

**ENHANCING ELECTRONIC GOVERNMENT SERVICES IN PUBLIC
ORGANIZATIONS IN KENYA: CASE OF HUDUMA POSTAL CITY
SQUARE IN NAIROBI**

ELIZABETH WANGARI MWANGI

**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE
DEGREE OF MASTER OF LIBRARY AND INFORMATION SCIENCE,
DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE,
UNIVERSITY OF NAIROBI**

NOVEMBER, 2021

DECLARATION

This research project is my original work and has not been submitted for examination to any other university.

Signature: _____ 

Date: ___16/11/2021___

Elizabeth Wangari Mwangi

Registration Number: C54/5864/2017

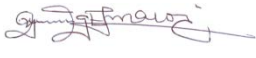
This research project has been submitted for examination with our approval as the university supervisors.

Signature: _____ 

Date: ___16/11 2021___

Dr. Grace Irura

Department of Library and Information Science

Signature: _____ 

Date: _____16/11/2021_____

Dr. Elisha Ondieki Makori

Department of Library and Information Science

DEDICATION

I dedicate this project to my daughter Talisa and Mr. J for your love, encouragement and support.

ACKNOWLEDGEMENT

I thank God for the gift of resources to complete this work. I would like to express my special thanks of gratitude to my supervisor Dr. Grace Irura and Dr. Elisha Makori for criticism, guidance and support throughout the research.

TABLE OF CONTENTS

Title Page	i
Declaration	ii
Dedication	iii
Acknowledgement	iv
Table of Contents	iv
Abstract	ix
List of Tables	x
List of Figures	xi
List of Abbreviations and Acronyms	xii
Chapter One	1
Introduction	1
1.1 Background to the Study	1
1.1.1 Context of the Study	6
1.2 Statement of the Problem	8
1.3 Purpose of the Study	9
1.3.1 Objectives of the Study	9
1.4 Research Questions	10
1.5 Significance and Motivation	10
1.6 Assumptions of the Study	11
1.7 Scope and Delimitations	11
1.8 Operational Terms and Concepts	12
1.9 Organization of the Study	13
1.10 Chapter One Summary	14

Chapter Two	15
Literature Review	15
2.1 Introduction	15
2.2 Electronic Government Services and Public Services	15
2.3 Electronic Government Services at Huduma Centres	17
2.4 Perception towards Electronic Government Services	19
2.5 Problems Encountered in Electronic Government Services	20
2.6 Strategies to Improve Electronic Government Services	22
2.7 Conceptual Framework	25
2.8 Chapter Two Summary	26
Chapter Three	28
Research Methodology	28
3.1 Introduction	28
3.2 Research Design	28
3.3 Area of Study	29
3.4 Target Population	29
3.5 Sampling Techniques	30
3.6 Sample Size	31
3.7 Data Collection Methods	32
3.7.1 Questionnaire	33
3.7.2 Interviews	33
3.8 Research Instruments	34
3.8.1 Pilot Study	34
3.8.2 Validity	34
3.8.3 Reliability	35

3.9	Ethical Considerations	35
3.10	Data Collection Procedures	36
3.11	Data Analysis and Presentation	36
3.12	Chapter Three Summary	37
	Chapter Four	38
	Data Presentation, Analysis and Interpretation	38
4.1	Introduction	38
4.2	Questionnaire Response Rate	38
4.3	Background Information of Respondents	39
4.4	Electronic Government Services Provided	40
4.4.1	Potential Customer Benefits	43
4.5	Perception on Electronic Government Services	46
4.6	Problems Encountered in Electronic Government Services	50
4.7	Strategies to Improve Electronic Government Services	54
	Chapter Five	57
	Summary of the Findings, Conclusion and Recommendations	57
5.1	Introduction	57
5.2	Summary of the Findings	57
5.2.1	Electronic Government Services Provided	58
5.2.2	Perception towards Electronic Government Services	58
5.2.3	Problems of Electronic Government Services	59
5.2.4	Strategies to Improve Electronic Government Services	59
5.3	Conclusion	60
5.4	Recommendations	61
5.4.1	Electronic Government Services Provided	61

5.4.2	Perception towards Electronic Government Services	61
5.4.3	Challenges of Electronic Government Services	61
5.4.4	Strategies to Improve Electronic Government Services	62
5.5	Areas for Further Studies	62
	References	64
	Appendix I: Letter of Introduction	69
	Appendix II: Questionnaire for Huduma Centre Clients	70
	Appendix III: Interview for Huduma Centre Staff	75
	Appendix IV: Krejcie and Morgan Sampling Table	77
	Appendix V: Research Recommendation Letter	78
	Appendix VI: NACOSTI Research License	79
	Appendix VII: Huduma Research Permission	80

ABSTRACT

Across the world governments are transforming public organizations services in order to provide services that are customer centered, cost-efficient and user friendly. With Huduma Centres, the Government of Kenya has transformed public service delivery to the citizens. This research examined initiatives to enhance electronic government services in public organizations in Kenya using the case of Huduma Postal City Square in Nairobi. Objectives included to: establish the extent to which electronic government services are provided at Huduma Centres, explore the perception of customers towards electronic government services provided at Huduma Centres; investigate problems encountered by the customers in access and use of electronic government services at Huduma Centres; and determine the strategies to improve access and provision of electronic government services at Huduma Centres. The study used both qualitative and quantitative research methods to provide descriptive data from the case study of Huduma Posta City Square. Total target population incorporated in this research process was 298 respondents with 278 being customers and 20 staff members. Random and purposive samplings were used to choose the respondents for data collection purposes. Questionnaires and interviews were the tools used to gather data and information from the respondents whose results were presented in tables. The study revealed that electronic government services are accessed and provided at Huduma Centres included online applications for certificates such as marriage, licenses passports, and visa, business name search and registration, online payment system, information search on land matters information search for government services and information search on career, employment, education. The study revealed that majority of the citizens has a positive perception towards electronic government services provided at Huduma Centres. Huduma centres have eased service delivery by the government to its people. Huduma services has enhanced equitable treatment of citizens, promoted greater transparency in service delivery, fostered greater convenience and access to information and reduced bureaucracy. The study concluded that there are a number of challenges that affect access and use of electronic government services at Huduma Centres. Among the challenges include privacy issues, connectivity breakdown, lack of reliability of information, lack of awareness, slow speed of internet, lack of equality in public access to internet, lack of interconnectivity between government departments and high cost of internet. The study recommended that in order for the government to enhance provision of electronic government services at Huduma Centres, there is need to enhance the country's computer knowledge provision and internet penetration. Further the government needs to establish more Huduma Centres and increase the number of services provided at each centre. More importantly, since the virtually all services have been digitized, it is recommended that the government should ensure that there are strong internet connections within the centre to enhance service efficiency; this may be achieved by seeking the services of internet providers who are capable of providing high speed internet. The government should also keep training employees on customer service in order to improve the quality of services that the government provides to citizens.

LIST OF TABLES

Table 3.1	Target Population	29
Table 3.2	Sample Size	32
Table 4.1	Response Rate	39
Table 4.2	Demographic of Information	40
Table 4.3	Customer Perceptions and Reactions	46
Table 4.4	Acceptance of Electronic government services	47
Table 4.5	Huduma Centre's Initiative Impact	49
Table 4.6	Emerging Digital Technologies	53
Table 4.7	Important Things for Huduma Centres	54
Table 4.8	Strategies for Improvement	55

LIST OF FIGURES

Figure 2.1:	Conceptual Framework	26
Figure 4.1:	Range of Electronic Government Services	41
Figure 4.2:	Electronic Government Services Accessed	43
Figure 4.3:	Potential Customer Benefits	45
Figure 4.4:	Level of Awareness on Access and use	45
Figure 4.5:	Level of Customer Satisfaction	48
Figure 4.6:	Challenges that Affect Access and Use	51

LIST OF ABBREVIATIONS AND ACRONYMS

BPR	:	Business Process Re-engineering
EGDI	:	E-Government Development Index
E-governance	:	Electronic Governance
E-government	:	Electronic Government
G2C	:	Government to Citizen
GPR	:	Government Process Reengineering
ICT	:	Information and Communication Technology
ICTs	:	Information Communication Technologies
ISD	:	Integrated Service Delivery
IT	:	Information Technology
LDCs	:	Least Developed Countries
MDAs	:	Ministries, Departments and Agencies
SDGs	:	Sustainable Development Goals
SMS	:	Short Message Services
UN	:	United Nations
UNES	:	Enterprises and Services Ltd

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Rapid advancement of information technology systems and innovations has resulted to substantial societal transformation and socio-economic development. Along with this unavoidable technical trend, governments have digitized public services or developed e-government to address issues with the current management system before upgrading new services to fulfill society's satisfaction (Giao, 2020). In the digital economy, information communication technologies (ICTs) are fundamental systems and solutions for human transformation and development. Information communication technology (ICT) has altered the way people connect with one another, find information, work, do business, deal with government authorities, and manage personal lives (Roztocki et al., 2019). In addition, information communication technology innovations have brought significant changes in the way: private companies function and operate; public function and operate; and government institutions provide services to citizens (Ude et al., 2021). According to the United Nations Report (2018), technologies are converging through the increasing use of digital platforms to produce new combinatory technologies, which are expected to continue to accelerate the pace of technological change, resulting in simultaneous technology-induced disruptive changes across multiple sectors.

Digital government, electronic government (e-government) and electronic governance (e-governance) represent the use of information and communication technology as a

time-needed mechanism for the gathering and dissemination of government information and the delivery of governmental services (Malodia et al., 2021). Electronic government is the use of relevant information communication technologies such as the internet to meet the needs of individuals, businesses and the general public for excellent public services from government and its agencies (e-government) (Mensah et al., 2020). Similarly, electronic government is the use of a range of information technologies such as the wide area networks, Internet and mobile computing by government agencies to transform government operations in order to improve the effectiveness and efficiency of service delivery geared towards promoting democracy (Tyagi & Tyagi, 2017). To these authors it is the use of ICT to support government operations, provide investments that are needed by citizens.

Across the world the evolution of electronic government services has continued to advance at different wavelengths in the various countries. E-government evolves in tandem with government progress and society's overall digitalization (Mukamurenzi et al., 2019). According to the United Nations (2018) report, countries throughout the world are always seeking to improve e-government and deliver online public services. Further this report revealed positive global trend toward greater e-government development. From the report, 40 countries scored "very high" on the e-government development index (EGDI). In addition, the global average EGDI increased from 0.47 in 2014 to 0.55 in 2018, indicating that overall e-government development has grown across regions. In many parts of the developed world, such as the UK, Canada, USA, similar with developing nation like Brazil, South Africa and South Korea, the use of ICT in delivery of government services has been cited to contribute significantly towards quality service delivery thus ultimately boosts social economic development

goals (Bwalya (2018). From Indian perspective, e-government has created opportunities for good governance where citizens use these services more easily to thank and appreciate the success of the government (Tyagi & Tyagi, 2017). In this respect, requests are completed online without the need for paperwork and cataloging information is done efficiently by for agents and customers via electronic transactions. This demonstrates that global progress in e-government and the provision of online public services has been made (Nguyen et al., 2020).

African governments, in particular, have attempted to enhance delivery of services to the citizens through reengineering and implementation of e-government services. In this sense, digital technologies and innovations are critically essential in development and delivery of electronic government services through digital platforms and mobile phones. From Bwalya (2018), first, the usage of technology in public service delivery is affecting e-efficiency governments and effectiveness. Second, e-government is presenting itself as a fundamental transformation platform of public administration, concluding as an enabler of contemporary interactive governance, rather than just a platform for providing public services. Third, as e-government evolves from traditional government to new public management to semantic governance models capable of big data and predictive analytics, it is steadily adapting to new technologies in order to remain relevant and move in lockstep with user and stakeholder expectations.

In Kenya, the electronic government services have transformed delivery of services to the public through e-citizen information portal. Huduma Centers were introduced in 2013, as an approach to improve service delivery and change the delivery of public

services providing key services to citizens or the public (Mutinda & Kaswira, 2017). Using the huduma centres, digital or electronic services are delivered through e-huduma portal that provide online government service and m-huduma using mobile phones and online platforms (Kinyanjui & Waithaka, 2019). Massive electronic government services have been adopted and implemented in government ministries, departments and agencies (MDAs) in order to increase productivity of civil servants, improve services and encourage participation in planning and decisions.

Bwalya (2018) suggest that e-government communication capabilities allow citizens to solicit for information from government agents and thereby effectively access government services such as online application for drivers' licenses and passports. From this author, modern public services require platforms that, first, reduce the workforce needed in the e-government environment by automating existing business processes through the integration of technologies. Second, ensure that government information and public services are accessible online using platforms where citizens and businesses can download fill and return back the forms to the government portals. Similarly, Huduma centres have transformed public service delivery by providing citizens access to various public services and information from one-stop-shop through integrated technology platforms (Kinyanjui & Waithaka, 2019). These authors add that, these collaborative, vertical and integrated, horizontal approaches bring on board various departments, ministries and agencies of Both County and central governments. Furthermore, these authors agree that, the e-citizen information portal and related initiatives have enhanced delivery of the otherwise considered cumbersome and complex bureaucracy.

Numerous studies indicate that government service delivery face massive challenges in developing countries. According to United Nations (2020) report, despite more than three decades of ICT development, Africa still lags behind in this area due to ICT infrastructure, access, use and skills. From this report, Africa has a 36 percent internet penetration rate (473 million people online). Furthermore, the report indicated that as the pace of technical innovation accelerates, these gaps are likely to impede the development of e-government in Africa, creating severe difficulties to the continent's digital transformation. From this report, despite the desire of governments around the world to move forward with e-government, many governments continue to face challenges due to a variety of contextual factors, including resource constraints, lack of digital infrastructure, and insufficient capacities or capabilities, particularly in developing countries and countries in special situations (United Nations, 2020). Some countries have to deal with digital inclusion, data privacy and cyber security according to the United Nations. In many other parts of the developing world, e-government has not developed to any appreciable extent owing to, among others, resistance to reforming corrupt public business processes and lack of adequate infrastructure to support emerging forms of e-Government given the emerging technologies, namely, fog computing, business intelligence and other unknown contextual challenges (Bwalya, 2018).

According to the United Nation (2018) report, change is becoming exponential thanks to the power of digital platforms and innovative combinations of different technologies towards sustainable development goals (SDGs). This report proposes the need for government to develop strategies and actions to support development agenda - nationally and globally. Furthermore, this report supports education as the

indispensable lever for development and social justice together with digital technologies and capabilities, lifelong learning and innovative in providing effective social protection mechanisms. On the same note, Understanding the contextual issues and varied characteristics of e-government, particularly from the perspective of the developing world, is critical given the need to bring together different perspectives to build global viewpoints on many elements of e-government development (Bwalya, 2018). The complexity of successful e-Government implementation and development, according to this author, comes in the various elements of conceptualization, design, implementation, adoption, and usage. Electronic government planning, strategies and initiatives during the pandemic period must be evaluated and reviewed to enhance to sustain people and advance development agenda.

1.1.1 Context of the Study

Huduma is the Kiswahili household name for service, widely applied in public sector organizations in Kenya. The Huduma Centre Kenya programme was launched in 2013 in the Ministry of Devolution and Planning under the governance structure of the Huduma Kenya Secretariat. The Ministry of Devolution and Planning together with the University of Nairobi consultancy (UoN) agency, Enterprises and Services Ltd (UNES), championed the formulation, development and implementation of the concept of Huduma Centres platforms (Kinyanjui & Waithaka, 2019). Due to its transformative nature, service delivery to citizens has improved in government ministries, departments and agencies. In principle, it provides the central platform where integration and provision of services to the public are conducted under one building, roof or room and on the same floor. Huduma Centers are mainly located and housed in government post office buildings. Huduma Kenya was launched against the

bedrock of rationalization and digitization of public services in order to break the cycle and remove unnecessary bureaucracy in the public sector delivery system (Kinyanjui & Waithaka, 2019). This e-government strategy and initiative of integrated service delivery (ISD) puts great emphasis in delivery of services to public for customer excellence and efficiency. With this one-stop-shop model, citizens and customers access various public services and information from a single location and through integrated service platforms (Kinyanjui & Waithaka, 2019).

Huduma Center service provider and delivery model depends upon digital and automation systems and solutions to serve ministries, departments and agencies. According to Ondego and Moturi (2016), the e-citizen being the government to citizen (G2C) portal provides services such as business name search and registration, notice of marriage, registration of marriage, driving licenses, land searches and clearances, passport and visa applications. In addition, the system allows citizens to sign up, apply for government services and conveniently pay using mobile money, credit cards, debit cards and online banking. It also allows foreign residents to apply for services. The system allows users to receive emails and short message services (SMS) notification every time applications have progressed. From these authors, e-citizen program intend to transform public service delivery by providing residents with access to a variety of public services and information through integrated digital platforms. Huduma Centres together with the county governments also provide free services to the citizens. With this Huduma partnership, national value has improved and promoted social cohesion and economic development.

1.2 Statement of the Problem

According to Abdul (2020), first governments' around the world is under pressure from rapid globalization, fiscal, social and technological changes to provide services that are citizen-centric, efficient, transparent, effective, one stop, any time and nonstop. Second, post-conflict countries are under even greater pressure to create such services because they replace the vacuum caused by the violence and will be the only services offered, rather than simply an upgrade of current government offerings that already meet citizen needs. Third, adoption of technology is the most efficient way to integrate the public and private sector and to provide services with accountability, transparency and efficiency, but this is not an easy task, especially for developing countries. In response to this, the Kenya public service developed and implemented electronic government initiative in order to provide citizens with opportunities to get various services under one room such as marriage certificates, drivers' licenses and police abstracts (Ang'anyo & Mbatha, 2019). Huduma Centers were introduced and launched in 2013 so as to improve and change service delivery to the citizens or public (Mutinda & Kaswira, 2017). In addition, these centers offer services from various agencies and government agencies via online information portal – electronic citizen platform. Huduma Kenya is meant to transform public service delivery by providing citizens with easy access to various public services and information (Ondego & Moturi, 2016). Electronic governance also improves public disclosure of information on expenditures and policymaking processes, thereby increasing the government's credibility and reducing the possibility of corruption (Karippacheril et al., 2016). As social separation drives online contact, traditional digital government services are being more widely used, but electronic government platforms are also being used to address the global COVID-19 crisis in novel ways

(United, Nations 2020). Huduma Centres provide numerous services though there are issues of illiteracy, digital divide and lack of infrastructure (Mutinda & Kaswira, 2017).

1.3 Purpose of the Study

The main purpose of this research was to assess initiatives to enhance electronic government services in public organizations in Kenya using the case of Huduma Postal City Square in Nairobi.

1.3.1 Objectives of the Study

The objectives were to:

- i. Establish the extent to which electronic government services are provided at Huduma Centres.
- ii. Explore the perception of customers towards electronic government services provided at Huduma Centres.
- iii. Investigate problems encountered by the customers in access and use of electronic government services at Huduma Centres.
- iv. Determine the strategies to improve access and provision of electronic government services at Huduma Centres.

1.4 Research Questions

1. Which electronic government services are accessed and provided at Huduma Centres?
2. What is the perception of customers towards electronic government services provided at Huduma Centres?

3. Which problems encountered by the customers in access and use of electronic government services at Huduma Centres?
4. Which strategies can improve access and provision of electronic government services at Huduma Centres?

1.5 Significance and Motivation

Effective and efficient access to electronic government services is vital in achieving development programmes and flagship projects as enshrined in Vision 2030 agenda. Online information portals and related e-government services provide the public with reliable and timely information to support planning and decisions. Policy makers and planners will fundamentally benefit from the research results. This is because e-government programmes and initiatives through Huduma Centres promote delivery of services to the citizens. Electronic government in this context involves integrated technologies sustained through e-citizen and digital platforms. With Huduma Centres, the government provides the required infrastructure and related parameters whose long term goal is to support the public and various ministries, departments and agencies. Simply, this research promotes the values of digital technologies and initiatives in delivery and provision of services in public organizations. In equal measure, clients and staff of the Huduma Centres will benefit from the research findings.

Electronic government service in both public and private sector organizations are mandatory in the modern digital economy. First, this research provides firsthand information on the need for organizations to adopt and implement online services, especially in this pandemic period. Second, fundamental knowledge in relation to

challenges that hinder delivery of services in the Huduma Centres are reviewed together with practical strategies and solutions to address these issues. This research arguments and findings provide imperative motivation for Huduma Centres and electronic government projects in general. Benefits and challenges of electronic government services are discussed within the context and real lens of Kenyan realities. Recommendations on possible collaboration of Huduma Centres with public libraries in order to eliminate the digital divide and access to access to e- government services will be important in promoting partnership. This research provides additional knowledge on the need to advance further research on electronic government projects and initiatives.

1.6 Assumptions of the Study

The study assumes that the information provided by the respondents is accurate and truthful. It also assumes that the study even though it is conducted at one Huduma centre branch, it will be applicable to fit the e-government access across all Huduma branches. The study also assumes that Public organizations provide access to electronic government services to the customers and Huduma Centres provide electronic government services through e-citizen platform and related digital technologies.

1.7 Scope and Limitations

This research was conducted at one Huduma Centre within Nairobi area. Sample population considered for real data collection and analysis incorporated both questionnaires and interview schedules. Equally, clients and staff from the selected Huduma Centre participated in the research problem. Clients or users of Huduma

Centres who participated in the research process were selected through simple random sampling to fill the questionnaire. While staff members of the Huduma Centre were identified through purposive sampling for interviews. The study involved Huduma Centre whose research results are generalized and assumed to fit the e-government access across all Huduma branches.

1.8 Operational Terms and Concepts

Citizen: Concept refers to a natural person entitled to the human rights and freedoms under the constitution (Ana & Lída, 2019). In this research, citizen is used in the same context but under the Kenyan constitution.

E-citizen: Electronic government initiatives that provide information and related services to the citizens through digital and online platforms.

E-Government Development Index: It's an attempt by the United Nations to assess the extent to which the United Nations member states are equipped to deliver government services to clients online and rank them accordingly (Valentina, 2021). It's a composite measure of three normalized indicators such as provision of online services, telecommunication connectivity, and human capacity.

E-Government: This term can be defined as the use of information communication technologies to more effectively and efficiently deliver government services to citizens and businesses (Cenay et al., 2021). The authors also note that, it is the application of information communication technology in government operations, achieving public ends by digital means.

E-Government Services: Electronic government is the application of information technology to government services and procedures to deliver public services and information to citizens, businesses, and governments electronically (Valentina, 2021).

Similarly, the concept of e-government services is applied within the context of these authors.

Huduma Centre: E-government one-stop-shop for delivery and access of services to the in government ministries, departments and agencies in addition to county governments.

Information Portals: Digital based resources that provide access to information and related services to the people through internet and online platforms.

Public Sector Organization: Independently run entity, with public ownership, working in the service of society – as a whole (Graça et al., 2018). In this research, public organization is a government agency that provides services to the citizens or public.

1.9 Organization of the Study

This research project is organized into five (5) chapters. Chapter one (1) deals with the introduction of the study problem, in addition, the chapter highlights the background and context of the research work in addition to the statement of the problem, purpose, objectives, research questions and significance of the study. Aspects of scope and limitations of the research problem together with operational terms and concepts and summary of the chapter are also reviewed. Chapter Two contains review of the literature based on the objectives and research questions. First part of the review literature review deals with knowledge on e-government concepts and related topics with the second part touching on the conceptual framework. The chapter ends with a brief conclusion. Chapter Three is devoted to research methodologies used to conduct this research problem. Elements discussed include research design, area of study, target population, sampling techniques, data

collection methods, research instruments, ethical aspects, data based issues and summary. Chapter Four touches on data presentation, analysis and interpretation of the research based on the logical structure of the research objectives with summary at the end. Chapter Five ends the research work with summary of the findings, conclusion and recommendations together with suggestions for further research and brief conclusion.

1.10 Chapter One Summary

In this chapter, introduction and background information on electronic government and related topics have been discussed. Organization of the entire chapter is guided by the research objectives. Equally, knowledge gaps touching on the statement of the problem in this research have been well reviewed. The chapter has also conceptualized the research problem with the purpose, objectives and questions. In addition, the highlights are devoted to significance, scope, limitations and operational concepts.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter highlights the literature about information portals and electronic government services. It looks at related literature concerning the types of services available at Huduma Centres, perception of customers towards electronic government services, problems encountered in access and use of electronic government services and e-government services and strategies to improve access and provision of electronic government services.

2.2 Electronic Government Services and Public Services

With the advancement of ICTs, public administration in many countries has embraced these technologies to enhance the efficiency of government processes and obtain better provisioning of services (Anupriya et al., 2021). Electronic government process is a group of related, structured activities, or series of chain of events (Zhigang & Fengyue, 2016). From these authors, these activities sets or chains provide specific service or product for specific publics where this process has beginning, end and purpose. Government business process reengineering (BPR) is the basis and prerequisite for the implementation of electronic government, business process reengineering that largely influence the potential of electronic government information technology and its effect in the reform of government management mode, add these authors. From Zhigang and Fengyue, government process reengineering (GPR) is to a certain political environment, the electronic government process review and rethinking, through to clean up and simplify the process for the original and integration, in order to significantly improve the level of government jobs.

Furthermore, government system reengineering is used to evaluate and redesign procedures to monitor by cleaning up, streamlining, and merging the original process in order to attain a big rise in the number of government employment in a given political environment.

The view of these authors are that governments need is critical that and that the government need to embrace e service mode tool. Electronic government administrative process sets to improve performance management and public satisfaction as the goal with three basic characteristics: one is for the public, with business as a center; the second is the existing boundaries across various department departments and their subordinate units; the third is facing the process of system program management to replace the traditional government management entities, note these authors.

These authors postulate that, development of electronic government and government process reengineering is complement each other, government process reengineering requires to accelerate the construction of electronic government system, and the effective use of information technology and information resources also requires government process reengineering. From the perspective of government in formalization, the government process reengineering is the organizational guarantee of electronic government.

From the literature available, the governments seem to have neglected children in terms of electronic government services. However, a number of Initiatives were noted during the Covid-19 Pandemic and more so in the developed economies. According to a report by UNICEF Office of Global Insight and Policy (2021) majority of electronic

government services were available for parents of newborns, infants and young children aged 0 to 4 years through online platforms and application, such as those in New Zealand, China, Singapore, South Korea and Israel. The author further explains that, South Korea, an application called Timor-Leste, managed to get an estimated one in eight of 0.45 million students online during the initial months of the pandemic. In China's cloud schooling platform for guided education ensured continued education services for 180 million full-time students. In Abu Dhabi's KidX also provided gamified civic education for children to learn about the roles and responsibilities of different government agencies. One of the major gaps established by this study is that middle-income countries like Kenya had limited use by the government in service provision for infants and younger children, and there was lack of online information or transactional services aimed at children, parents or guardians.

2.3 Electronic Government Services at Huduma Centres

Electronic government can be used for a wide range of purposes, including better service, improved management, enhanced governance, increased public participation and better relationships with citizens and businesses (Anupriya et al., 2021). In United Kingdom, the electronic government platform provides relevant services under one roof (Connolly & Bannister, 2018). From these authors, this eliminates the need to travel from one location to another in order to obtain all services. Without the one-stop-shop, each government department is likely to have its own set of citizen interfaces, forcing people to visit many locations and meet inconvenient and challenging situations. In the one-stop-shop, the interface is integrated and this reduces confusion and duplication. The interchange of information and seamless services across government agencies is improved; and transaction costs, time, space,

and people are reduced as a result. In other terms, the one-stop-shop combines government services and provides the same from a single package according to these authors.

The online service was critical in transactions such as renewing licenses, certifications, paying taxes and applying for benefits, less time consuming and easier to carry out. Thus, the interactions allowed citizens to be more informed about government services and ushered in new thinking and promise of reforming the public service from being inward looking and administration-focused to outward oriented and focused on service delivery to the public. According to Mutinda and Kaswira (2017), the Huduma program brings together over 35 agencies under one roof and provides high-impact services to the public, saving time, money, and improving service delivery for both residents and businesses.

From Otieno and Omwenga (2016), first, electronic government is not just about creating information portals and using the Internet, it's about changing the way services are delivered and the basic relationship between government and its citizens. Second, the e-citizen is an information portal of the Government of Kenya to the citizen (G2C) which provides e- government services such as registration and licensing of land and permit, passport research and visa applications. The information portal allows citizens to register, request government services and easily pay with mobile money, credit cards, debit cards and online banking. It also allows foreign people to request services upon which users then receive notification by e-mail and text as the application progresses.

2.4 Perception towards Electronic Government Services

Rapid advancement of information and communication technology has changed the way governments operate and communicate with the public or citizens through electronic government initiatives (AlBalushi, 2021). The author further explains that, understanding the linkages between the quality of government services and their impact on the user or citizen satisfaction has become critical. For the Kenyan government, it is important that all government services must be provided online and supplied rapidly and completely when and where needed (Ministry of ICT, Kenya, 2019). From Rutto and Yudah (2017), citizens are not interested in the complexity of the information portal or costs associated with operating the system. It's about how the information portal meets the needs and provides fast access to electronic government services. It is important that their needs are met in the most efficient way possible. The government needs to implement more electronic government programs to improve digital inclusion and encourage more individuals to participate in government activities through online services (Imbamba & Kimile, 2016). Citizens at the local level should be the focus of such activities. Furthermore, physically challenged people, women, youth, illiterate residents, low-income people, and the elderly should all be able to participate in government-sponsored online activities.

Implementation and utilization of electronic government services and related digital solutions require necessary additional requirements such as Internet connectivity and electricity. However, hard-to-reach and economically marginalized populations in remote areas, slums and informal settlements, which would normally be targeted by the Huduma initiative, are excluded from these services due to funding constraints (Mutuku, 2018). On the same note, the idea of service centres to the user are intended

to help people to access information and service transactions in one location (Mutinda & Kaswira, 2017). In addition, information portals like e-citizen give access to e-government services at the comfort of the location of the user. From these authors, a huge section of the population in rural Kenya and the slums lack the abilities to use the Internet. According to these authors, people from socioeconomically underprivileged origins, those living in geographically marginalized locations and the elderly are among the many people who are unable to utilize the Internet or access e-government services.

2.5 Problems Encountered in Access and use of E-Government Services

Across the world governments are embracing digital technologies to revolutionize operations, communicate information, make decisions, deliver services, interact and collaborate with citizens to address policy issues of public interest. However, many countries still lack the ability to successfully use digital technology to provide accessible, dependable, rapid, personalized, secure and inclusive services as well as empower people through open and participatory procedures (Naicker, 2020). Governments and organizations have moved towards online provision of information, products and services while changing the way of interaction. This transition poses dilemma for many individuals who lack the essential abilities to access online services in addition to government departments and organizations that find that these services mostly underutilized because people lack the necessary skills to access and use the services (Alkhateeb & Abdalla, 2021). Based on research from Saudi Arabia, infrastructure and service availability are critical in electronic government adoption (Baabdullah et al., 2018). In some circumstances, governmental institutions do not

have the capability to deliver online services on continuous basis, putting availability and delivery at risk, note the authors. In addition, the hardware that runs these applications lacks the ability to provide the 99.5 percent availability that users of these systems want.

Many developing nations experiencing the digital divide are unable to install the necessary infrastructure platform in the form of websites and other online local content for electronic government implementation (Sarker & Xiaohua, 2018). Online local content policies, ICT infrastructure, and skilled human capital development have also affected effective implementation of electronic governance. Unequal access, distribution and use of information and communication technology between two or more people, is known as the digital divide (Mwai & Karume, 2020). However, Naicker (2020) explains that most developing and developed countries are embracing common service guidelines to ease the digital divide amidst the states information "haves" and "have-nots". The digital divide gap implies that government, organizations and people with access to the Internet and associated systems are able to use and benefit from electronic government services. In Africa, lack of suitable electronic governance networks and high levels of illiteracy make communication between citizens and government even more challenging (Nwanisobi & Christopher, 2017), Due to the technical nature of information technology, over 70% of the rural African population finds it difficult to access and use electronic governance online services

Many users especially in rural areas lack knowledge about e-citizen platform and also lack information and experience that allows use of information portal applications.

The price or cost of the Internet is another consideration that can affect successful access of electronic government services. In addition, the Huduma Center, which complements the e-citizen information portal, is concentrated in urban areas and always has long queues to access government services (Mwai & Karume, 2020). Kenya has made significant progress in using information portals to access government services, though there are still several challenges related to the successful use of e-government services (Onyango, 2020). Electronic government is a new way to improve the relationship between citizens and governments through ICT approach, however, most of the citizens in rural area are not aware of online services and that Huduma Centres are mostly located in urban areas (Ogola & Nyang'au, 2017). According to Kamairo (2017), the email addresses supplied on several ministerial websites were generally inactive in addition to having higher demand for services than supply at Nairobi Huduma Centre.

2.6 Strategies to Improve Electronic Government Services

In France, electronic governance platforms required so level of streamlining so as to improve simplicity of use according to Kenenissa (2017). Business registrations, Payments made through online and tax related process were where more electronic governance simplifications were needed. While remote communities had no basic skill in utilization of internet and thus making it impossible to utilize and government electronic services. Government agencies must simplify interface and e-governance modules, conduct more sensitization trainings, and develop digital e-governance shops inside communities in order for electronic government services to be effective. According to Almuraqab and Jasimuddin (2017), there is a strong link between

simplicity of adoption and utilization of electronic governance services. As a result, public sector bodies should work to make government ICT systems more user-friendly; otherwise, electronic governance projects will be limited to urban populations who are familiar with such knowledge and skills. There are three skills required to effectively implement electronic governance efforts in communities: first, information technology skills; second, information management competencies; and third, information society skills (Mafwiri, 2020). Information technology skills are hard technical skills, whereas information management competencies are technical professionalism needed to deploy and competently oversee ICT infrastructure, and information society literacy skills are soft skills needed to perform fundamental operations with strong ICT infrastructure (Lee, 2021).

Information society skills are critical for e-governance users, according to Singh and Singh (2018). This is due to the fact that users only need to interact with the frontend of the information technology platforms that make up electronic governance. Well-managed government organizations respond positively to the demand for electronic government capabilities to the customers, in which trainings and outreach events are held in communities to improve skills that are necessary for electronic governance adoption. For these authors, Singapore's government, for example, has boosted e-electronic governance adoption by establishing ICT kiosks in both urban and rural areas. As a consequence, the state of Singapore's e-governance service has a 75% adoption rate. Electronic governance may be made sustainable by expanding electronic governance infrastructure to allow citizens in both urban and rural locations to access government services (Nwanisobi & Christopher, 2017). It also necessitates simplifications and changes that will allow citizens to easily access and use

government and governance procedures. In Africa in particular, government organizations should make every effort to provide web interpreters in local native languages that people residing in rural zones can understand, according to these authors.

There is a direct link between government assistance and electronic government service adoption (Basahel & Yamin, 2017). To these authors, support from the government is critical in developing policies that guide the design, development, and uptake of electronic government services. Furthermore, government policy on electronic government adoption directs government agencies and departments to implement mechanisms such as information technology design, e-government software, hardware, skills architecture needed to implement e-government programs.

In Nigeria revealed that electronic government services offered have to be accessible for the initiative to succeed upon which physical and logical infrastructures are key components and crucial drivers in delivering such services (Verkijika & De Wet, 2017). From these researchers, items that constitute electricity, telecommunications, and Internet access form accessibility aspect of infrastructure. Citizens must have these three items as well as some computer hardware and software components that are part of the infrastructure during information delivery hours, in order to access government services.

From South African perspective, adoption of electronic governance initiatives necessitates the establishment of adequate infrastructure to support the adoption of the systems (Sarker & Xiaohua, 2018). These authors opine that, the ICT infrastructure

that underpins electronic governance is costly to set up and maintain, because the software and associated technology required to implement the programs are capital expensive and government funding is required.

Tanzanian experience indicates that one required government support architecture, in enhancing the architecture, adoption of architecture, electronic governance in addition to relevant quality skills and expertise (Mafwiri, 2020). To this purpose, the government is accountable for developing capacity building and awareness creation for government officials who are in charge of electronic governance implementation and adoption, as well as establishing ICT learning in-service courses for the general public on how to use the programs. Huduma Kenya that compliments e-citizen information portal provides wide range of government services to the customers (Imbamba & Kimile, 2017). This author advises, integrated service delivery strategy that provides government services to the general public through the one-stop-shop model with strong focus on customer service excellence must be well supported.

2.7 Conceptual Framework

The conceptual framework highlights the independent and dependent variables in this study. For the citizens of Kenya to be able to use electronic government services and e-citizen information portal efficiently and effectively, the platform must provide the services. Huduma Centre which compliments e-citizen should create awareness and trainings on the services offered. The information portal should be easy to use and cater for different categories of people. Barriers to access e-government services should be addressed.

**Independent Variable
Outcomes**

Dependent Variables

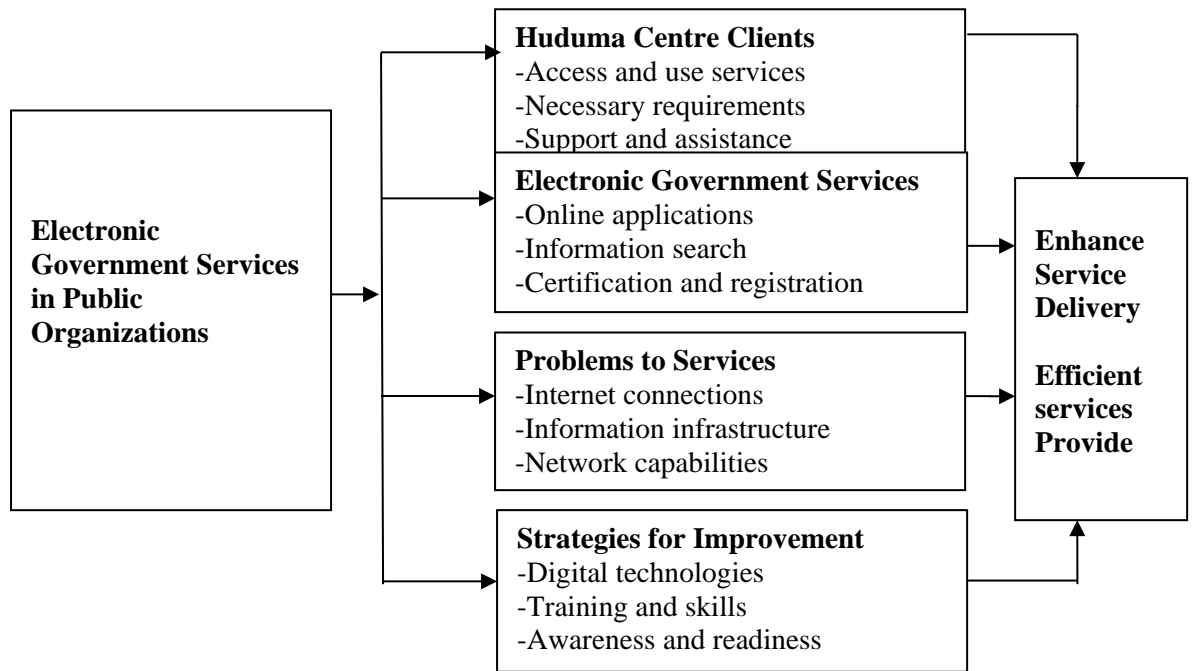


Figure 2. 1: Conceptual Framework

2.8 Chapter Two Summary

The chapter has analyzed aspects of literature review and related empirical studies that have been previously carried out in relation to access to electronic government services all across the globe. The conceptual framework is also outlined together with necessary information in the research problem. The reviewed literature revealed that there are limited studies on access and use of electronic government services in public organizations especially in developing countries. Further the study established that there is limited literature and use by the government in service provision for infants and younger children, and there was lack of online information or transactional services aimed at children, parents or guardians. This chapter has been structured and organized based on the research objectives of the research problem.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design and methodology of the research. It includes the area of study, the selection of the sample size, data collection methods, data analysis methods and ethical considerations.

3.2 Research Design

From Hammond and Wellington (2020), research design is concerned with putting the research questions, hypotheses, or even the hunch or idea into workable undertaking. The research design sets the procedure on the required data, methods to be applied to collect and analyze the data in relation to the research questions (Tobi & Kampen, 2018). In this research process, both qualitative and quantitative methods were applied to provide descriptive data from the case study. Quantitative research method explains a phenomenon by collecting numerical data that are analyzed using statistical approaches (Goertzen, 2017). This approach employs numerous strategies of collecting statistical data through the use of questionnaires. Qualitative research involves collecting and analyzing non-numerical data to understand concepts, opinions, or experiences (Bryman, 2017). It can be used to gather in-depth insights into the problem or generate new ideas for research. The blueprint for this research problem entails the process of conducting research where data were collected, analyzed and presented. Focus for data collection and analysis incorporated the customers and staff members at Huduma Posta City Square within Nairobi Metropolitan city.

3.3 Area of Study

The research process was conducted at Huduma Posta City Square located in Nairobi Metropolitan city. Huduma Posta City Square is among the first centre to be established to provide electronic government services to the public. The centre serves many customers within Nairobi city and it's located within central business district (CBD) of Nairobi Metropolitan city.

3.4 Target Population

According to Singh et al. (2020) the target population is the total number of elements of a certain population that are important to the research endeavor. It is the entire aggregation of respondents that meet the designated set of criteria (Thomas & Pencina, 2020).

Table 3.1 Target population

Target Population	Frequency	Percentage
Huduma Centre Customers	970	98
Huduma Centre Staff Members	20	2
Total	990	100

For this research process, the target population, first and foremost, includes the public or citizens who are the customers or clients accessing and using electronic government services at Huduma Centres and through e-citizen information centres. In addition, it incorporates the staff members working at Huduma Posta City Square. The centre that serves a population of 970 people daily has 20 members of staff.

3.5 Sampling Techniques

For Gondwe (2020), sampling is the process of selecting a group of individuals or objects from a population that contains representative elements and features of the entire population. As indicated by Bhardwaj (2019), sampling is the process where the subset of the whole population is selected to participate in the study. While Rahi (2017), refers sampling technique to the method of selecting a sample. It is also the method used in drawing samples from a population, usually in such a manner that, the sample will facilitate determination of some hypothesis concerning the population (Sharma, 2017). In research, professional judgment is employed in identifying the representative sample of the population using purposive sampling (Kopp et al., 2018). Purposive sampling was used to choose the important human personnel or staff members who were interviewed in this research process. While random sampling was applied in selection of clients who use the Huduma Centre and e-citizen information portal to access e-government services at Huduma Centre City Square. Huduma Posta City Square was purposively selected for this research problem.

3.6 Sample Size

From Majid (2018), sample is the list of items where a representative sample is drawn for the purposes of research. It is the source material or device from which the sample is selected and forms the physical representation of the target population and comprises all the units that are potential members of the sample. Furthermore, Bhardwaj (2019) describes the sample as the collection of all units chosen from the universe to represent it. In research problem, it is essential to determine the sample size requirements prior to the process of data collection, analysis and presentation. Sample ^{size} is the number of elements chosen from the universe to make up or

represent the population (Belavadi, 2017). It is also the source list from which the sample is to be drawn that contains the names of all items of a given population (Sim et al., 2018).

Memon et.al. (2020) explains that, The Krejcie and Morgan table (Krejcie & Morgan, 1970) is well recognised for sample size calculation amongst behavioural and social science scholars and is appropriate to any defined population. Singh et.al, (2020) asserts that there are no calculations needed to use the Krejcie & Morgan sample size calculation table.

$$S = \frac{X^2 NP (1-P)}{d^2 (N-1)} + X^2 P (1-P)$$

Where;

S, Represents the required sample size.

X² =Represents the desired confidence level (0.05)

N is the population size.

P is the population proportion (assumed to be 0.50 since this would provide the maximum sample size).

d represents the degree of accuracy expressed as proportion (0.05).

$$s = \frac{0.0025(970 \times 0.5)(0.5)}{0.0025(970-1)} + 0.0025 \times 0.5(0.5)$$

$$= 278$$

This research therefore considered sample size of 278 respondents using Krejcie & Morgan calculation table and 20 members of the staff through purposive sampling. The sampling frame or sample size for the research engaged 278 participants. Show how you calculated the sample size.

Table 3.2: Sample Size

Target Population	Population Size	Sample Size
Huduma Centre Customers	970	278
Huduma Centre Staff Members	20	20
TOTAL		298

3.7 Data Collection Methods

This is the gathering of information in order to substantiate or establish facts (Clark & Vealé, 2018). It is also defined as the procedure of collecting, measuring and analyzing accurate insights for research using standard validated techniques (Bhardwaj, 2019). Collecting primary data can be done in a variety of ways. Questionnaires, interviews, observation, experiments, and manipulation models are the most crucial methods used. In research process, structured questionnaire and interview schedule were the data collection tools. The questionnaires were used for Huduma Centre customers with the members of stall being interviewed.

3.7.1 Questionnaires

Questionnaire is the method of gathering information from respondents about attitudes, knowledge, beliefs and feelings (Krosnick, 2018). Grassini and Laumann (2020) assert that, questionnaires are the frequently used instruments to gather critical information about the population. After the research proposal has been approved, a research assistant administered the questionnaire. The study adopted closed ended and unstructured questionnaire. Structured or closed ended questionnaire with Likert scale

standardizations gave quantitative data while the unstructured or open-ended questionnaire provided in-depth answers.

3.7.2 Interviews

Interviewing is the process of conducting a conversation with a purpose (Callaghan, 2018). According to Carlson (2020), the most important aspect of the interviewing approach is conveying the attitude that the views of the participants are valuable and useful. The researcher also collected qualitative information through interview guide. This entailed informing the respondents (staff) of the intention of the interview process through appointment. The interviews were conducted in face-to-face manner as guided by the interview questions. Interviews audio were recorded using smart phones upon which the recorded qualitative data were encrypted and presented in verbatim narrative along with the quantitative data.

3.8 Research Instruments

In this research process, the data collection tools were designed and tested so as to ensure that the questions and interviews are understood well by the respondents. This also helped to address the concerns that the respondents may have regarding the data tools.

3.8.1 Pilot Study

Pilot study implies small preface study that is conducted in order to evaluate feasibility, time, costs and adverse events; and determine if the research will be successful (In, 2017). In this research, the pilot study was carried out at Makadara Huduma Centre where 10 respondents were purposively selected for this purpose. The pilot study collected 10 questionnaires from 8 customers and two interview guides from 2 staff working at Makadara Huduma Centre whereby a 100% response rate was

achieved. The data collected was analyzed and assessed to establish the reliability level and validity of the research instruments.

3.8.2 Validity

Validity refers to whether or not the study genuinely measures what it needs to assess as well as the accuracy of the findings (Zhou & Yao, 2018). According to Cohen et.al. (2017), validity is the extent to which the study tool (questionnaire) measures what it is supposed to be gauging. The questionnaires and interviews that form the basis of data collection process were designed based on the research objectives and questions. Both data collection tools were formulated through brainstorming with professional assistance from the supervisors and fellow information professionals. The pilot study testing the questionnaires and interviews were carried out before the final research process. From the pilot study, the respondents seemed to comprehend all questions under the area under investigation and it was also clear that the research tools were able to collect information that the study was interested in.

3.8.3 Reliability

In research, repeatability of the outcomes is referred to as reliability (Flick, 2018). Reliability refers to the degree of consistency or accuracy with which an instrument measures the attribute it is designed to measure (Mohajan, 2017). This implies that the same results should be obtained if accurate information is provided during the study. Reliability is achieved by minimizing measurement errors during data collection process. This was done with the help of the research assistant while administering questionnaires. The researcher also personally interviewed the respondents in a friendly manner. From the piloted instruments, the study established consistency in

terms of responses from all respondents. This was an indication that there was high internal consistency and therefore the study instruments were deemed fit for the study.

3.9 Ethical Considerations

Flick (2018) advises on the importance to ensure that other participants don't identify fellow colleagues in the research. According to this author, consistent anonymization of the data and parsimonious use of context information are necessary in research. Information resources and additional works used are acknowledged to avoid plagiarism. Respondents participated in this research process freely and voluntarily. In addition, high level of confidentiality and anonymity was maintained. The research authorization letters were obtained from the University of Nairobi and Huduma Posta City Square and National Commission for Science, Technology & Innovation (Nacosti).

3.10 Data Collection Procedures

The data collection approach was guided or based on the research objectives and questions. To aid in the collection of questionnaire data, the research assistant was recruited and trained, while the researcher personally interviewed the members of staff at Huduma Posta City Square.

3.1.1 Data Analysis and Presentation

After the data collection exercise, the results were analyzed and presented data using both quantitative and qualitative methods. Questionnaire data was coded, entered and calculated into descriptive statistics using data analysis software package the Statistical Package for the Social Sciences (SPSS Version 25). Information from the results was utilized and presented in charts, line graphs, 2D pie charts. Interview qualitative data was synthesized and classified into the research question before being

presented in frequency distribution tables. In addition to quantitative representation, it is reported in narrative form. Qualitative data was used to support the quantitative data.

3.12 Chapter Three Summary

This chapter discussed the various elements of research methodology applied in this research process. Equally, all these elements are well explained and supported with necessary knowledge - target population, research design, sampling methods and sample size. Fundamental issues that guided the research problem together with data collection methods, analysis and presentation as well as research instruments have been highlighted.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter discusses the interpretation and presentation of the findings obtained from the field. The chapter presents the background information of the respondents, findings of the analysis based on the objectives of the study. The aim of this study was to examine initiatives to enhance electronic government services in public organizations in Kenya using the case of Huduma Postal City Square in Nairobi. The key study objectives that guided this research were; to establish the level at which electronic government services are provided at Huduma Centres, to explore the perception of customers towards electronic government services provided at Huduma Centres, to investigate problems encountered by the customers in access and use of electronic government services at Huduma Centres and to determine the strategies to improve access and provision of electronic government services at Huduma Centres.

4.2 Response Rate of Respondents

This study targeted 278 Huduma Centre customers and 20 staff members. A questionnaire was used for the Huduma Centre Customers while an interview guide was used for the staff. As indicated in Table 4.1, the questionnaires received back from the customers were 248(89%) while interviews were done on 16 (80%) staff members. This response rate was satisfactory to make conclusions for the study as it acted as a representative. According to Mugenda and Mugenda (2012), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. Based on the assertion, the response rate was

therefore excellent. The commendable response rate was achieved as a result of the researcher’s persuasion and making the respondents understands the importance of this research.

Table 4.1: Response Rate

Respondents	Distributed Instruments	Returned Instruments	Percentage (%)
Huduma Centres Customers	278	248	89.2
Staff interviewed	20	16	80
Total	298	264	88.5%

4.3 Background Information of Respondents

This section presents participant’s demographic information; specifically, the areas sought included gender and educational qualifications. This was sought in view of ascertaining participant’s ability to comprehend and respond to the study subject. From Table 4.2 it’s evident that majority (53.6%) of the respondents were males while 46.4% were female. However, it’s also notable that the difference in group representation is less than 15 percent which depicts fair representation of both genders. Results show that, majority (38.7%) of the participants held college diploma certificates, 32.3% of the participants held degrees, 17.7% of the participants held certificates while 11.3% of respondents had masters. This implies that majority of the participants were well educated and therefore they were in a position to respond to the research question with ease.

Table 4.2: Demographic Information

Gender	Frequency (F)	Percentage (%)
Male	133	53.6
Female	115	46.4
Total	248	100

Education Level		
Certificate	44	17.7
Diploma	96	38.7
Degree	80	32.3
Masters	28	11.3
Total	248	100

4.4 Electronic Government Services Provided

The researcher investigated the levels at which electronic government services were provided at Huduma Centres. The study also wanted to establish the electronic government services the respondents had accessed or used. In relation to this the highlights were range of services including accessing and filling online forms, business name search and registration, online applications of marriage, licenses passports, visa, information search on and matters, information search for government services information search on career, employment, education, online payment system and method and information on government updates and notices.

From the results as shown in Figure 4.1, participants indicated a range of services that could be accessed through Huduma Centres.

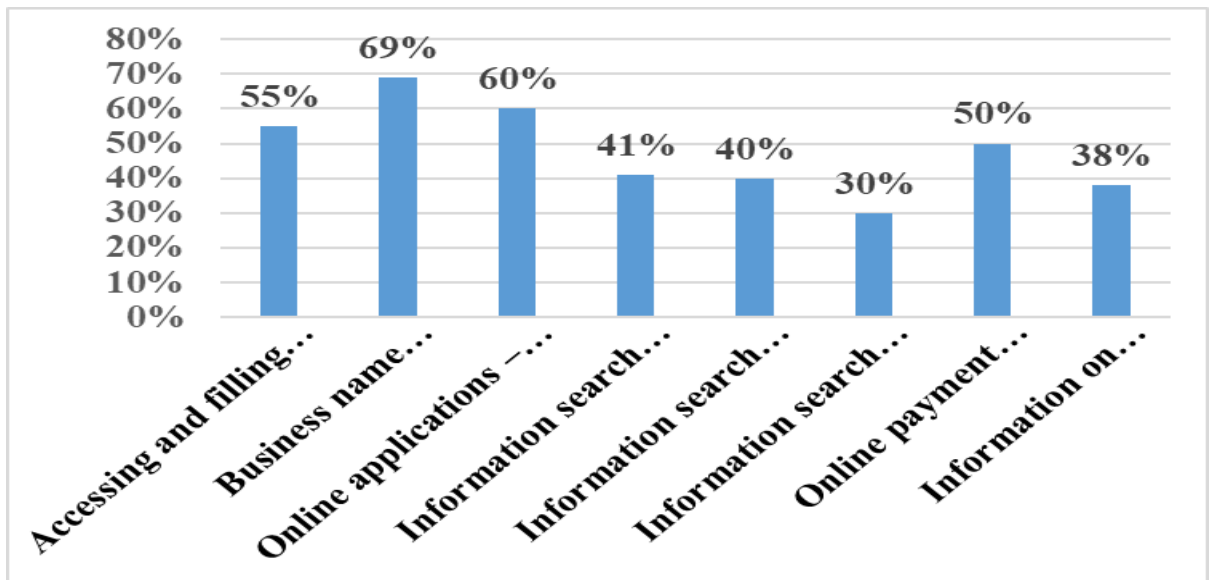


Figure 4.1 Range of Electronic Government Services

Among the services enlisted include business name search and registration as represented by a 69% (171) response rate. Further, 60% (149) indicated that Huduma Centres availed online applications such as marriage, licenses passports, visa, 55% (136) of the respondents indicated that individual could access and fill online forms, 50% (124) indicated that the center provided access to online payment system and method, 41% (102) the respondents indicated information search on land matters, 40% (99) indicated information search for government services, 38% (94) of the respondents indicated information on government updates and notices while 30% (74) of the respondents indicated information search on career, employment, education. Drawing from the statistics above its evident that the public were aware of government services available at Huduma Centres however majority of the public were not conversant with of some services such as information search on career, employment, education. These findings are in supports similar research conclusion by Anupriya et al., (2021) that with the advancement of ICTs, public administration in

many countries has embraced these technologies to enhance the efficiency of government processes and obtain better provisioning of services.

On the electronic government services the respondents had accessed or used, results as presented in Figure 4.2 show that 76% (188) respondents who formed the majority indicated that they made online applications for certificates such as marriage, licenses passports, and visa, 60% (149) accessed and filled online forms, 55% (136) of respondents indicated they were interested in business name search and registration, 50% (124) of respondents indicated that they reached for online payment system and method, 45% (112) of respondents indicated information search on land matters, 44% (109) of respondents indicated information search for government services while 22% (55) of respondents indicated information search on career, employment, education. The findings are in line with those of Otieno and Omwenga (2016) who revealed that electronic government is not just about creating information portals and using the Internet, it's about changing the way services are delivered and the basic relationship between government and its citizens.

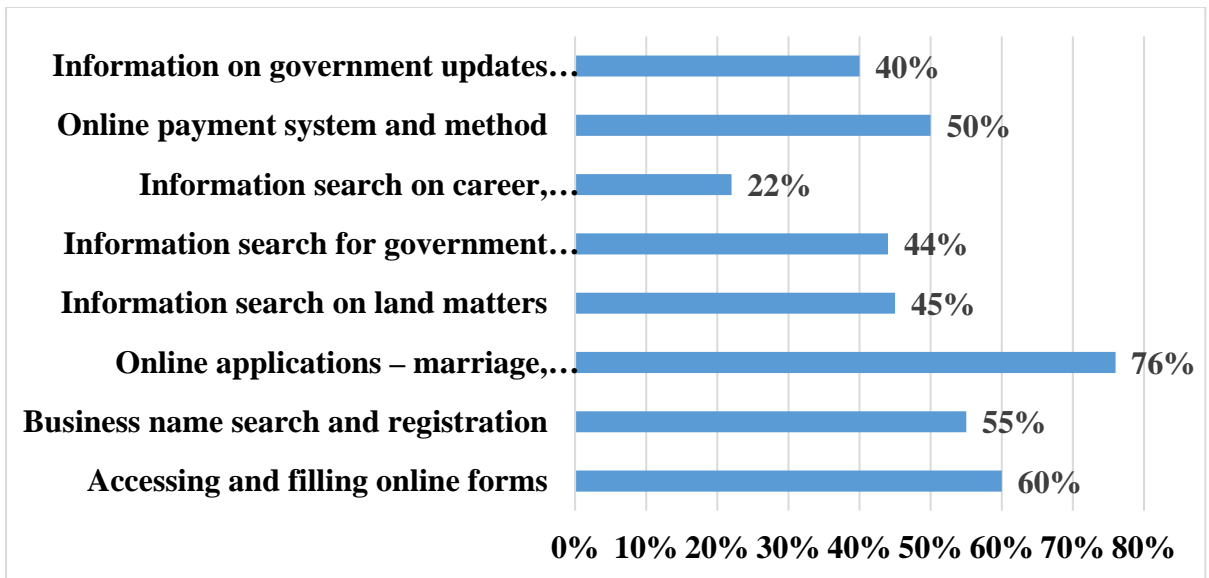


Figure 4.2 Electronic Government Services the Respondents Had Accessed or Used

In addition, there was qualitative information, where one respondent stated that;

“Through the Huduma Centres web portal the public has online access to a number of public services offered by various Government Ministries, Departments and Agencies, within one channel. Some of these include payment of taxes through i-Tax, renewal of drivers’ licenses, business registration, passport application, and application of death and birth certificates among many more. This not only makes it easier for the citizen to access the various public services and information, but also makes delivery of service more efficient, convenient and timely”.

4.4.1 Potential Customer Benefits

The research sought to determine the potential benefits to customers resulting from Huduma Centres. Some of the benefits that highlighted included multiple services available from one point, Better and efficient services offered, provide public services online, Increases access to data and information, Collaboration and engagement enhanced, Performance and monitoring possible and Client management capabilities

improved. The study findings are in line with those of Ondego and Moturi (2016) who found out that e-citizen program intends to transform public service delivery by providing residents with access to a variety of public services and information through integrated digital platforms.

As shown in Figure 4.3, respondents stated that Huduma Centre provided public services online (86%). Further, 77% (191) of the respondents indicated that through Huduma Centres multiple services were available from one point, 72%(179) of the respondents indicated the facility enhanced Collaboration and engagement enhanced.70% (174) of the respondents indicated Huduma Centres provided Better and efficient services, 50% (124) of the respondents indicated that Client management capabilities improved, 40% (99) of the respondents indicated that Huduma Centres Increases access to data and information and that 30% (74) of the respondents indicated that performance and monitoring possible. The findings confirm the contention by Mutinda and Kaswira (2017), the Huduma program brings together over 35 agencies under one roof and provides high-impact services to the public, saving time, money, time saving and improving service delivery for both residents and business organizations.

The investigated the awareness levels with the public concerning of the electronic services provided at Huduma centre. The different levels of awareness included extremely aware, very aware, aware, somewhat aware, not aware and don't know. From Figure 4.4, 35.5% (88) of the respondents indicated that they were aware,24.2% (60) of the participants indicated that they were very much aware, 21.4% (53) of the respondents indicated that they were extremely aware while 19.0% (47) of the respondents indicated that they were somewhat aware. This implies that majority of the

public were somehow able to access and use electronic government services. The findings agree with those of Imbamba and Kimile, (2016) who stated that the government needs to implement more electronic government programs to improve digital inclusion and encourage more individuals to participate in government activities through online services.

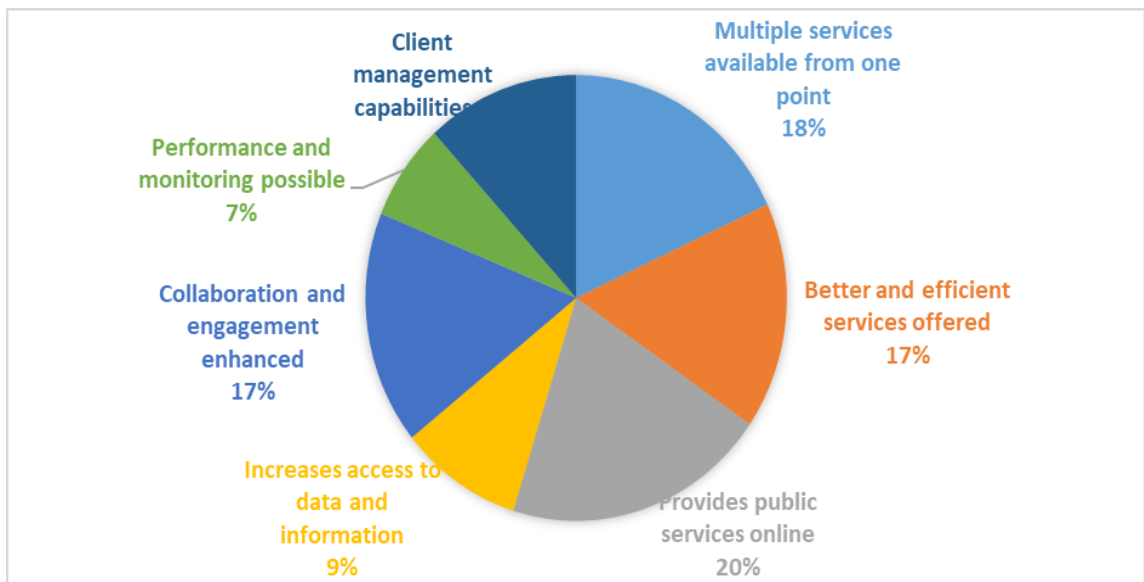


Figure 4.3: Potential Benefits to Customers Resulting from Huduma Centres

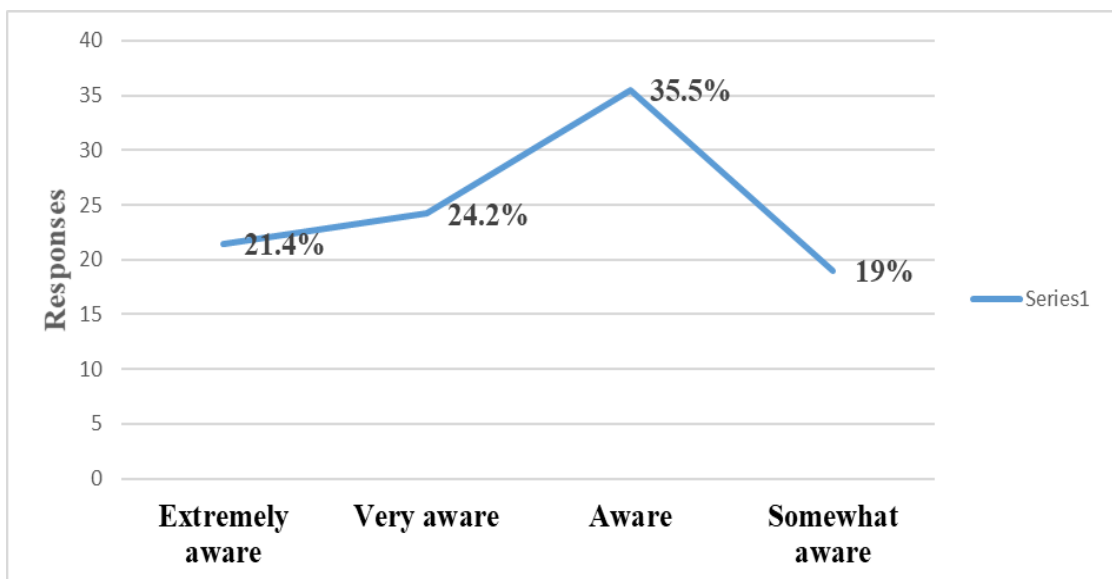


Figure 4.4 Level of Awareness on Access and Use Electronic Government Services

4.5 Perception towards Electronic Government Services

Participants were asked to rate the perception and reaction of customers towards the delivery of electronic government services. The rating was done based on the following measures; strongly important, very important, important and somewhat important. As shown in Table 4.3 36.3% (90) of the respondents indicated of customers considered e- services very important, 29.4% (63) of the respondents indicated important, 25.0% (62) of the respondents indicated strongly important while 9.3% (23) of the respondents indicated somewhat important. This implies that majority of the public were considered delivery of electronic government services very important. The findings go in line with those of Kinyanjui and Waithaka, (2019) who revealed that citizens have improved confidence with Huduma centres since it has transformed public service delivery by providing citizens access to various public services and information from one-stop-shop through integrated technology platforms.

Table 4.3: Customer Perceptions and Reactions

Customer Perceptions and Reactions	Frequency	Percentage (%)
Strongly important	62	25.0
Very important	90	36.3
Important	73	29.4
Somewhat important	23	9.3
Total	248	100.0

Respondents were asked to rank the acceptance of electronic government services provided at Huduma Centres. The ranking was done in terms of outstanding, excellent, very good, good and average. From the study findings as presented on Table 4.4, 31.5% (78) of the respondents indicated average, 27.8% (69) of the respondents indicated good, 16.5% (41) of the respondents indicated excellent, 16.1% (40) of the respondents indicated very good while 8.1% (20) of the respondents indicated outstanding. This implies that there is an average level of public acceptance with electronic government services.

Participants were also required to indicate the level of customer satisfaction with e-service provision in Huduma Centres. The levels of satisfaction were rated in terms of extremely satisfied, satisfied and dissatisfied and extremely dissatisfied. From the study findings as shown in Figure 4.5, 42.7% (106) of the partakers in indicated that that they were satisfied 30.6% (76) of the respondents indicated that that they were extremely satisfied, 18.5% (46) of the respondents indicated that that they were dissatisfied, while 8.1% (20) of the respondents indicated that that they were extremely dissatisfied. This implies that there is majority of the public were satisfied with electronic government services provided at Huduma Centres.

Table 4.4: Acceptance of Electronic Government Services

Acceptance of Electronic Services	Frequency	Percentage (%)
Outstanding	20	8.1
Excellent	41	16.5
Very good	40	16.1
Good	69	27.8
Average	78	31.5
Total	248	100.0

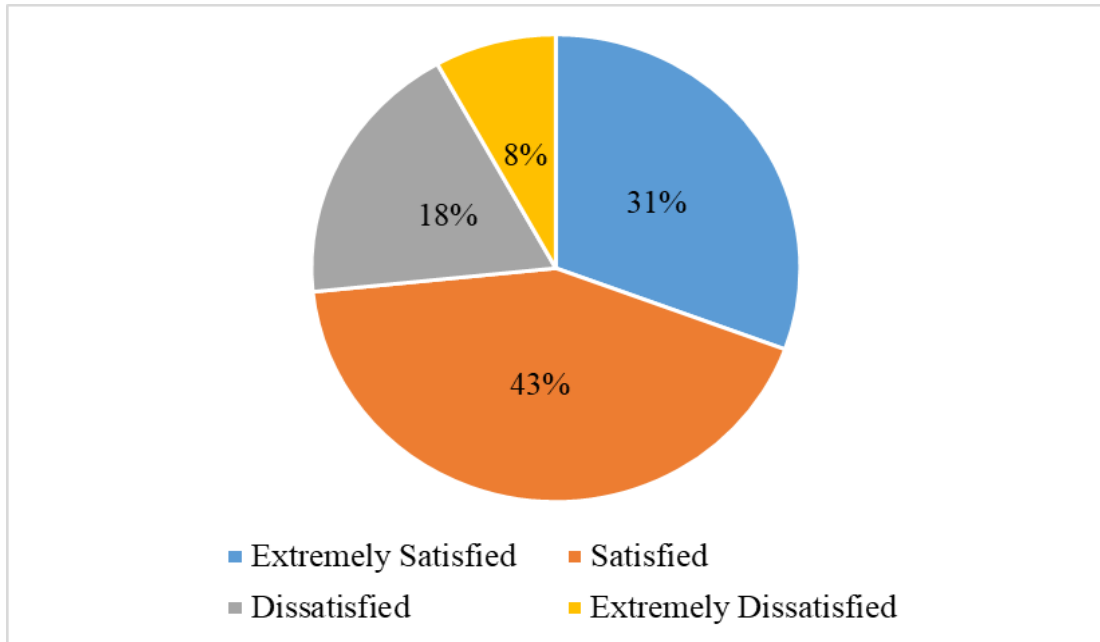


Figure 4.5: Level of Customer Satisfaction

In addition, there was qualitative data where the Huduma Centre Customers stated that e-government systems were very useful in their lives and were easy to use. They further reported that convenience was the highest perceived benefit of using Huduma Centres E-Government services. Privacy issues was considered to be one of biggest barrier in the embracement of Huduma Centres E-Government services, however majority of the participants were willing to continue accessing their government’s online services via Huduma Centres portal. The study asked the participants to enumerate the initiatives used to enhance customer perception and reaction towards service delivery at Huduma Centres. Participants reported that department had to put up customer care desk that serves in creating awareness. Similarly, Huduma Centres had also embraced also social medial platforms in enhancing awareness in Huduma services.

The study sought to determine the impact of Huduma centre Services to the respondents. The study was guided by the following impacts; Enhances effective delivery of services, provides quick access to information, customers' needs attended instantly, improves assistance from the staff, provides wide range of services, promotes customer relationship and provides digital assistance. Majority of the participants as shown in Table 4.5 agreed that Huduma Centers' initiative improves assistance from the staff (M= 4.31 SD=0.22), Provides digital assistance (M=4.18 SD=0.19), through Huduma Centers' initiative customers' needs attended instantly (M=4.12 SD=0.18) Huduma Centers' initiative, promotes customer relationship (M=4.10 SD=0.18), Huduma Centers' initiative provides quick access to information (M=4.09 SD=0.17) it also provides wide range of services (M=4.01 SD=0.16) and enhances effective delivery of services (M=3.88SD=0.14). The findings concur with research deduction by AlBalushi, (2021) who found out that rapid advancement of information and communication technology has changed the way governments operate and communicate with the public or citizens through electronic government initiatives. The author further explains that, understanding the linkages between the quality of government services and their impact on the user or citizen satisfaction has become critical.

Table 4.5: Huduma Center’s Initiative Impact

	Not important	Somewhat important	Important	Very important	Strongly important	Mean	Std dev
Enhances effective delivery of services	6	22	55	79	86	3.88	0.14
Provides quick access to information	3	15	42	85	103	4.09	0.17
Customers’ needs attended instantly	2	14	36	96	100	4.12	0.18
Improves assistance from the staff	1	12	31	69	135	4.31	0.22
Provides wide range of services	5	10	56	84	93	4.01	0.16
Promotes customer relationship	4	8	47	88	101	4.10	0.18
Provides digital assistance	2	9	37	95	105	4.18	0.19

Source: Research data, (2021)

In addition, there was qualitative data where interviewees stated that Huduma Centres brought a huge change in terms of service provision by the government to its citizens.

In a verbatim one of the staff reported the following;

“Service delivery through Huduma e-platforms is more efficient as compared to traditional modes. There is more accountability with officers as opposed to traditional method. Consolidation of government services within a single portal has helped us save time for our customers by not visiting the specific government departments physically. However, there is need to ensure continuous software upgrades, staff training and public awareness on electronic government services”.

4.6 Problems encountered in Access of Electronic Government Services

Study respondents were asked to indicate highlight the problems that affect access and use of electronic government services at Huduma Centre. Some of the problems guiding the study included; inadequate internet services and connections, inadequate information infrastructure, lack of technological culture and leadership, lack of digital policies and legislation, limited financial resources and commitment, lack of digital skills awareness and readiness, lack of trust and honest in online services, lack of technological culture and leadership, information and data security issues and inadequate energy and power infrastructure.

As shown in Figure 4.6, 82% (203), participants indicated that delivery of e-government services faced various challenges including inadequate awareness of digital policies, 80%(198) of the respondents indicated inadequate technological culture and leadership, 78% (193) of the respondents indicated inadequate energy and power infrastructure, 71% (176) of the respondents indicated inadequate information infrastructure, 70% (174) of the respondents indicated information and data security issues, 64%(159) of the respondents indicated inadequate digital skills awareness and readiness, 62% (154) of the respondents indicated inadequate internet services, 57% (141) of the respondents indicated limited financial resources and commitment, 40% (99) of the respondents indicated limited trust and honest in online services while 20% (50) of the respondents indicated inadequate network connection. These findings concur with study conclusion by Kaswira, (2017) that a huge section of the population in rural Kenya and the slums lack the abilities to use the Internet as adding that people from socioeconomically underprivileged origins, those living in geographically

marginalized locations and the elderly are among the many people who are unable to utilize the Internet or access e-government services.

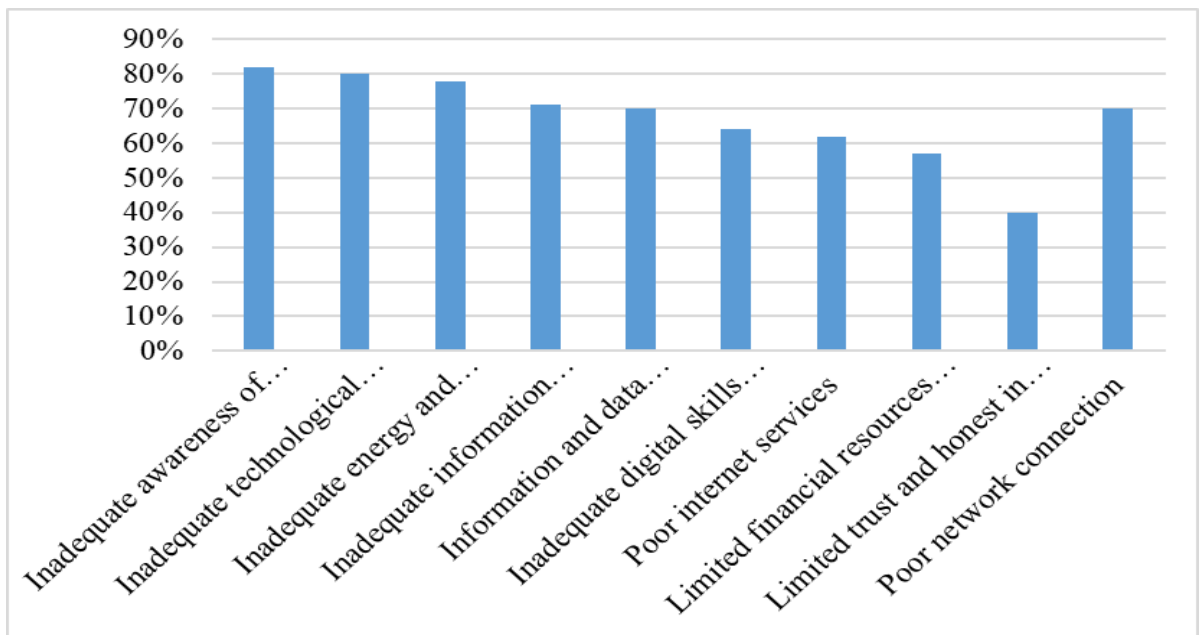


Figure 4.6: Problems encountered by the customers in Access and Use

From the qualitative data, the study revealed that network failure was the major challenge affecting service delivery at Huduma Centre. In a verbatim, one of the Centre manager stated the following;

“One of the major challenge that we experience day in day out is network failure which affects our service delivery to a larger extent. In most cases the network failure comes from the other service providers since we operate like a virtual office. When there is no reliable network from their end, we cannot be able to give services to our customers efficiently and effectively”.

From the open ended questions, the significant problems that hindered effective delivery of electronic government services at Huduma Centres included low awareness levels, doubtful and insufficient infrastructure, deficient IT skills amid users, lack of clarity in policy and legal framework, risk of privacy and high

insecurity and lack of interdepartmental harmonization and collaboration. Interviewees further reported that Huduma Centres enhanced equitable treatment of citizens, promoted greater transparency in service delivery, fostered greater convenience and access to information, improved the quality of information provided, helped to save time, improved access portfolio of government services, improved citizens satisfaction with government services and reduced bureaucracy. These results concur with argument by Baabdullah (2018) infrastructure and service availability is critical in electronic government adoption. These results also concur with arguments of a similar study by Imbamba & Kimile, (2016) that show that the government needs to implement more electronic government programs to improve digital inclusion and encourage more individuals to participate in government activities through online services.

Study respondents were asked to highlight emerging digital technologies that should promote delivery of services at Huduma Centres. Some of the emerging technologies investigated included online information portal, mobile platforms and applications, digital platforms and devices, social media platforms and internet and websites, disruptive technologies robotics and wearable. From the findings in Table 4.6, 208(84%) indicated mobile platforms and applications as one of emerging digital technologies, 77% of the respondents indicated digital platforms and devices, 71% of the respondents indicated social media platforms, 70% of the respondents indicated online information portal while 23% of the respondents indicated disruptive technologies, robotics, wearable.

Respondents were asked to highlight the important things that the management of Huduma Centres should put in place to ensure effective delivery of e-government services. Some of the important things guiding the study included expand or increase the centres, provide more services, information literacy and awareness, provide digital technologies and market and promote the centres. From the study findings as shown in Table 4.7, 90% of the respondents indicated that there is need to expand or increase the centres, 85% of the respondents suggested the need to market and promote the centres, 83% of the respondents suggested the need to provide more services, 80% of the respondents suggested the need to enhance information literacy and awareness while 76% of the respondents suggested the need to provide digital technologies

Table 4.6: Emerging Digital Technologies

Emerging Technologies	N	Percentage (%)
Online information portal	174	70
Mobile platforms and applications	208	84
Digital platforms and devices	191	77
Social media platforms	176	71
Internet and websites	198	80
Disruptive technologies robotics, wearables	57	23

Table 4.7: Important Things for Huduma Centres

Important things at Huduma Centre	N	Percentage (%)
Expand or increase the centres	223	90
Provide more services	206	83
Information literacy and awareness	198	80
Provide digital technologies	188	76
Market and promote the centres	211	85

4.7 Strategies to Improve Electronic Government Services

Respondents were asked choose strategies to enhance delivery of electronic government services to the customers. The strategies guiding the study included; training capabilities, digital platforms and tools, technological infrastructure, expand the services, internet connections, human personnel and mobilization of resources. As illustrated in Table 4.8, 89% of the participants suggested the need to invest in technological infrastructure, 85% of the participants suggested the need to need to expand the e-government services 80% of the participants suggested the need to boost internet connections, 64% of the participants suggested the need to need to ensure training capabilities 60% of the participants suggested that that there is need to mobilization of resources and invest more on digital platforms and tools while 50% of the participants suggested the need to hire and invest more on human personnel. The findings are in line with those of Imbamba and Kimile (2017) who stated that an integrated service delivery strategy that provides government services to the general public through the one-stop-shop model with strong focus on customer service excellence must be well supported in terms of resources and infrastructures.

Table 4.8: Strategies for Improvement

Strategic Improvement	N	Percentage (%)
Training capabilities	159	64
Digital platforms and tools	149	60
Technological infrastructure	221	89
Expand the services	211	85
Internet connections	198	80
Human personnel	124	50
Mobilization of resources	149	60

Source: Research data, (2021)

From the qualitative information, respondents reported that there is need to Increase ICT skills among citizens and staff through training and education. There is need to share knowledge and updates about e-services to the public. Interviewees were asked to comment on the initiatives that can be used to enhance electronic government services at Human Centres. Results show that various strategies were applied to improve access and provision of electronic government services at Huduma Centres, such included the erection of customer care desk that helped in creating awareness to the public, embracement of social medial platforms, use of free call lines, continuous training of staff, investment on communication infrastructure networks, development of software security control measure and collaboration with other government offices. The findings are in line with Mafwiri, (2020) who stated that, the government is responsible for developing training and capacity building for government officials who are in charge of electronic governance implementation and adoption, as well as establishing training ICT clinics for the general public on how to use the programs.

CHAPTER FIVE
SUMMARY OF THE FINDINGS, CONCLUSION AND
RECOMMENDATIONS

5.1 Introduction

From the analysis and data collected, the following discussions, conclusion and recommendations were made. The responses were based on the objectives of the study. The study sought to establish the electronic government services are accessed and provided at Huduma Centres. Assess the perception of customers towards electronic government services provided at Huduma Centres, investigate problems encountered in access and use of electronic government services at Huduma Centres and propose strategies that can improve access and provision of electronic government services at Huduma Centres.

5.2 Summary of the Findings

This research examined initiatives to enhance electronic government services in public organizations in Kenya using the case of Huduma Postal City Square in Nairobi. The study used both quantitative and qualitative research methods to provide descriptive data from the case study of Huduma Posta City Square. Total target population incorporated in this research process was 298 respondents with 278 being customers and 20 staff members. Random and purposive samplings were used to choose the respondents for data collection purposes. Interviews and questionnaire were the tools used to gather data and information from the respondents whose results were presented in tables.

5.2.1 Electronic Government Services Provided

The study established that a range of services could be accessed through Huduma Centres platforms. Such services include business name search and registration; Huduma Centres availed online applications such as marriage, licenses passports, visa, and individual could access and fill online forms. The center provided access to online payment system and method, information search on land matters, information search for government services, information on government updates and notices and information search on career, employment, and education. From the findings it is evident that the public were aware of government services available at Huduma Centres however majority of the public were not conversant with of some services were services such as Information search on career, employment, education. Results also show that the most accessed E-services include; online applications for certificates such as marriage, licenses passports, and visa, online forms, business name search and registration and online payment system.

5.2.2 Perception towards Electronic Government Services Provided

The public has positive perception towards electronic government services provided at Huduma Centres. From the findings, it's clear that Huduma services has enhanced equitable treatment of citizens and promoted greater transparency in service delivery. It was also established that Huduma Centres provided better and efficient services, client management capabilities were improved and provision of e-services increased. The study established that considerable number participants (public) were somehow able to access and use electronic government services, The public considered delivery of electronic government services very important, there is an average level of public acceptance with electronic government services, majority of the public were satisfied

with electronic government services provided at Huduma Centres. Results also show that at Huduma centers', there is effective staff assistance, efficient digital assistance and customers' needs are attended instantly.

5.2.3 Problems encountered in Access of Electronic Government Services

On problems that affect access and use of electronic government services at Huduma Centre, results show that delivery of e-government services faced various challenges including lack of digital policies and legislation, lack of technological culture and leadership, inadequate energy and power infrastructure, inadequate information infrastructure, information and data security issues and lack of digital skills awareness and readiness. Results also show that inadequate internet services and connections, limited financial resources and commitment, lack of trust and honest in online services and lack of technological culture and leadership were some of the other challenges.

5.2.4 Strategies to Improve Electronic Government Services

In order to improve enhance delivery of electronic government services to the customers, there is need to invest in technological infrastructure, expand the e-government services, boost internet connections, ensure training capabilities, mobilization of resources, invest more on digital platforms and tools and finally hire and invest more on human personnel. To improve and enhance delivery of electronic government services, there is need to increase the penetration of ICT skills among citizens and staff through training and education. There is need to share knowledge and updates about e-services to the public.

5.3 Conclusion

In line with the first objective, the research concludes that electronic government services are accessed and provided at Huduma Centres included online applications for certificates such as marriage, licenses passports, and visa, business name search and registration, online payment system, information search on land matters information search for government services and information search on career, employment, education.

On the second objective, the study concludes that currently; majority of the citizens have a positive perception towards electronic government services provided at Huduma Centres. Huduma centres have eased service delivery by the government to its people. Huduma services has enhanced equitable treatment of citizens, promoted greater transparency in service delivery, fostered greater convenience and access to information and reduced bureaucracy.

On the third objective, the study concludes that there are a number of problems encountered in access and use of electronic government services at Huduma Centres, Among the challenges include privacy issues, connectivity breakdown, hyper government surveillance on citizens, lack of reliability of information, overpromising and under-delivering, lack of awareness, slow speed of internet, lack of equality in public access to internet, lack of clarity, lack of interconnectivity between government departments and high cost of internet.

On the fourth objective, the study concludes that there are various strategies that can be applied to improve access and provision of electronic government services at Huduma Centres. Such includes the erection of customer care desk that helps in creating awareness to the public, embracement of social medial platforms, and use of

free call lines, continuous training of staff, and investment on communication infrastructure networks and development of software security control measure.

5.4 Recommendations

This study therefore makes the following recommendation;

5.4.1 Electronic Government Services Provided

In order to enhance provision of electronic government services at Huduma Centres, there is need to enhance the country's computer knowledge provision and internet penetration. Further the government needs to establish more Huduma Centres and increase the number of services provided at each centre.

5.4.2 Perception towards Electronic Government Services Provided

Government should replace the faulty teller machines with new and efficient ones. More importantly, since the virtually all services have been digitized, it is recommended that the government should ensure that there are strong internet connections within the centre to enhance service efficiency; this may be achieved by seeking the services of internet providers who are capable of providing high speed internet.

5.4.3 Problems encountered in Access and Use of Electronic Government Services

The government should develop privacy and security Laws and regulation. This calls for implement good privacy and security policies, revising existing laws, build privacy and trust on network environment with best security practices such as encryption and authentication. The government should also ensure privacy of

electronic data through digital signatures, provide for quick legal advancements, reviews and approvals.

5.4.4 Strategies to Improve Electronic Government Services

The government should also keep training employees on customer service in order to improve the quality of services that the government provides to citizens. Such training should be done continuously to equip with employees working at the centre with skills that are required to handle diverse customers, especially based on the fact that there are customers with different personalities, attitudes, and perceptions. The most important skills, in this case, are interpersonal skills and emotional intelligence. The government should also train the public on digital literacy skills and this can be done in collaboration with other stakeholders like public libraries.

5.5 Suggested Areas for Further Study

5.5.1 Focus on a Larger Scope

The focus of this study was to examine initiatives to enhance electronic government services in public organizations in Kenya using the case of Huduma Postal City Square in Nairobi. The study was limited to the Huduma Centre City Square within the CBD Nairobi, and the findings can't be generalized or applied within the private sector entities and other government owned organizations. In connection to this limitation, it is possible to carry out further research how the issues look like in other sectors.

5.5.2 Stakeholders Involvement on E-Government Service Systems

Future studies should investigate the relationship between stakeholder involvement in development of E-government service systems and citizen acceptance and utilization

of the services. Similar studies can be carried out with a further scope to include more Counties in Kenya other than Nairobi County. A comparative study can be done on other citizen service centres in other countries for comparison purposes.

REFERENCES

- Abdul, M. S. (2020). Challenges and Prospects of E-government Implementation in Afghanistan. *International Trade, Politics and Development*, 5(): pp. 51-70.
- AlBalushi, T.H. (2021). E-services quality: A perspective of service providers and service users. In *E-Service [Working Title]*. IntechOpen. <https://doi.org/10.5772/intechopen.97077>
- Alkhateeb, M. A., & Abdalla, R. A. (2021). Antecedents of Trust in E-government: Palestinian Citizens' Perspective. *Studies of Applied Economics*, 39(7).
- Almuraqab, N. A. S., & Jasimuddin, S. M. (2017). Factors that Influence End-users' Adoption of Smart Government Services in the UAE: A Conceptual Framework. *Electronic Journal of Information Systems Evaluation*, 20(1): pp11-23.
- Al-Rawahna, A. S. M., Chen, S. C., & Hung, C. W. (2018). The Barriers of E-government Success: An Empirical Study from Jordan. *International Journal of Managing Public Sector Information and Communication Technologies*, 9(2): pp. 1-18.
- Ana, M. & Lída, O. (2019). Constitutional Knowledge and Its Impact on Citizenship Exercise in a Networked Society. IGI Global.
- Ang'anyo, M., & Mbatha, J. (2019). Impact of Performance Contracting on Public Service Delivery in the National Government Administration in Kenya: Case of Eldoret West Sub-county. *Journal of Public Administration and Governance*, 9(2).
- Anupriya, K., Satish, K. & Amandeep, D. (2021). Electronic Government and Corruption: Systematic Literature Review, Framework, and Agenda for Future Research. *Technological Forecasting & Social Change*, 167, 120737.
- Belavadi, S. N. & Prashanth, P. (2017). Understanding Research Methodology Under Ayurveda Parlance. *ayurpub* 2017; II (2):369-378
- Botrić, V. & Božić, L. (2021). The Digital Divide and E-government in European economies. *Economic Research-Ekonomska Istraživanja*, pp. 1-20.
- Bwalya, K. J. (2018). *The E-government Development Discourse: Analysing Contemporary and Future Growth Prospects in Developing and Emerging Economies*. South Africa. Aosis

- Cenay, B., Elvettin, A. & Onur, K. (2021). *Handbook of Research on Global Challenges for Improving Public Services and Government Operations*. IGI Global.
- Clark, K. R., & Vealé, B. L. (2018). Strategies to Enhance Data Collection and Analysis in Qualitative Research. *Radiologic Technology*, 89(5): 482CT-485CT.
- Flick, U. (2018). *The sage handbook of qualitative data collection*. Sage Publication.
- Giao, H. N. K. (2020). Customer Satisfaction at Tiki. Vn E-commerce Platform. *The Journal of Asian Finance, Economics and Business*, 7(4): pp. 173-183.
- Gondwe, G. (2020). How Qualitable is Qualitative Research in Communication Studies? Examining the Pragmatic Use and Acceptance in Media Studies. Examining the Pragmatic Use and Acceptance in Media Studies. *SSRN Electronic Journal*: pp.1556-5068
- Graça, M., Rui, P. & Augusta, da C. (2018). *Handbook of Research on Modernization and Accountability in Public Sector Management*. IGI Global.
- Hammond, M., & Wellington, J. (2020). *Education Research: The Basics*. Routledge.
- In J. (2017). Introduction of a pilot study. *Korean journal of anesthesiology*, 70(6), 601–605.
- Imbamba, E. N. & Kimile, N. (2017) A Review of the Status of E-government Implementation in Kenya. *Regional Journal of Information and Knowledge Management*, 2: pp. 14-28.
- Joshi, P., & Islam, S. (2018). E-government Maturity Model for Sustainable E-government Services from the Perspective of Developing Countries. *Sustainability*, 10(6): pp. 1882.
- Karippacheril, T. G., Kim, S., Beschel, R. P. Jr., & Choi, C. (2016). *Bringing Government into the 21st Century: The Korean Digital Governance Experience*. Washington, DC: World Bank.
- Kinyanjui, M. & Waithaka, P. (2019) Transformation in Public Service Delivery in Kenya: A Case of Huduma Kenya Centres. *International Journal of Research and Innovation in Social Science (IJRISS)*, III(X): pp. 2454-6186.
- Kopp, C., Korb, K. B. & Mills, B. I. (2018). Information-theoretic Models of Deception: Modelling Cooperation and Diffusion in Populations Exposed to "Fake News". *PloS one*, 13(11).

- Lee, T. D., Lee-Geiller, S. & Lee, B. K. (2021). A Validation of the Modified Democratic E-governance Website Evaluation Model. *Government Information Quarterly*.
- Memon, M. & Ting, H. & Hwa, C. & Ramayah, T. & Chuah, F. & Cham, T. H. (2020). Sample Size for Survey Research: Review and Recommendations. *Applied Structural Equation Modeling*, 4(2)01: pp. 2590-4221
- Mensah, I. K., Zeng, G., & Luo, C. (2020). E-government Services Adoption: An Extension of the Unified Model of Electronic Government Adoption. *SAGE Open*, 10(2).
- Ministry of ICT, Kenya (2019) National Information, Communications and Technology (ICT) Policy.
- Mukamurenzi, S., Grönlund, Å. & Islam, S. M. (2019). Improving Qualities of E-government Services in Rwanda: A Service Provider Perspective. *The Electronic Journal of Information Systems in Developing Countries*, 85(5).
- Mutinda, M. & Kaswira, J. (2017). Strategic Role of Huduma Centre Initiatives on Public Service Delivery Among Residents of Nakuru County. *IOSR Journal of Business and Management*, 19(9)(VII): pp. 35-41.
- Mwai, J. & Karume, S. (2020). Transforming Service Delivery in Government through Integration of Web 3.0 and Social Media Technologies: A Case for Developing Countries. *Information Technology*, 8(3): pp. 57-65.
- Neelankavil, J. P. (2020). A Population-based Analysis of Intra-Operative Cardiac Arrest in the United States. *Anesthesia & Analgesia*, 130(3): pp. 627-634.
- Nguyen, T. T., Phan, D. M., Le, A. H., & Nguyen, L. T. N. (2020). The Determinants of Citizens' Satisfaction of E-government: An Empirical Study in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(8): pp. 519-531.
- Ogola, C., & Nyang'au, A. (2021). Evaluation of Institutional Determinants of E-Government Adoption in the National Government Administrative Units in Kenya: A Case of Migori County. *International Journal of Research and Innovation in Social Science (IJRISS)*, V(IV): pp. 2454-6186.
- Ondego, B. & Moturi, C. (2016). Evaluation of the Implementation of the E-citizen in Kenya. *International Journal of Applied Information Systems*, 10(4): pp. 13-21.

- Osah, J., & Pade-Khene, C. (2020). E-government Strategy Formulation in Resource-constrained Local Government in South Africa. *Journal of Information Technology & Politics*, 17(4): pp. 426-451.
- Otieno, I. & Omwenga, E. I. (2016). Citizen-Centric Critical Success Factors for the Implementation of E-Government: A Case Study of Kenya Huduma Centres. *Journal of Emerging Trends in Computing and Information Sciences*. 7(2): pp. 102-109.
- Roztock, N., Soja, P. & Weistroffer, H. R. (2019). The Role of Information and Communication Technologies in Socioeconomic Development: Towards a Multi-Dimensional Framework. *Information Technology for Development*, 25(2): pp. 171-183.
- Rutto, D. & Yudah, O. (2017). Huduma Centres Revolutionizing Service Provision in Kenya: Lessons for the Information Profession. *International Journal of Science and Research(IJSR)*, 6(6): pp. 1133-1137.
- Sarker, M. N. I., Hossin, M. A., Frimpong, A. N. K. & Xiaohua, Y. (2018). Promoting Information Resource Management for E-government Through Big Data Approach. *Proceedings of the 2018 International Conference on Information Management & Management Science - IMMS 18*, 99-104.
- Singh, V. & Singh, G. (2018). Citizen Centric Assessment Framework for E-governance Services Quality. *International Journal of Business Information Systems*, 27(1): pp. 1-20.
- Malodia, S., Dhir, A., Mishra, M., & Bhatti, Z. A. (2021). Future of e-Government: An Integrated Conceptual Framework. *Technological Forecasting & Social Change*, 173: pp.121102
- Mugenda, O.M., & Mugenda, A.G. (2012). *Research methods: Quantitative and qualitative approaches*, Nairobi, ACTS Press
- Tyagi, V. & Tyagi, A. (2017). E-governance in India - Concept, Challenges and Strategies. *International Journal of Science Technology and Management*, 6(2): pp.2394-1529
- Ude, N., Ude, K., Ugbor, U. & Ogu, E. (2021). E-governance and Economic Development in Sub-Saharan Africa: A Case of Nigeria. *International Journal of Development Strategies in Humanities, Management and Social Sciences*, 11(1): pp. 87–100.

- United Nations (Ed.). (2018). *Harnessing frontier technologies for sustainable development*. United Nations.
- United Nations (2020). *Digital Government in the Decade of Action for Sustainable Development*. United Nations.
- UNICEF, Pelter, Z., & Byrne, J. (2021). *Government services and children: Pathways to digital transformation*. United Nations Children's Fund.
- Valentina, C. (2021). *Handbook of Research on Applied Data Science and Artificial Intelligence in Business and Industry*. IGI Global.
- Verkijika, S. F. & De Wet, L. (2017). Determining the Accessibility of E-government Websites in Sub-Saharan Africa Against WCAG 2.0 Standard. *International Journal of Electronic Government Research (IJEGR)*, 13(1): pp. 52-68.
- Zhigang, L. & Fengyue, Y. (2016). The E-government Information Model Based on GPR. *Procedia Computer Science*, 91: pp. 193-200.
- Zhou, D., Yan, Z., Fu, Y. & Yao, Z. (2018). A survey on Network Data Collection. *Journal of Network and Computer Applications*, 116: pp. 9-23.

APPENDIX I

LETTER OF INTRODUCTION

Elizabeth Wangari Mwangi
PO Box 49489 - 00100 Nairobi

Dear respondent,

INTRODUCTION LETTER FOR RESEARCH

I am a Master of Library and Information Science student at the University of Nairobi. I am conducting a study titled; **Enhancing Electronic Government Services in Public Organizations in Kenya: Case of Huduma Postal City Square in Nairobi.**

The Objectives of the study includes to: establish the extent to which electronic government services are provided at Huduma Centres, explore the perception of customers towards electronic government services provided at Huduma Centres; find out the challenges that affect access and use of electronic government services at Huduma Centres; and determine the strategies to improve access and provision of electronic government services at Huduma Centres.

You have been chosen to take part in this study, any information or opinions you submit will be used solely for academic purposes and kept totally confidential.

Yours Faithfully

Sign 

Elizabeth Mwangi

APPENDIX II

QUESTIONNAIRE FOR HUDUMA CENTRE CLIENTS

INSTRUCTIONS

For questions with options, select your desired answer by ticking (✓) Please use the provided space for comments.

BACKGROUND INFORMATION

1. Name of Huduma

Centre _____

2. Gender

3. Highest educational qualifications

ELECTRONIC GOVERNMENT SERVICES PROVIDED

4. Indicate the range of electronic government services accessed and provided at Huduma Centres. Tick all that apply.

Range of Electronic Government Services

Tick All That Apply

Accessing and filling online forms

Business name search and registration

Online applications – marriage, licenses passports, visa

Information search on land matters

Information search for government services

Information search on career, employment, education

Online payment system and method

Information on government updates and notices

Any other

5. Indicate the electronic government services that you have accessed and used in question 4. Choose five services in order of priority.

Range of Electronic Government Services

Accessing and filling online forms

Business name search and registration

Online applications – marriage, licenses passports, visa

Information search on land matters

Information search for government services

Information search on career, employment, education

Online payment system and method

Information on government updates and notices

6. Indicate the potential benefits to customers resulting from Huduma Centres. Mark all that apply.

Potential Customer Benefits

Multiple Response Options

Multiple services available from one point

Better and efficient services offered

Provides public services online

Increases access to data and information

Collaboration and engagement enhanced

Performance and monitoring possible

Client management capabilities improved

7. Indicate the extent to which you are able to access and use electronic government services. Make use of the scale, where, 1 = extremely not aware, 5 =

Very¹ aware, 4 = Aware, 3 = Somewhat¹ aware, 2 = Not aware, ¹ 1 = don't know¹

Access and Use Electronic Government Services	Response Option
Extremely aware	
Very aware	
Aware	
Somewhat aware	
Not aware	
Don't know	

PERCEPTION ON ELECTRONIC GOVERNMENT SERVICES

8. Choose the response that best highlights and represents the perception and reaction of customers towards the delivery of electronic government services. Use the matrix option, where 6 = extremely aware, 5 = Very aware, 4 = Aware, 3 = somewhat aware, 2 = Not aware, 1 = don't know

Customer Perceptions and Reactions	Response Option
Strongly important	
Very important	
Important	
Somewhat important	
Not important	
Don't know	

9. Rank the acceptance of electronic government services provided at Huduma Centres. Mark the appropriate response, where, 6 = extremely aware, 5 = Very aware, 4 = Aware, 3 = somewhat aware, 2 = Not aware, 1 = don't know

Acceptance of Electronic Government Services	Response Option
Outstanding	
Excellent	
Very good	

Good
Average
Poor

10. Indicate the level of customer satisfaction in Huduma Centres. Mark the appropriate option, where 4 = Extremely Satisfied, 3 = Satisfied, 2 = Dissatisfied, 1 = Extremely Dissatisfied

Level of Customer Satisfaction	Response Option
Extremely Satisfied	
Satisfied	
Dissatisfied	
Extremely dissatisfied	

11. Indicate the extent to which the Huduma Centres' initiative has transformed service delivery to the customers. Select the appropriate option, where 6 = strongly important, 5 = Very important, 4 = Important, 3 = somewhat important, 2 = Not important, 1 = I don't know.

Huduma Centre's Initiative Impact	6	5	4	3	2	1
Enhances effective delivery of services						
Provides quick access to information						
Customers' needs attended instantly						
Improves assistance from the staff						
Provides wide range of services						
Promotes customer relationship						
Provides digital assistance						

PROBLEMS ENCOUNTERED IN ACCESS AND USE OF ELECTRONIC GOVERNMENT SERVICES

12. Indicate / Highlight the problems encountered in access and use of electronic government services at Huduma Centre. Select all that apply.

Problems encountered in Access and Use	Multiple Response Options
Poor internet services	
Inadequate information infrastructure	
Inadequate technological culture and leadership	
Inadequate awareness of digital policies	
Limited financial resources and commitment	
Inadequate digital skills awareness and readiness	
Limited trust and honest in online services	
Poor network connections	
Information and data security issues	
Inadequate energy and power infrastructure	
Any other	

13. Highlight emerging digital technologies that should promote delivery of services at Huduma Centres. Tick all that apply.

Emerging Digital Technologies	Multiple Response Options
Online information portal	
Mobile platforms and applications	
Digital platforms and devices	
Social media platforms	
Internet and websites	
Disruptive technologies – robotics, wearable	
Any other	

14. Highlight the important things that the management of Huduma Centres should put in place to ensure effective delivery of e-government services. Mark the appropriate responses.

Important Things for Huduma Centres	Multiple Response Options
Expand or increase the centres	
Provide more services	
Information literacy and awareness	
Provide digital technologies	

Market and promote the centres

Any other

15. Indicate the extent to which the government can improve the digital development aspect in order to enhance efficient service delivery at Huduma Centres. _____

STRATEGIES TO IMPROVE ELECTRONIC GOVERNMENT SERVICES

16. Choose strategies to enhance delivery of electronic government services to the customers. Choose the appropriate responses.

Strategies for Improvement	Multiple Response Options
Training capabilities	
Digital platforms and tools	
Technological infrastructure	
Expand the services	
Internet connections	
Human personnel	
Mobilization of resources	

17. Write down any additional solutions or measures to enhance electronic government services at Huduma Centres.

18. Write down the best initiatives that can improve the products and services provided at Huduma Centres.

19. Write down any general comments about access and use of electronic government services at Huduma Centres.

Thank you for your participation.

APPENDIX III

INTERVIEW SCHEDULE FOR HUDUMA CENTRE STAFF

BACKGROUND INFORMATION

1. Name of Huduma Centre

2. Gender

3. Profession

4. Position

5. Years of service

6. Highest educational qualifications

ELECTRONIC GOVERNMENT SERVICES PROVIDED

7. Highlight on the nature of electronic government services provided to the customers at Huduma Centres.

8. Comment on the effectiveness of electronic government services offered to the customers.

9. Mention the methods used to evaluate the delivery of services provided to the customers at Huduma Centres.

PERCEPTIONS ON ELECTRONIC GOVERNMENT SERVICES

10. Highlight the perception of the customers towards delivery of electronic government services at Huduma Centres.
11. State the perception of the staff in relation to access of electronic government services at Huduma Centres.
12. Enumerate the initiatives used to enhance customer perception and reaction towards service delivery at Huduma Centres.

PROBLEMS ASSOCIATED WITH E-GOVERNMENT SERVICES

13. Mention significant problems that hinder effective delivery of electronic government services at Huduma Centres.
14. Comment on the positive impact of the digital transformation in provision of electronic government services at Huduma Centres.

STRATEGIES AND SOLUTIONS

15. Enumerate possible strategic solutions to enhance delivery of electronic government services at Human Centres.
16. Comment on the initiatives that can be offered to enhance electronic government services at Human Centres.

Thank you for your participation.

APPENDIX IV: KREJCIE AND MORGAN SAMPLING TABLE

Table 1: Table for Determining Sample Size for a Finite Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

APPENDIX V: RESEARCH RECOMMENDATION LETTER



UNIVERSITY OF NAIROBI

FACULTY OF ARTS

DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE

Telephone: +254 20 318262, Ext. 28095
Telegram: Varsity
Fax: +254 20 2245566

P.O. Box 30197- 00100 GPO
Nairobi, Kenya.
dnjiraine@uonbi.ac.ke

Our Ref: UON/CHSS/DLIS/303/C54/5864/2017

Date 5th October 2021

Director General,
National Commission for science, Technology & Innovation
P. O. Box 30623-00100, Nairobi

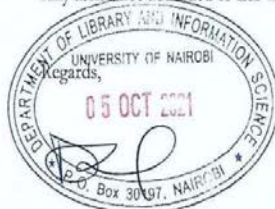
Dear Sir/Madam,

RE: RECOMMENDATION FOR MWANGI, ELIZABETH WANGARI: REG NO: C54/5864/2017

The above named is a bonafide student at the University of Nairobi undertaking a Master of Library and Information Science (MLIS). She is currently in the process of collecting data as part of the requirements for the course.

Her topic is **"Enhancing Electronic Government Services in Public Organizations in Kenya: Case of Huduma Postal City Square in Nairobi"**.

Any assistance accorded to her will highly be appreciated.



Dr. Dorothy Njiraine
Chairperson, Department of Library & Information Science (DLIS)


APPENDIX VI: NACOSTI RESEARCH LICENSE


REPUBLIC OF KENYA


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: **467593** Date of Issue: **07/October/2021**

RESEARCH LICENSE



This is to Certify that Miss., Elizabeth Wangari Mwangi of University of Nairobi, has been licensed to conduct research in Nairobi on the topic: ENHANCING ELECTRONIC GOVERNMENT SERVICES IN PUBLIC ORGANIZATIONS IN KENYA: CASE OF HUDUMA CENTRES IN NAIROBI (CITY SQUARE) for the period ending : 07/October/2022.

License No: **NACOSTI/P/21/13494**

467593
Applicant Identification Number


Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION**

Verification QR Code



NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

APPENDIX VII: HUDUMA RESEARCH PERMISSION



MINISTRY OF PUBLIC SERVICE, GENDER, SENIOR CITIZENS
AFFAIRS & SPECIAL PROGRAMMES
STATE DEPARTMENT FOR PUBLIC SERVICE

Ref. No. HKS/BPR/007/14

Elizabeth Wangari Mwangi,
P.O Box 49489-00100
NAIROBI.

RE: PERMISSION TO UNDERTAKE RESEARCH.

This has reference to the University of Nairobi letter Ref. No. UON/CHSS/DLIS/303/C54/5864/2017 dated 5th October, 2021 and your letter dated 7th October, 2021 on the above subject matter..

This is to inform you that your request to undertake data collection in the Huduma Centre- Postal City Square- Nairobi has been granted on the basis that the information granted will be used purely for academic and research purposes only.

Additionally, in line with Sections 25 and section 26 of the Data Protection Act No. 24 of 2019 on the rights of a data subject in processing of their personal data, you are required to seek consent from persons from whom you intend to collect the data and inform them of the extent to which you intend to use the collected information, prior to collecting said data.

Lastly, you are expected to share a copy of your final research project with the Huduma Kenya Secretariat once approved.

James Buyekane
SECRETARY/CEO

Copy to;

Centre Manager- City Square



Huduma Kenya Secretariat
15th Floor, Lonrho House, Standard Street, Nairobi
P.O. Box 47716-00100, Nairobi Telephone 0206900010