EFFECTIVENESS OF INFORMATION AND COMMUNICATION TECHNOLOGY IN ACCESSING GOVERNMENT SERVICES AT GPO HUDUMA CENTRE IN KENYA

BY

ESTELLA WANJIRU NG'ANG'A

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10TH NOVEMBER, 2021

DECLARATION

I hereby declare that this project is my original work and has not been presented for a degree, diploma or certificate in this or any other university.

23rd December,2021

…….. ……

Estella W. Ng'ang' a
K50/10715/2018

Date

This research project has been submitted for examination with my approval as the University Supervisor

23rd December, 2021

…… ……..

Dr. Martina Mutheu
Senior Lecturer
Department of Journalism and
Mass Communication
University of Nairobi

Date

DEDICATION

I dedicate this research project to my family who have supported me during this academic journey.

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I wish to acknowledge my supervisor Dr. Martina Mutheu for the guidance and support that she accorded me during the research period. I am grateful to institutions and people who contributed to the success of this project. These include; the University of Nairobi, Department of Journalism and Mass Communication, GPO Huduma Centre and respondents who provided valuable information that made this study a success.

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ABSTRACT

The purpose of this research was to determine the efficiency of information and communication technology (ICT) in gaining access to government services. It was carried out at Nairobi's GPO Huduma Centre, a government initiative that has invested in technology to bring services closer to the people. ICT provides opportunities for development. However, there are challenges that impede its effectiveness, primarily due to a lack of adequate ICT infrastructure, low capacity in ICT skills among the citizens and government employees, and device affordability, resulting in the digital divide between technological haves and have-nots. The main objectives were: to determine the suitability of government ICT services, to evaluate the usage of ICT platforms in accessing services, to assess the performance and usefulness of the ICT platform, and to assess user satisfaction with ICT services provided at GPO Huduma Centre. The study employed the Technological Acceptance Model (TAM) theory to describe how people adopt technology and make informed decisions about it. In this study, a descriptive survey research design was used. The study's target audience included both government employees and platform users. The respondents were given primary data questionnaires. Statistical Package for Social Sciences (SPSS) version 20 was used to analyze the results. The findings show that ICT was immensely used in offering government services. The ICT services offered to the citizens were suitable for their needs and the government had put in place the right infrastructure to provide government services using ICT. The staff working at Huduma Center had the requisite skills to provide support for those seeking government services through ICT platforms. When used, ICT enhanced service delivery to the citizens. In realizing the benefits associated with ICT platforms in accessing government services factors such as efficiency, timeliness and cost effectiveness, were considered by the users. However, some of the users did not have the requisite skills to use these platforms and the government had not carried out any tangible training interventions to support skills. This meant that some of the citizens especially the old were not using these platforms maximally. There were also challenges associated with limited access of the government ICT online systems in some instances especially during some seasons when many users converged online. Electricity connectivity and challenges related to internet infrastructure also meant that some people could not readily access government services online. In some parts of Nairobi, urban poverty also excluded some users. Several recommendations were made based on the study's findings. When ICT platforms are launched, the government should put in place mechanisms to improve citizen training on how to use them. The capacity of ICT platforms to accommodate more users online during peak periods should also be enhanced. Where possible, the government should enhance accessibility of ICT support infrastructure such as internet and electricity connectivity among low income persons to enhance their access to government services online. ICT platforms should also be made user friendly to enhance inclusion of all citizens irrespective of age and socioeconomic status.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Kariuki (2018), describes ICT as a broad word that consists of "any communication device or application as well as the various services and applications that are associated with them." The importance of information communication technology is generally regarded to lie in its potential to expand access to information and communication. Information can be found, explored, analyzed, and exchanged using ICT facilities. This allows users to quickly access ideas and experiences from a diverse group of people, communities, and cultures. It is also important to acknowledge the full potential of deploying information communication technology to enhance the delivery of services. It is significant that the United Nations, through its UN Development program keenly puts an emphasis on ICTs for development as a way of bridging the technology divide between haves and have-nots.

According to Zirima (2017), the role of ICT in the provision of government services to the people is accordingly being emphasized to support effective working together of systems in the government. For reducing poverty, increasing productivity, bringing about economic growth, and entrenching a culture of accountability and governance, information system technologies are essential infrastructure. As a result, it is projected that ICTs in the public sector would revolutionize both the way public services are delivered to citizens and the fundamental connection between governments, communities, and, most crucially, citizens in the future years (Tusubira, 2016).Worldwide, innovations in technology have eased communication and intensified interactions. Deployment of ICT solutions to promote communication plays

a huge role in effective public service delivery. ICT is becoming a driving force in service delivery as well as promoting transparency and accountability. ICTs play a critical role in ensuring efficiency and effectiveness and thus facilitate improved government performance. It is a means of engaging citizens in decision-making process and also acts as a means of information sharing and communication (See, 2007).

ICT has played a key role in operations revolution as well as in service delivery across the globe. Adopting ICT improves efficiency and, as a result, service delivery (Soroor & Tarokh, 2006). As a result, in order for a company to be competitive, it must invest in proper information and communication technology as well as continually review and enhance the effectiveness and efficiency of its corporate information system. ICT is crucial in the banking sector in both developed and developing countries, since it has substantially altered corporate processes, marketing, and service delivery. Commercial banks, for example, have used ICT to introduce new services and capable facilities for deploying banking products such "as internet banking, mobile banking, and automated teller machines" (Kariuki, 2018). Due to this, the financial sector has seen unprecedented level of operation and provision of services. Thus more financial institution are increasingly investing in ICT in order to be at par with technological advancement so as to be able reduce business expenses, and to widen the scope of financial products available to their customers.

The use of ICT has enabled businesses and individuals carry out transactions with the government and access services in a fast and effective manner (Zekos, 2013). There has been increased usage of ICT to disseminate information and trigger public participation. Provision of government services is being transformed and there is improved communications and services. Collaboration has been enhanced within the public

sector and between government and its citizens. The government must ensure that citizens get the most out of ICT while also safeguarding their interests in this fast-paced business (Chen & Lin, 2016).

The evolution of ICT is currently shaping businesses across the globe. Thus, importance of ICT to the development of individuals, businesses, governments, and the entire world cannot be overstated. Information and communication technology is therefore regarded as the driving force (Onobrakpeya, Nana, & Odu, 2018). Nations like Nigeria have come to realize this fact and the government at different levels in the nation has adopted technology towards increasing national productivity. As a result, using ICT in governance is expected to enhance decision-making by increasing citizen participation in economic development, support modern work force, and enhance social well-being and facilitate digitalization. One of the areas in which government has tried to make the impact of ICT felt is in the ministries. Government ministries are known for gathering, processing and storing a wide variety of information required for immediate or future purposes (Oden, 2017).

The fast advancement of ICT including explosive rise of information services, has fundamentally altered the global economic and social landscape. ICT has transformed and improved employment, development, productivity, efficiency, and service delivery. Kenya has recently focused on transforming into a knowledge-based economy, relying on the creation, distribution, and application of information technologies to improve service delivery. ICT has played an important role as both an innovative economic sector and a catalyst for a variety of sectors.

ICT has been highlighted by the Kenyan government as a critical facilitator in achieving Vision 2030 goals and aspirations, which would turn Kenya into a knowledge-based

economy by providing quality, cheap, and dependable ICT solutions to the entire country. The efforts of Kenya in providing public services using information and communication technologies have developed relatively advanced ICT government service delivery capabilities. In addition, according to the United Nations Survey of 2016 on government e-readiness, Kenya was ranked position 119 out of 193 members states and tenth in Africa. However, it appears that Kenya's e-government development is still at a low level due to insufficient infrastructure, policy, and human capital (Imbamba & Kimile, 2017). There is evidence that e-government improves public service delivery, information, productivity, or participation, according to Njuru (2011). In this context, the main reason of this research was to examine the effectiveness of ICT in accessing government services at GPO Huduma Center in Kenya.

1.2 Statement of the Problem

In any government entity, service delivery typically includes a broad range of tasks such as policy development, budget planning, bill writing, public education, and the storage of official documents (Kariuki, 2018). According to Ononbrakpeya et al. (2018), in order to complete these tasks, the government often uses information and communication technology devices to collect, process, and store a wide range of data that is needed for immediate or future purposes in relation to these activities. Kioko, Nyang'u, and Kamau (2018), on the other hand, argue that government entities in developed countries struggle to effectively use information and communication technology. Even if they want to embrace ICT, they frequently lack the vision and knowledge required to do so effectively. It can be difficult to recruit skilled technical staff after an ICT investment has been made, and staff training is costly (Chen & Lin, 2016).

The ICT industry is complex, therefore, for one to benefit, it is essential to keep up with evolving technology. With the ever-present threat of cyber-security, violation of privacy, and a lack of proper regulatory mechanism to regulate the industry and protect its consumers, the evolution of digital media presents new challenges to the industry. Due to the widespread use of ICT services, it is necessary to arm users with information in order to allow sufficient use, create capacity, make services more accessible, and satisfy an increasingly informed citizenry that demands high-quality government services (Soroor & Tarokh, 2006).

Kioko et al. (2018) looked at "the impact of ICT facilities and perceived benefits on service delivery in the Machakos county government." The findings demonstrated that the Machakos County Government believes that ICT holds a crucial position in the provision of public services to the people and, thus, is a crucial component in ensuring high standards of services delivered.

Kariuki (2018) conducted research to determine the effect ICT on how people access services in Kenyan banks. The findings show that ICT adoption has considerably changed bank operations and service delivery mechanisms. A similar study conducted by Ngina (2013) showed that Kenyan commercial banks have largely benefited from advances in ICT to provide quick and efficient service, provide more banking information to customers, and provide banking convenience to geographically distributed customers.

Masai (2012) conducted a study to assess the degree to which ICT is used in service delivery in Kenya's public universities. The findings show that service quality in the institutions has remained unsatisfactory due to underutilization of resources. The institutions do not have all of the essential ICT services that are needed for successful service delivery. Further investigation found that university staff lacked sufficient ICT skills, which hindered service delivery.

Nyaboke, (2018) carried out an investigation to analyze the impact of ICT on Huduma Centres especially when it came to public service access in Nakuru County, Kenya. The result show that Huduma Centres provided services that were dependable and that customers were pleased with how they were handled. However, the study concluded that ICT systems needed to be improved further in terms of user-friendliness, usability, and convenience.

While the studies described have categorically demonstrated the value of ICT use in various sectors, given that Kenya's government is increasingly automating services, further study is needed to evaluate the effectiveness of ICTs in accessing government services from a system perspective. This will be a method of assessing a government's ability to respond to citizen demands for more efficient ICT access. Despite the link between effective administration and public satisfaction, research on ICT measurement in the public sector has been minimal thus far (UN, 2010). Internal procedures, systems, and organizational arrangements are evaluated in this study to promote efficient e-government functions and enhanced service delivery. As a result, the goal of our research is to close this gap.

1.3 Purposes of the Study

1.3.1 Overall Objective

The overall goal for this work was to examine the effectiveness of information and communication technology in accessing government services.

1.3.2 Specific Objectives

(i) To assess the suitability of ICT services offered by government at GPO Huduma Centre

(ii) To examine usage of ICT platform in accessing services at GPO Huduma Centre

(iii) To evaluate the performance and usefulness of the ICT platform at GPO Huduma Centre

(iv) To assess user satisfaction with ICT services offered at GPO Huduma Centre

1.3.3 Research Questions

(i) How suitable are ICT services offered by government at GPO Huduma Centre?

(ii) What is the level of usage of the ICT platform to access services at GPO Huduma Centre?

(iii) What is the level of performance and usefulness of the ICT platform in accessing government services at GPO Huduma Centre?

(iv) What is the level of user satisfaction with ICT services offered at GPO Huduma Centre

1.4 Justification and Significance of the Study

1.4.1 Significance of the study

1.4.1.1 Researchers and Academicians

The academic world will profit from the findings of this study in terms of knowledge addition, as they will be able to recognize the usefulness of ICTs in government service delivery. Students and teachers can also use the findings of this study in their literature review for topics cutting across information and communication technology.

1.4.1.2 The Government

The government would be the primary beneficiary of the findings obtained from the study as it would highlight the effectiveness or otherwise of ICT in accessing government services and enable government review policy with the aim of maximizing on its investment.

1.4.1.3 ICT Industry

By embracing the findings on the usefulness of ICT in accessing government services, the ICT business would gain from the conclusions of this study. The data will aid industry actors in making well-informed decisions about the accessibility of services via ICT.

1.4.1.4 Citizens

This research will help the citizens to gain insights on the effectiveness of information and communication technology in accessing government services. This would help citizens to provide feedback necessary for improvement on the services offered.

1.4.2 Policy Justification

This research would help policy makers in government improve on ICT services offered, build capacity of users to effectively take advantage of services offered thus ensuring citizen satisfaction. Incorporate citizen views, empower them with knowledge on how to access the services and improve on connectivity to ensure reach effectiveness.

1.4.3 Rationale

Challenges experienced by citizens in their quest for services indicate there are areas that need improvement and there is need to take into account citizens views in order to make services offered responsive to their needs. Therefore, it is prudent that this study is carried out.

1.5 Scope and Limitation

The study was conducted at GPO Huduma Centre, Nairobi Kenya and targeted employees and users of services of varying ages. The study utilized both quantitative and qualitative approach. It was expected to take a period of three months from proposal development stage to presenting of the results and findings obtained from the respondents. However, disruptions and complexities emanating from Covid-19 pandemic delayed the completion of the study.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter presents an analysis of work done on the effectiveness of information and communication technology. It concentrates on the applicability of ICT services, user capability, and citizen happiness. The impact of information and communication technology adoption on service delivery in Kenya's Huduma Centre platform is highlighted in this chapter. The chapter also reviews and analyzes the material studied, with a particular focus on user happiness, ICT system utilization and performance, cost-benefit analysis, and the impact of ICT infrastructure on service delivery. The theoretical foundation, conceptual framework, and summary of literature review are also included in this chapter.

2.2 Information Communication Technology

Many countries throughout the world have begun on programs to implement "e-government initiatives for efficient and effective government operations, with the goal of making government more accountable and transparent, as well as providing timely services that are more convenient and cost-effective" (Finnie, Mueller, & Sweetman, 2018). This is because the availability of ICT framework is one of the preconditions for e-government deployment and adoption.

An ICT system is made up of tangible hardware and ethereal software that allows for the generation, acquisition, storage, dissemination, retrieval, manipulation, and transmission of data. Hardware, software, data, and the people who utilize them are all

part of an ICT system for an e-government project. The effectiveness and success of e-government adoption are dependent on an ICT system.

The rapid rise of ICT has prompted a paradigm change around the world, and “many governments, like the business sector, have recognized the importance of e-government as a tool for responsive governance” (Chen & Lin, 2016). Information and communication technology, when properly implemented and utilized, has the ability to alter public service delivery. The advantages of e-government adoption are undeniable. Although it is clear that e-government is a powerful driver of economic growth and saves time while also providing accountability, efficacy, and transparency to government, there are numerous obstacles to its investigation and fulfillment (Darling, 2012). According to Chen & Lin (2016), “lack of awareness, access to e-services, usability of e-government websites, lack of trust and security concerns, data protection laws, digital divide, lack of citizens' interest, lack of government support, and lack of strategy and frameworks are among the challenges identified in the e-government study.” Regardless of the benefits that electronic technology brings into government, “there is a high rate of failure of e-government programs, particularly in poor countries” (Abramovsky & Griffith, 2006).

2.3 Suitability of ICT services offered by government at GPO Huduma Centre

In a study by Sharma (2017) on the effects of IFMIS on government procurement, the interviewees had varying expectations on what the system needed to offer them. Some of the respondents expected the system to facilitate automated revenue collection from the various businesses trading with the government, enhance reporting capabilities within government departments, automation of the procurement process in terms of

requisition, tendering, contract award and payment, provide accurate information on the Government's financial position and improve decision making within government departments in terms of procurement. With the different understanding of services and expectations from the government, Sharma found out that people within the age bracket of 20-40 years had more expectations from the government as compared to people who are slightly older.

Evans and Yen (2016) in a survey study on the evolving relationship of government and citizens, domestic as well as international development, established that governments which had adopted technology systems were more efficient when compared to governments that had not adopted technological systems in service delivery. The online survey that randomly interviewed citizens within various African countries found out that citizens in countries where technology was implemented were positive about government service delivery while citizens in countries that had not implemented technology had more complaints about the government (Ormrod, 2010). Further, governments that had invested heavily in ICT systems provided services quickly and were fast in decision making than their counterparts who had not invested in technology.

2.4 The performance and usefulness of the ICT platform

Expertise is exceptional knowledge or skill that is developed by study, training, or practice. Employee technical expertise is positively related to performance. Staff development through training is geared towards enhancing technical knowledge and competencies of staff by way of improving their knowledge base, enhancing better performance (Nyanjom, 2013). Through the conduct of career training and

development, the level of expertise and knowledge increases hence improving on employee work performance that is directly related to the attainment of service delivery goals.

This match of organizational goals against set ones leads to better service delivery as goal congruence is attained. The numerous benefits that are achieved through employee personal career development include: additional employees morale, low production costs and improved employee confidence. All these benefits positively impact performance (Becker, 2011). This implies that adopting employee training will achieve optimal performance as employees are willing and ready to give their all towards successful project completion that in turn positively affects performance.

Top management ought to depict their leadership skills and capabilities by giving purposeful instructions to subordinate employees. This will in turn improve on performance in assignments since the juniors will be better placed to apprehend given assignments. In essence, workers who are better informed will make less operational mistakes thus increasing on efficiency hence improve on positive outcomes of service delivery (Finnie et al 2018). Service Delivery is a function of employees` competencies, knowledge and skills. In fact, competencies and service delivery are positively correlated as optimal project results cannot be obtained if the engaged labor force is incompetent (Burke, 2013). Additionally, service delivery performance is also influenced by intelligence, training and development, knowledge level and personality traits (Phillips, 2013). According to Tanui (2014), a county human resources system that promotes desirable teamwork and accommodates all technical expertise and

contributions from all team members contributes to the employee job satisfaction and motivation, which leads to better task execution and, as a result, better service delivery.

According to Livingstone (2012), “35% projects in developing countries failed, 50% partially failed, and only 15% succeeded.” As a result, the public sector is falling behind the commercial sector in terms of using ICTs for back-office functions. The majority of them have not fully embraced ICT in automating their processes. Moreover, operational characteristics, new managerial skills, new planning capabilities and the availability of new ICTs must be joined together with a paradigm shift in the leadership of government organisations so as to fully realize the value of e-government adoption.

2.5 Usage of an ICT platform in accessing government services

Individuals' attitudes toward an idea, object, person, or circumstance, particularly when solving a problem, are characterized by a pattern of behaviors (Kanyua, 2015). Affective (feelings), cognitive (held opinions), conative (inflation for action), and evaluative are the four elements of attitudes (positive or negative stimuli). ICT developers and users in an organization decide and, conversely, control how it is used. The mindset of data frameworks might be resistant to advancements that would jeopardize their current position, strength, and working habits. As it stands, Thong (1999) believes that the current mood can influence how people perceive the importance and utility of a particular ICT.

For technological change management, “an understanding of the organization and individual decisions to accept technology is required.” The “government must have a vision, and the system must be accepted and adopted by the intended users, in order to

successfully implement and adopt e-government for service delivery" (Antwerpen & Ferreira, 2016). For example in South Africa, the ability to adopt and deploy ICT is influenced by many factors. According to Shresta (2007), adoption is impacted by money and the availability of computer and internet capabilities in poor countries. As a result, the operationalization of e-government brings about major changes in the public sector's structure, culture, and values, as well as commercial practices. Human, organizational, cultural, political, and technological challenges surround the radical shift, all of which must be addressed for successful adoption. It transforms the public sector's processes, structures, cultures, and individual behavior (Fujitani, Bhattacharya, & Akahori, 2011).

Rapid advances in ICT, as well as the resulting explosive growth of the information services sector, have drastically altered the economic and social landscape. According to Chen and Lin (2016), "technology has had a significant impact on the expansion of service delivery alternatives." In addition, the government, probably more than any other organization, can benefit from the efficiencies and increased service that digital operations can provide. As a result, ICT has made it possible for service delivery to bring together multiple data operations platforms. Furthermore, "ICT is increasingly being used as a strategic instrument to support government agendas and program delivery more efficiently" (Yator et al 2014).

According to Layne and Lee (2001), e-government implementation is based on providing people with access to information at a single stage, such as the e-citizen website page and Huduma centers. To achieve this, data innovation guidelines and methods must avoid any equipment or system boundaries that would prevent the use of

e-government frameworks. IT models, according to Tim, M. (2006), guide how ICT resources are acquired, managed, and used within the organization.

Restrictions in paper-based documents that provide temporal, geographical, and financial information necessitate migration to electronic mediums. Furthermore, paper-based systems have little utility, and many people are incapable of performing without making multiple errors. Having electronic systems can help administration with basic leadership and also improve working effectiveness, thus improving administration efficiency (Ayers, 2009).

2.6 Theoretical Framework

The majority of research activity is based on theories. According to Teijlingen (2010), the theoretical framework is supplied by the scholar in order to position a specific study effort in the context of other similar work in the same field. As a result, it supports the intended research effort by identifying known relationships between variables and creating parameters or constraints for the proposed study. The "Technology Acceptance Model"(TAM) theory is the foundation of this research (Davis, 1989).

2.6.1 Technology Acceptance Model (TAM) Theory

TAM is utilized in this work to describe the aspects that influence technology acceptance and deeds, as well as to provide a basic hypothetical explanation (Bertrand and Bouchard, 2008). According to Ducey (2013), "TAM includes Perceived Ease of Use and Perceived Usefulness, which are important factors of technology acceptance and user behavior." TAM is primarily used to forecast the acceptance of technology and to identify obstacles that must be overcome in order for it to be acceptable to users.

According to this approach, for ICT to be adopted, factors such as perceived usefulness and perceived ease of use should be in place. This is due to the fact that perceived usefulness and perceived ease of use influence an individual's intention to use a system (Venkatesh, Morris, Davis and Davis, 2003).

The perception that a certain technology will assist a user in achieving his or her job goals is known as perceived usefulness. “In other words, perceived usefulness refers to a person's belief that adopting a certain system will improve his or her job performance” (Davis, 1986). The subjective belief that using new technology does not require a lot of time and effort is referred to as ease of use. According to Davis (1986), users are more inclined to embrace an application that is believed to be easy to use. Also, perceived simplicity of use is thought to have a direct impact on perceived usefulness.

The delivery of user-focused services is frequently a continual cycle of operations. It defines how well a supplied service meets the customer's expectations (Lewis & Booms, 1983). However, not everyone will immediately adopt a technology despite obvious benefits. The adoption process is usually chronological, and can be categorized into adopter types depending on how fast a technology can be adopted. According to Rogers (1962) innovators are willing to test forth new ideas. The pursuit of fresh ideas draws innovators away from their usual network of peers and into more cosmopolitan social ties. Typically, innovators have significant financial resources as well as the capacity to comprehend and apply complicated technical information than their peers.

In comparison to innovators, early adopters are more likely to be absorbed into the local social system. Locals, rather than cosmopolitan innovators, are regarded as early adopters. In most social systems, people who were early adopters appear to have the

most influence. They give other adopters advice and information about a new technology. To help speed up the dissemination process, change agents will seek out early adopters. Early adopters are frequently well-liked by their peers and have a track record of successfully implementing new ideas in a discreet manner (Rogers, 1971).

Early majority adopters do receive innovations just ahead of everybody else. They are instrumental in technology adoption, yet they are rarely seen in positions of leadership. They tend to hold an important position in the technology adoption process. They act as a bridge very early adopters and late adopters. On the other hand, the late majority take time to accept new technologies. For them, the need to make monetary gain may motivate them to accept new ideas. Usually, they are careful and not in hurry to accept new things until a sizeable number of the population has adopted.

The laggards are the last to adopt a new idea. This group consists of individuals who have no say in society leadership. They just follow very late what the society decides to do. “They are fixated on the past and must make all judgments in terms of earlier generations. Individual laggards mainly interact with other traditionalists.” “More contemporary ideas already in use by innovators may render an innovation finally embraced by a laggard obsolete. Laggards are likely to be distrustful of innovators and change agents as well as innovations” (Rogers, 1971).This is vividly seen in government service delivery, where paper work coexisting with digital services is still present.

A clear policy shift in government toward adopting ICT in service delivery, has witnessed a gradual move away from paper with both services at times co-existing. A

good example is application for the national identification card which can be done both online and offline. Though the vast majority of government services are now accessible over the internet. The public gets online access to a variety of public services given by numerous government ministries, departments, and organizations through the e-Citizen web platform. The government has gradually extended the amount of online services available to the general people. iTax allows you to pay your taxes, renew your driver's license, register your business, apply for a passport, and apply for death and birth certificates, among other things. Huduma Centres, which are one-stop-shop citizen service centers that provide efficient government services at the citizen's convenience from a single location, complement the portal. This not only makes it easier for people to access various government services and information, but it also improves service delivery efficiency, convenience, and timeliness. It is an important instrument in Kenya's anti-corruption struggle because it eliminates the need for a "broker," making the service cheaper and faster while also fostering honesty in society.

2.7 The Conceptual Framework

The figure below shows the conceptual framework that the study anchors on.

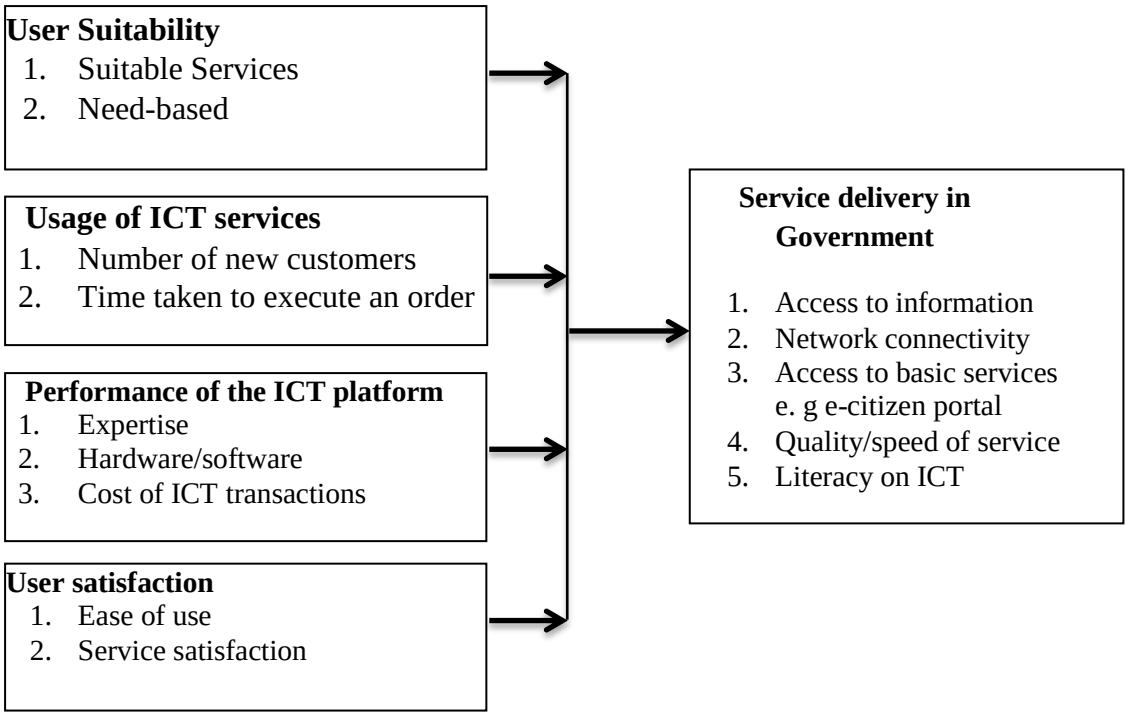

Figure 2.1 Conceptual Framework

2.8 Chapter Summary

The literature review on the effectiveness of information and communication technology in gaining access to government services was presented in this chapter. The theoretical foundation as well as the conceptual framework were presented in this chapter.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

This section focuses on the research method utilized to conduct the study. This chapter covers the research design, target population, sampling approach, data collection, analysis, and presentation of the findings.

3.2 Research Design

This research adopted a descriptive survey design. This is a systematic, empirical investigation in which the researcher does not have direct control over independent variables because they have already manifested or cannot be modified essentially (Yaghoubi, 2011). The research design was chosen because of its ability to create a profile of a phenomenon. The goal of descriptive research is to learn how, who, when, and where a phenomenon occurs so that a profile can be created (Mugenda and Mugenda, 2003).

3.3 Research Approach

Mixed research approach was used to establish a clear and objective viewpoint, a disciplined and systematic procedure, and a reality-based approach to allow results free of hazy approaches, hypotheses, and assumptions. The study used both qualitative and quantitative methods. These were used in data gathering and analysis in order to provide a comprehensive look at the study problem (Creswell, 2011). After carefully designing pretesting procedures that were executed based on time and logistical factors in order to ensure objective response to the study questions, the two methodologies were applied.

3.4 Sampling

3.4.1 Sampling Frame

Cooper & Schindler (2014) states that a sampling frame is a set of units from which a sample of interest is drawn. A sampling frame was received from GPO Huduma Center Nairobi for this study.

3.4.2 Sampling Technique

A sampling technique is system that is used by the researcher in ensuring that different components of the study that are either homogenous or heterogeneous are all included in the final sample selected (Cooper & Schindler, 2014). This study used simple random sampling technique so that all employees working at Huduma Centre as well as users accessing government services are given equal chance of being selected in the eth final sample.

3.4.3 Sample Size

Sample size is the smaller unit that represents a larger population from which the researcher is interested in drawing inferences (Creswell, 2018). This study targeted the staff and customers at GPO Huduma Center Nairobi. The sample size for the study was determined using 90% of confidence level.

$$n = \frac{N}{(1 + Ne^2)}$$

Whereby:

Where, n = sample size, N = Study Population, 1000 in this case

e = Alpha level of 0.05

$$n = \frac{1000}{1 + 1000(0.05^2)}$$

$n = 286$

Therefore, a sample of 286 employees and users were targeted

3.5 Data Collection and Data Collection Tools

The procedure by which the researcher collects data from respondents in order to answer research questions or objectives is referred to as data collection (Creswell, 2018). This research relied on primary data. Questionnaires were used to collect data from the intended respondents. A questionnaire is a type of data collection tool made up of a series of questions designed to elicit data and information from respondents (Sekaran & Bougie, 2013). The closed-ended questionnaire used a Likert scale with five response levels (Strongly Disagree, Disagree, Neutral, Strongly Agree and Agree). There were two questionnaires used: one for employees and one for customers.

3.6 Data Analysis and Reporting

Descriptive statistics were used to evaluate data for this study because it is based on a descriptive framework. Frequency distributions and percentages were used to analyze the data. For data analysis, the Statistical Package for Social Sciences (SPSS) version 24 was used. Tables and figures were used to present the findings.

3.7 Validity and Reliability

A pilot test was done using 10 percent of the respondents to make sure that the research instrument is sufficient for carrying out the study. Any weaknesses that was identified, was corrected before the actual study. A Crobach alpha value of 0.7 and above was used to determine the reliability of the study instrument.

3.8 Ethical Considerations

Before beginning field work, the researcher needed authorisation from the appropriate authorities. The administration of the GPO Huduma Centre in Nairobi gave their approval. Before any data was gathered, informants were given a thorough briefing on the goal, duration, and prospective uses of the research results beyond academic purposes, as well as some other research-related material that was of interest to them. After the data was collected, the study participants' anonymity was guaranteed. Informed consent was used to recruit people.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This section shows the findings of the study. The study's goal was to determine how effective ICT is for gaining access to government services. The study's specific objectives were to assess user satisfaction with ICT services offered by the government at GPO Huduma Centre, examine usage of the ICT platform in accessing services at GPO Huduma Centre, evaluate the performance and usefulness of the ICT platform at GPO Huduma Centre, and evaluate the performance and usefulness of the ICT platform at GPO Huduma Centre. The results are provided in the sections that follow.

4.1.1 Response Rate

The sample of the study was 286. Out of these 247 participated in the study. Of these 108 were Huduma Center officials, 117 were Huduma services users while 22 were ICT staff. As shown in Table 4.1, the overall return rate was 86.4%. This was deemed suitable for analysis since a response rate of 50% is sufficient as per the recommendations of Babbie (2008). The researcher thus went on with analysis.

Table 4.1 Return Rate

Research Instrument	**Issued**	**Returned**	**Return Rate (%)**
Questionnaire for Huduma Center Officials	125	108	86.4
Users Questionnaire	125	117	93.6
ICT Staff Questionnaires	36	22	61.1
Total	**286**	**247**	**86.4**

4.2 Bio data of Respondents Demographics

The participants who answered the questionnaires were asked to indicate their gender, age, education level and duration of working at Huduma center as well as using Huduma center services.

4.2.1 Gender of respondents

The findings as shown in Figure 4.1 showed that most of the Huduma Center officials as well as the users of ICT services offered by government at GPO Huduma Centre were male at 61.7% and female at 38.3%. This makes it apparent that there was a higher number of males than females represented in the study.

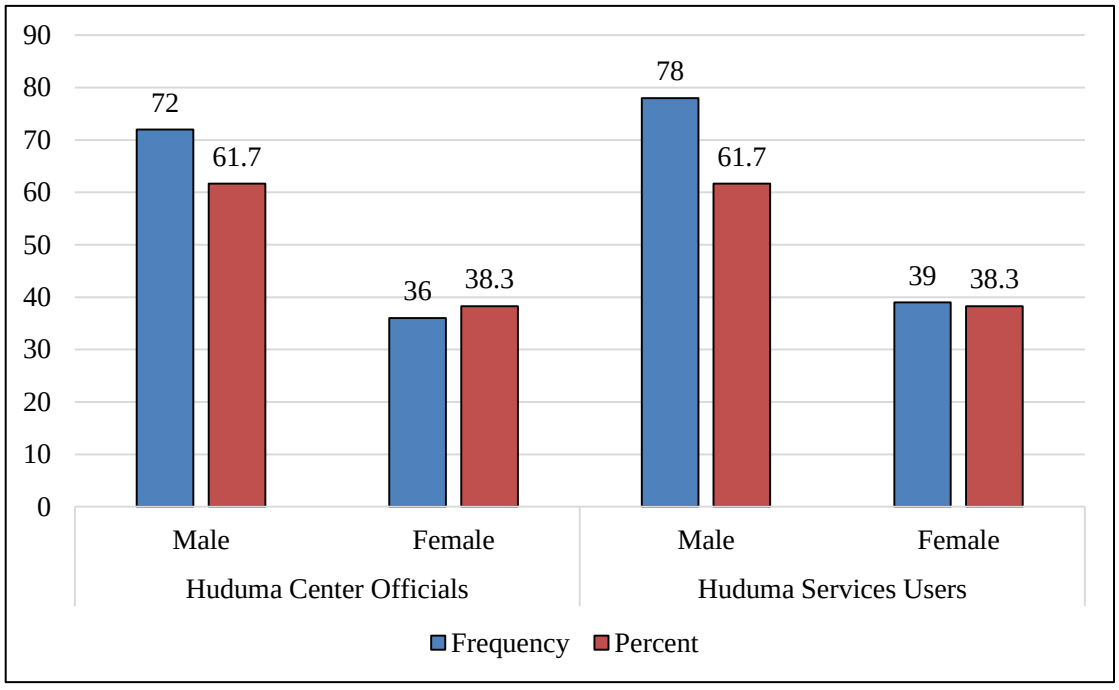

Figure 4.1. Gender of Respondents

4.2.2 Age groups of respondents

Participants were asked to categorize themselves into age categories. The data suggest that the majority of them were between the ages of 20 and 30, with 38.9% of Huduma Center administrators and 41% of Huduma Center consumers of ICT services being between the ages of 20 and 30. These were followed by those aged between 31 and 40 years at 30.6% for Huduma Center officials and 29.1% for users of ICT services at Huduma Center. The age distributions of the study respondents are reflective of the age demographics in Kenya where younger populations are the majority. This could have positive effects on the use of ICT to access government services since as posited by (Porter & Donthu, 2009), and in reference to the Technology Adoption Model (TAM), technology adoption was more among younger persons as opposed to the more elderly persons. These findings are presented in Figure 4.2.

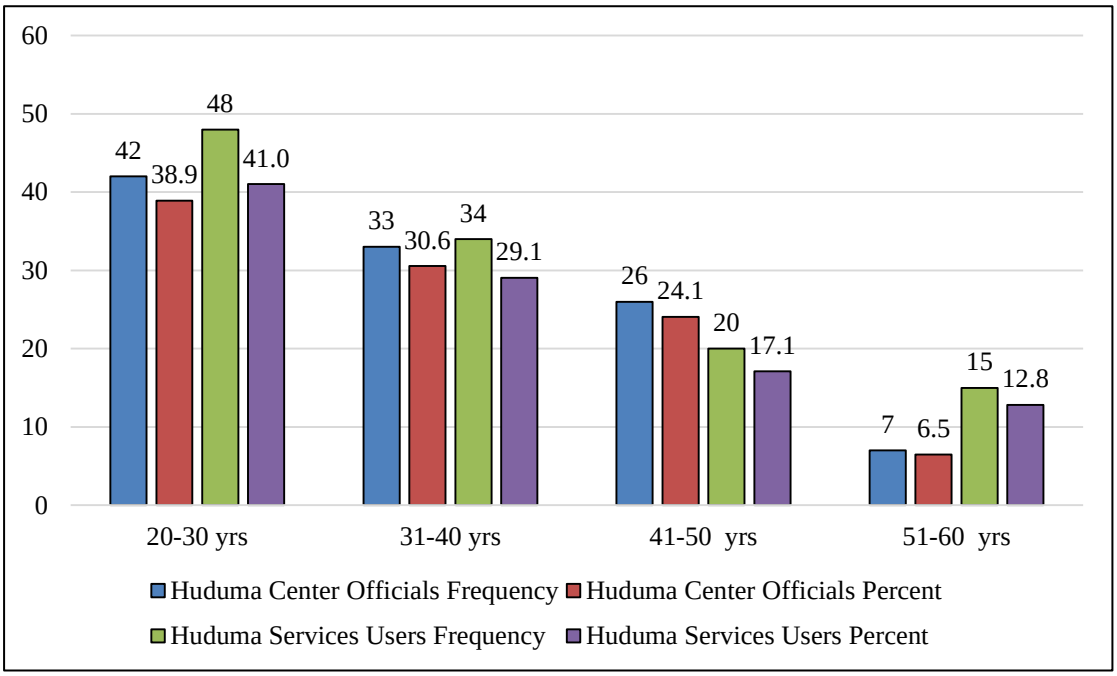

Figure 4.2. Age Groups of Respondents

4.2.3 Levels of Education

The participants were asked to state their educational levels. While the majority of Huduma Center executives (65.7 percent) had bachelor's degrees, the majority (more than half) of Huduma Center customers of ICT services (56.4 percent) had diplomas. This is indicative of the fact that the respondents had sufficient academic qualifications to make significant contributions to the subject under investigation and were likely to use ICT more in accessing government services. This further corroborates the TAM which postulates that there is a significant difference in the use of ICT among more educated persons and less educated persons with the former showing higher tendency to use ICT than the latter (Porter & Donthu, 2009). It was also possible to gauge the perceptions of persons of different education levels on the effectiveness of ICT in accessing government services.

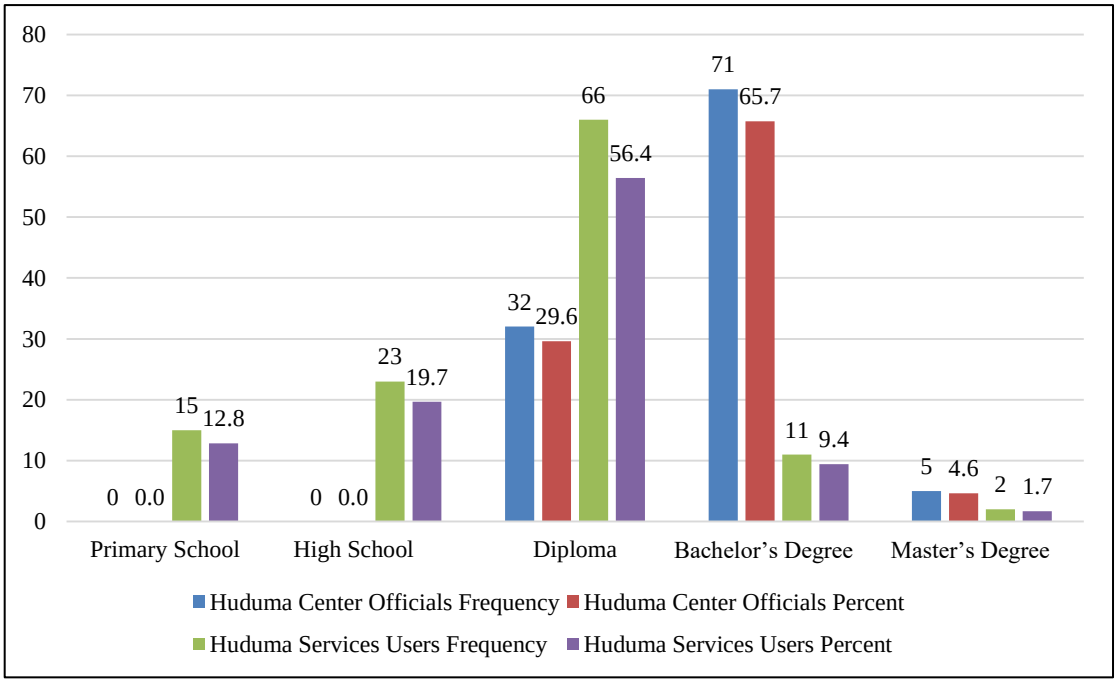

Figure 4.3 Levels of Education

4.2.4 Duration working for the Huduma Center/Using Government ICT services

The participants were asked to point out for how long they had been working in the organization/ or using government ICT services. The findings show that most of the Huduma Center officials had been working at the center for 4 to 6 years (40.7%). This also applied to users of government ICT services since most of them (37.6%) had been using such services for the same period of time.

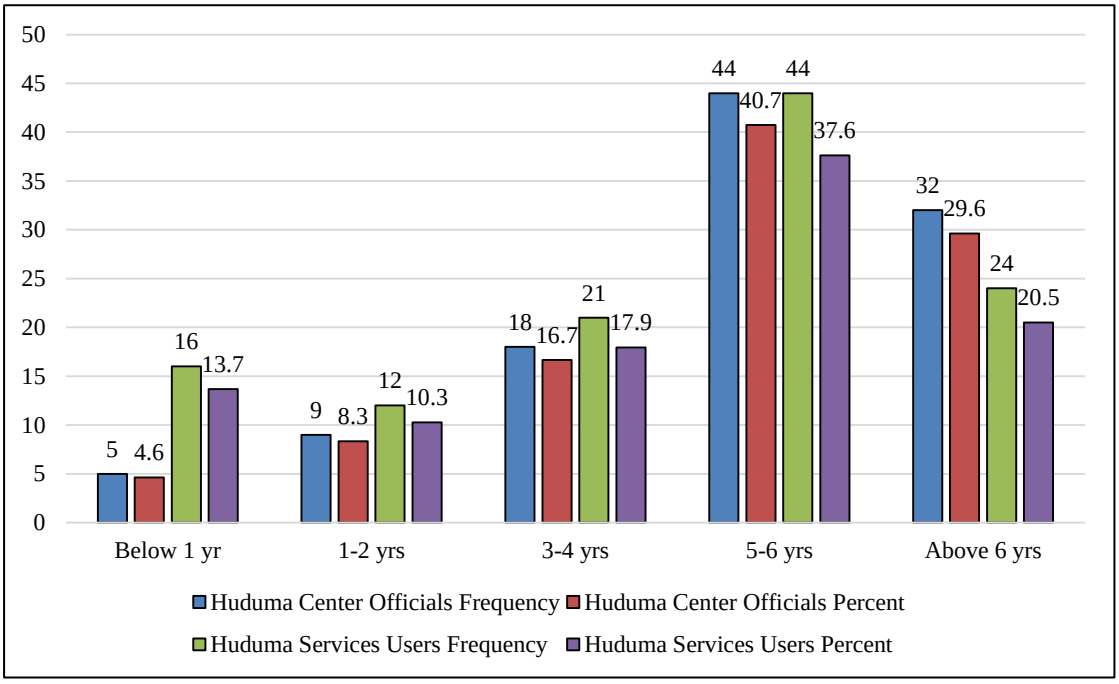

Figure 4.4 Duration Working for the Huduma Center/Using Government ICT services

4.3 Research Findings in Line with the Study Objectives

The sections that follow present the study's findings in accordance with the research objectives.

4.3.1 Suitability of ICT services

The Huduma Center officials were asked to rate their level of agreement with selected statements about the suitability of ICT services on a scale of 1 to 5, where 1- Strongly

Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree. Weighted means (WMs) were used to show the level of agreeability with each statement by indicating the point of convergence for all the responses along the scale provided. The findings are presented in Table 4.2.

Table 4.2 Huduma Center Officials' Rating of Suitability of ICT services

Statements	**1**	**2**	**3**	**4**	**5**	**Total**	**WM**
(i) ICT services being offered to the citizens are suitable for their needs.	1	1	2	3	101	108	5
(ii) The organization has the right infrastructure to provide government services using ICT.	2	3	5	9	89	108	5
(iii) You have the right skills and knowledge to provide government services through ICT.	3	4	5	11	85	108	5
(iv) Information communication technology has enhanced service delivery to the citizens.	0	2	1	12	93	108	5
(v) Information system technology has brought efficiency in service delivery to the citizens.	0	0	1	11	96	108	5

Weighted means of 5 were obtained for all the five statements. This means that there was strong agreement with the statements. In this regard, it is evident that ICT services being offered to the citizens were suitable for their needs. The services include applications for ID, Birth certificate, NSSF, Passport and NHIF among others. This could augment the adoption of such services since as pointed out by Marangunic and Granic (2015), in the TAM, users' acceptance of digital technology was linked to its perceived usefulness.

In addition, the organization has the necessary infrastructure to provide government services via ICT. The model includes a variety of government services and information that is made available to individuals. It consists of a physical office, an e-Huduma portal, a mobile Huduma platform, and a Huduma Call center. Data sharing between Huduma data centers is accomplished by connecting through the government's shared core network to the back-end systems of the ministries, departments, and agencies (MDAs), which are overseen by the ICT Authority. This could enhance the use of ICT to access government services, because, as Zirima (2017) argues, information system technologies are more effective when they are backed by the right resources.

Furthermore, authorities possess the necessary skills and experience to deliver government services via ICT. At the Huduma Secretariat's Technology Operating Center, an information technology networking staff is assigned to monitor all Huduma ICT systems in real time. The networking staff also provides ongoing support to the centers by reacting to concerns presented via electronic tickets, assisting via remote access, or providing walk-in support, depending on the need and nature of the issue. This could improve the use of ICT in government service delivery. These findings are consistent with Masai's (2012) research, which found a link between ICT skills and service delivery.

Information communication technology has also enhanced service delivery to the citizens. The findings show that information system technology has brought efficiency in service delivery to the citizens. Some services have completely eliminated the need for paper work. Huduma centers currently provide 45 government services, according to Ng'aru and Wafula (2015). The issuing of Kenya Revenue Authority personal

identification numbers and booking vehicle inspection are among the services that have gone paperless. The Huduma Centre serves as a one-stop shop for government service delivery. This supports Tusubira's (2016) study, which found that the implementation of ICT solutions played a significant influence in effective public service delivery. As a result, it can be concluded that the use of ICT in the delivery of government services at Huduma Center is appropriate.

4.3.2 Usage of ICT platform in accessing services at GPO Huduma Centre

Officials from the Huduma Center were asked to indicate their level of agreement on the capacity of ICT users. Table 4.3 summarizes the findings.

Table 4.3 Usage of ICT platform in accessing services at GPO Huduma Centre

Statements	**1**	**2**	**3**	**4**	**5**	**Total**	**WM**
Users have the ability to use information system technology when accessing government services to a small extent.	2	2	5	18	81	108	5
Users are provided with necessary knowledge and information on how to access government services through information system technology.	97	3	3	4	1	108	1
Users are provided with training on how to access government services electronically.	100	5	1	1	1	108	1
There are structured programs to enhance education provided to the users on how to access e-government services.	98	3	4	2	1	108	1
Users have the ability to use internet enabled solutions to access government services electronically.	23	14	17	16	38	108	3

The respondents agreed to a strong extent (WM=5) that users had the ability to use information system technology when accessing government services to a small extent. This shows that knowledge to use government information services were dismal. This is in line with a UN report that shows that ICT use to offer government services were

still low (UN, 2020). The respondents went on to strongly disagree (WM=1) with the statement that users were provided with necessary knowledge and information on how to access government services through information system technology and that users were provided with training on how to access government services electronically. This shows that there was lack of training on the use of ICT in offering government services. This could have negative effects on access to ICT services since training was pivotal in enhancing the use of ICT resources as posited by (Nyanjom, 2013).

The respondents also strongly disagreed (WM=1) that there were structured programs to enhance education provided to the users on how to access e-government services. This means that that the government had not rolled out large scale training programs. This could limit the level of access to government services through ICT (Becker, 2011). Lastly, the respondent were neutral to fact that the users had the ability to use internet enabled solutions to access government services electronically. In this regard, laggards are forced to dig into their pockets to seek services of those who can help with ICT work. This implies that there was average use of ICT to access government services (UN, 2000).

4.3.3 Performance and usefulness of the ICT platform at GPO Huduma Centre

Officials from the Huduma Center were asked to indicate their level of agreement on Citizen Satisfaction with ICT Services. Table 4.4 summarizes the findings.

Table 4.4 Performance and usefulness of the ICT platform GPO Huduma Centre

Statements	1	2	3	4	5	Total	WM
(i) Citizens find it convenient to access government services using information and communication technology.	1	1	2	3	101	108	5
(ii) Customer service is enhanced by the use of information and communication technology.	0	0	2	4	102	108	5
(iii) Customer loyalty is enhanced through the use of ICT services in the organization.	0	0	4	6	98	108	5
(iv) The use of information and communication technology saves time for customers.	0	2	1	11	94	108	5
(v) The use of information and communication technology to access government services allows users to receive constant updates on government services.	0	0	0	8	100	108	5

The respondents strongly agreed (WM=5) with all the statements. In this light, the citizens found it convenient to access government services using information and communication technology. This aligns with the study by Finnie, Mueller, and Sweetman (2018) who point out that ICT offers "timely services which are convenient and cost-effective." Customer service was also enhanced by the use of information and communication technology. These findings agree with a study by Chen and Lin (2016) that shows that ICT has a potential to transform delivery of services in public institutions. Furthermore, customer loyalty was enhanced through the use of ICT services in the organization. The use of information and communication technology also saved time for customers. This is in line with the study by Finnie et al. (2018) as already pointed out that ICT played key roles in saving time. Finally, as Raj et al. (2009) pointed out, respondents strongly agreed that using information and communication technology to access government services allowed users to receive constant updates on

government services. This demonstrates that ICT platforms performed admirably and were useful in the delivery of government services.

4.3.4 User Satisfaction with ICT Services Offered at GPO Huduma Centre

Users of government ICT services at the GPO Huduma Centre were asked to rate their level of agreement with the effectiveness of information and communication technology in accessing government services. Table 4.5 summarizes the findings.

Table 4.5 User Satisfaction with ICT Services Offered at GPO Huduma Centre

STATEMENTS	1	2	3	4	5	Total	WM
(i) It is convenient to use information and communication technology to access government services.	0	0	1	7	109	117	5
(ii) The organization provides privacy when accessing government services.	0	0	0	0	117	117	5
(iii) The organization guarantees security on data when accessing government services electronically.	0	0	1	2	114	117	5
(iv) Clear guidelines are provided when accessing government services electronically.	0	1	1	11	104	117	5
(v) Structured training is offered when accessing government services online.	101	12	2	2	0	117	1
(vi) The use of information and communication technology to access government services enhances your cost savings.	0	0	1	5	111	117	5
(vii) E-readiness among ICT personnel influences good service delivery.	0	0	0	2	115	117	5
(viii) The use of ICT influences good customer service.	0	0	1	4	112	117	5

The users of ICT Services Offered at GPO Huduma Centre agreed with seven of the statements provided to them on their satisfaction levels. In this regard, they strongly agreed (WM=5) that the use of information and communication technology to access

government services is convenient in terms of meeting the users needs and being user friendly. This agrees with the study by Finnie, Mueller, and Sweetman (2018) which also found convenience to be an important attribute of ICT in accesses to services. They also strongly agreed that the organization provides privacy when accessing government services and that it guarantees security on data when accessing government services electronically (WM=5). These findings are in line with the study by Soroor and Tarokh (2006) who were of the same opinion.

Further, they agreed that clear guidelines were provided when accessing government services electronically and that the use of ICT to access government services enhances your cost savings (WM=5) as posited by Kariuki (2018). E-readiness among ICT personnel also influenced good service delivery (WM=5). The use of ICT also influenced good customer service (WM=5) which supports the findings by Finnie et al. (2018). Lastly, the respondents disagreed strongly (WM=1) with the statement that structured training is offered when accessing government services online. This could place limitations on the use of ICT to access government services as posited by Nyanjom (2013).

4.3.5 Effectiveness of Information and Communication Technology in Service Delivery

The study also sought to investigate the efficacy of ICT in service delivery. The ICT Staff were asked to respond to specific questions about the effectiveness of information and communication technology in service delivery. The responses show that ICT had enhanced government service delivery by reducing the time taken to access government resources which collaborates the findings by Finnie et al. (2018). The cost of accessing

government services had led to streamlined delivery of government services. This led to efficiency in access to government services (See, 2007). Furthermore, there was enhanced ability to communicate between customers and Huduma Center. This agrees with the study by Kariuki (2018) that also underlines the importance of ICT in enhancing service delivery.

The respondents were asked if ICT security challenges are a threat when accessing government services online. These findings show that ICT security challenges were not profound among those seeking government services. In this regard, the respondents pointed out that the ICT system was safe and that it was possible to control all security challenges as posited by Chen and Lin (2016). Citizens were able to access the system without any major challenges. Each person could log into government portals by creating an account using their identification documents and phone numbers. This created a personalized access to government services. However, the situation was different for those who did not have the requisite knowledge. This shows that ICT played pivotal role in access to government services at individual level (Yousafzai, et al., 2007).

Lastly, the ICT personnel were asked to point out the challenges they faced when providing government services electronically. The findings show that various challenges were faced. These included limited knowledge among some users (Masai, 2012) which led to numerous inquiries; often overwhelming them. There were also instances when applications and uploads where not done correctly leading to rampant demands for corrections. Demands on the systems also limited access in some instances especially during some seasons when many citizens converged online. Electricity

connectivity and challenges related to internet infrastructure also meant that some people could not readily access government services online. Urban poverty also excludes some users in Nairobi.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

The findings of the study are summarized in this section. The study findings are also used to draw conclusions and provide recommendations. Finally, the report makes recommendations for future research.

5.1.1 Suitability of ICT services

Officials from the Huduma Center were asked to rate their level of agreement with various statements about the suitability of ICT services. Weighted means (WMs) were used to show the level of agreeability with each statement provided by indicating the point of converge for all the responses provided along the scale provided. Weighted means of 5 where obtained for all the five statements. This means that there was strong agreement with the statements. In this regard, it is evident that ICT services being offered to the citizens were suitable for their needs. The organization also has the right infrastructure to provide government services using ICT. Further, the officials had the right skills and knowledge to provide government services through ICT. Information communication technology has also enhanced service delivery to the citizens. Lastly, the findings show that information system technology had brought efficiency in service delivery to the citizens.

5.1.2 Usage of ICT platform in accessing services at GPO Huduma Centre

Officials from the Huduma Center were asked to indicate their level of agreement on the capacity of ICT users. The respondents agreed to a strong extent (WM=5) that users

had the ability to use information system technology when accessing government services to a small extent. This shows that knowledge on use of government information services is dismal. The respondents went on to strongly disagree (WM=1) with the statement that users were provided with necessary knowledge and information on how to access government services through information system technology and that users were provided with training on how to access government services electronically. They also strongly disagreed (WM=1) that there were structured programs to enhance education provides to the users on how to access e-government services. Lastly, the respondents were neutral on the fact that the users had the ability to use internet enabled solutions to access government services electronically.

5.1.3 Performance and usefulness of the ICT platform GPO Huduma Centre

Officials from the Huduma Center were asked to indicate their level of agreement on Citizen Satisfaction with ICT Services. Table 4.4 summarizes the findings. All of the statements were strongly agreed upon by the respondents (WM=5). In this light, citizens found it convenient to use information and communication technology to access government services. The use of information and communication technology also improved customer service. Furthermore, the use of ICT services in the organization increased customer loyalty. Customers also saved time by utilizing information and communication technology. Finally, respondents strongly agreed that using information and communication technology to access government services enabled users to receive continuous updates on government services.

5.1.4 User Satisfaction with ICT Services Offered at GPO Huduma Centre

The users of government ICT services offered at GPO Huduma Centre were asked to indicate their level of agreement on the effectiveness of information and communication technology in accessing government services. The users of ICT Services Offered at GPO Huduma Centre agreed with seven of the statements provided to them on their satisfaction levels. In this regard, they strongly agreed (WM=5) that **t**he use of information and communication technology to access government services is convenient. Most users can access services at locations near their residence or in the comfort of their house/offices. They also strongly agreed that **t**he organization provides privacy when accessing government services and that it guarantees security on data when accessing government services electronically (WM=5). This is enhanced by the Data Protection Act (DPA) which gives effect to the provisions of Article 31 of Kenya's Constitution which provide for the fundamental right to privacy. Further, they agreed that clear guidelines were provided when accessing government services electronically and that the use of information and communication technology to access government services enhances your cost savings (WM=5). This implies that the platform is user friendly and thus meets the users needs. E-readiness among ICT personnel also influenced good service delivery (WM=5). The government has invested in training of ICT personnel with the right skills and knowledge. The use of ICT also influenced good customer service (WM=5). It improves customer service by speeding up communications, increasing convenience, providing self-serve options and allowing for targeted marketing campaigns. Lastly, the respondents disagreed strongly (WM=1) with the statement that structured training is offered when accessing government services online. For the users (citizens) there is no public policy in ICT empowerment. Individuals incur costs to learn ICT skills. Going forward, the government could offer

ICT skills to every individual in the society so that they can effectively access government services online.

5.1.5 Effectiveness of Information and Communication Technology in Service Delivery

The ICT Staff were asked to provide their views on the effectiveness of ICT on service delivery by responding to selected questions. The responses show that ICT had enhanced government service delivery by reducing the time taken to access government resources. The cost of accessing government services has led to streamlined delivery of government services. This leads to efficiency in access to government services. Furthermore, there is enhanced ability to communicate between customers and Huduma Center.

ICT security challenges were not profound among those seeking government services. In this regard, the respondents pointed out that the ICT system was safe and that it was possible to control all security challenges. Citizens were able to access the system without any major challenges. Each person could log into government portals by creating an account using their identification documents and phone numbers. This created a personalized access to government services. However, the situation was different for those who did not have the requisite knowledge.

Lastly, the ICT personnel were asked to point out the challenges they faced when providing government services electronically. The findings show that various challenges were faced. These included limited knowledge among some users which led to numerous inquiries; often overwhelming them. There were also instances when

applications and uploads where not done correctly leading to rampant demands for corrections. Demands on the systems also limited access in some instances especially during some seasons when many citizens converged online. Electricity connectivity and challenges related to internet infrastructure also meant that some people could not readily access government services online. Due to urban poverty some families in Nairobi were also excluded.

5.2 Conclusions

The findings show that ICT was immensely used in offering government services. The ICT services offered to the citizens were suitable for their needs and the government had put in place the right infrastructure to provide government services using ICT. The staff working at Huduma Center had the requisite skills to provide support for those seeking government services through ICT platforms. When used, ICT enhanced service delivery to the citizens. In realizing the benefits associated with ICT platforms in accessing government services such as efficiency, timeliness and cost effectiveness, many citizens were using them. However, some of the users did not have the requisite skills to use these platforms and the government had not carried out any tangible training interventions to support skills. This meant that some of citizens especially the old were not using these platforms maximally. There were also challenges associated with limited access of the government ICT online systems in some instances especially during some seasons when many citizens converged online. Electricity connectivity and challenges related to internet infrastructure also meant that some people could not readily access government services online. In some parts of Nairobi, urban poverty also excluded some users.

5.3 Recommendations

Based on the study findings several recommendations were made.

1. The government should put in place mechanisms for enhancing training of citizens on how to use ICT platforms when they are launched rather than waiting for them to learn by themselves.
2. The capacity of ICT platforms to accommodate more users online during peak periods should also be enhanced.
3. Where possible, the government should enhance accessibility of ICT support infrastructure such as internet and electricity connectivity among low income persons to enhance their access to government services online.
4. ICT platforms should also be made user friendly where possible to enhance inclusion of all citizens irrespective of age and socioeconomic status.

5.4 Suggestions for Further Research

The study sought to determine the effectiveness of information and communication technology in accessing government services with reference to GPO Huduma Centre. It is pertinent to carry out similar studies in other Huduma Centers in Nairobi City County for comparison purposes. Studies in other parts of Kenya would also be interesting as different Counties may have their own unique challenges in terms of demographics of users and workers skills resulting from training, experience and exposure.

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APPENDICES

Appendix I: Questionnaire for Employees

SECTION A: GENERAL INFROMATION

1. What is your gender? Male [ ] Female [ ]

2. What is your age group?

   20-30 Years Old [ ] 31-40 Years Old [ ]

   41-50 Years Old [ ] 51-60 Years Old [ ]

3. Please indicate your level of education.

   High School [ ] Diploma [ ] Bachelor's Degree [ ] Master's Degree [ ]

4. For how long have you been working in the organization?

   Less than a year [ ] 1-2 Years [ ]

   3-4 Years [ ] 4-5 Years [ ]

   6 years and above [ ]

SECTION B: Suitability of ICT services Kindly indicate your level of agreement on the suitability of ICT services based on a scale of 1-5, , where 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

No	STATEMENTS	1	2	3	4	5
1	ICT services being offered to the citizens are suitable for their needs.					
2	The organization has the right infrastructure to provide government services using ICT.					
3	You have the right skills and knowledge to provide government services through ICT.					
4	Information communication technology has enhanced service delivery to the citizens.					
5	Information system technology has brought efficiency in service delivery to the citizens.					

SECTION B: ICT Usage of ICT platform in accessing services at GPO Huduma Centre Kindly indicate your level of agreement on ICT users' capacity based on a scale of 1-5, , where 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

No	STATEMENTS	1	2	3	4	5
1	Users have the ability to use information system technology when accessing government services to a small extent.					
2	Users are provided with necessary knowledge and information on how to access government services through information system technology.					
3	Users are provided with training on how to access government services electronically.					
4	There are structured programs to provide access to e-government services.					
5	Users have the ability to use internet enabled solutions to access government services electronically.					

SECTION C: Performance and usefulness of the ICT platform at GPO Huduma Centre

Kindly indicate your level of agreement on Citizen satisfaction with ICT services based on a scale of 1-5, , where 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

No	STATEMENTS	1	2	3	4	5
1	Citizens find it convenient to access government services using information and communication technology.					
2	Customer service is enhanced by the use of information and communication technology.					
3	Customer loyalty is enhanced through the use of ICT services in the organization.					
4	The use of information and communication technology saves time for customers.					
5	The use of information and communication technology to access government services allows users to receive constant updates on government services.					

Appendix II: User satisfaction with ICT services offered at GPO Huduma Centre.

SECTION A: GENERAL INFROMATION

1. What is your gender? Male [ ] Female [ ]

2. What is your age group?

20-30 Years Old [ ] 31-40 Years Old [ ]

41-50 Years Old [ ] 51-60 Years Old [ ]

2. Please indicate your level of education.

High School [ ] Diploma [ ] Bachelor's Degree [ ] Master's Degree [ ]

Kindly indicate your level of agreement on the effectiveness of information and communication technology in accessing government services on a scale of 1-5, where 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

No	STATEMENTS	1	2	3	4	5
1	The use of information and communication technology to access government services is convenient.					
2	The organization provides privacy when accessing government services.					
3	The organization guarantees security on data when accessing government services electronically.					
4	Clear guidelines are provided when accessing government services electronically.					
5	Structured training is offered when accessing government services online.					
6	The use of information and communication technology to access government services enhances your cost savings.					
7	E-readiness among ICT personnel influences good service delivery.					
8	The use of ICT influences good customer service.					