management process would take the value 5.056.

$X_1 = 0.162$ ; One-unit increase in communication plan results in 0.162 units in the performance of Huduma Centre

$X_2 = 0.423$ ; One-unit increase in ICT decision making results in 0.423 units in the performance of Huduma Centre

$X_3 = 0.179$ ; One- unit increase in ICT Governance results in 0.179 units in the performance of Huduma Centre

$X_4 = 0.208$ ; One- unit increase in ICT Infrastructure results in 0.208 units in the performance of Huduma Centre

Ranking the predictors variables in terms of their individual influence on the performance of Huduma Centre, the table 6. shows the relative importance of each the predictions i.e. ICT decision making (0.423), ICT Infrastructure (0.208), ICT Governance (0.179) and communication plan (0.162) respectively.

**Table 6: Regression Coefficient**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.056	3.061		1.652	.104
	Communication Plan	.162	.073	-.204	-2.221	.030
	ICT decision making	.423	.079	.623	5.344	.000
	ICT Governance	.179	.058	.375	3.063	.003
	ICT Infrastructure	.208	.039	.472	5.328	.000

**Dependent Variable: Performance****CONCLUSIONS AND RECOMMENDATIONS**

The findings indicated that communication plan has great effect on performance of Huduma Centre. The communication plan forms and creates flow of information on in ICT strategy implementation. The organization may not be in a position to execute its mandate without having a clear path for communication plan. This aids fast response of client's information queries as well as quick response by top management a salient feature of Huduma centers.

The study found that ICT decision making influence the ICT strategy implementation and performance of organization. This study therefore concludes organizations should consider ICT as a pillar of all the artificial intelligence to spur growth and attaining its goals and objectives. The findings of the study also indicated that ICT Governance affected organization performance. This study therefore concludes that organization should decide the ICT governance arrangements for each key decision area. The harmonizing of each decision making group will significantly affect the decisions and outcomes and is therefore able to affect organization in a positive way.

The study concludes that communication plan is critical for effective ICT strategy and performance of Huduma Centre. The study recommends therefore that the top management in ICT strategy implementation should bear in mind the expectations of both the employees and clients in

terms of fast access of information and align the strategy with goals and objectives of the organization. The study further concludes that through ICT that organization are in a position to make real time decisions since the management can be in a position to fast rack the information flow in the organization during Key decision making processes.

The study found that the ICT aided decision making is vital for overall performance of Huduma Centres. This study recommends that organizations should embrace ICT strategy in decision making. This would cut costs of operations and mitigate losses that would have been incurred in lengthy boardroom meetings. The study established that ICT infrastructure is a key element in ICT strategy Implementation which in turn affect performance of Huduma Centre. This study therefore recommends that organizations should strive to conduct research and development to employ cost effective ICT infrastructure which would lead to enhanced systems security, data storage during ICT strategy implementation and increase the service delivery to great levels.

**Recommendations for Further Studies**

The study recommended that further studies should be carried out on ICT strategy implementation in other sectors of the economy. Further research can be undertaken on ICT strategy implementation in private owned firms in Kenya. The study can also be extended to Non-governmental organizations.

## REFERENCES

- Amhalhal, A. (2021). Organisational performance and the use of multiple performance measures in an emerging market. The University of Huddersfield. *Institutional Repository*.
- Amir, G. Joseph, K. Florence. A, Waswa. (2015). Effect of Huduma Centers (One Stop Shops) in Service Delivery- A Case Study of Mombasa Huduma Center.
- Garson, D.G. (2016). Public Information Technology and E-Governance. Sudbury, MA: *Jones and Bartlett Publishers*.
- Héroux, S. & Fortin, A. (2017). Exploring the influence of executive management diversity on IT governance. *Journal of Information Systems and Technology Management - Jistem USP*, 14(3), 401-429
- Jayanagara, O., Darmanto, D., & Istianda, M. (2022). Influence of Organizational Culture, Success Context, and Ict Strategy on Organizational Performance, and their Implications on Sustainable Competitive Advantage (Empire Study at LPP TVRI Jakarta). *Budapest International Research and Critics Institute (BIRCI-Journal)*, 5(1), 1-8.
- Kabeyi, M. (2019). Organizational strategic planning, implementation and evaluation with analysis of challenges and benefits for profit and nonprofit organizations. *International Journal of Applied Research and Studies*, 5. 27-32.
- Kariuki, A. K. (2015). Impact of Information Technology on Organizational Performance: Case of Population Services Kenya. Kenyatta University. *Institutional Repository*.
- Kobia, M., and D. Oliech (2016). "The Case of Huduma Kenya Program in Kenya," Case Study, Commonwealth Association for Public Administration and Management.
- Madadipouya, K. (2015). A Review on the Strategic Use of IT Applications in Achieving and Sustaining Competitive Advantage. *International Journal of Managing Public Sector Information and Communication Technologies*. 6, 10.
- Mbithi, M. B. (2016). Influence of strategy implementation on performance of Kenya bureau of standards. The University of Nairobi. *Institutional Repository*.
- Mutuku, G. K. (2018). Strategic use of Information Technology and Performance of Machakos Huduma Centre. The University of Nairobi. *Institutional Repository*.
- Mwori, E. (2016). The Relationship between ICT Strategy and Public Service Delivery: A Case Study of the ICT Authority. The University of Nairobi. *Institutional Repository*.
- OECD (2016). Digital Government Strategies for Transforming Public Services in the Welfare Areas.
- Rani, P. (2019). Strategy Implementation in Organizations: A Conceptual Overview. *Journal of Management*, 14 (3), 205-218.
- Vejseli, S. & Rossmann, A. (2017). The Impact of IT Governance on Firm Performance - A Literature Review. *A Conference paper: At: Langkawi, Malaysia*.
- Wambura, P. M. (2017). Assessing the effectiveness of Huduma Centres (One-Stop-Shops) in the Delivery of Public Services: The case of Nairobi City County, Kenya. Africa Nazarene University. *Institutional Repository*.

- Yatich, K.H. (2018). Attaining competitive advantage through energy efficiency: A cooperative strategic perspective. *African Journal of Business Management*. 12 (13), 406-414.
- Yli-Renko, H., Denoo, L., Janakiraman, R. (2020). A knowledge-based view of managing dependence on a key customer: Survival and growth outcomes for young firms. *Journal of Business Venturing*, 35(6).