

**INFLUENCE OF TELECENTRE PLATFORMS' INITIATIVE ON  
CUSTOMER SATISFACTION WITH GOVERNMENT SERVICE  
DELIVERY: A CASE OF MACHAKOS COUNTY, KENYA**

**JOEL MULI KYALO**

**A Project Report Submitted in Partial Fulfillment of Requirement for the  
Award of Master of Arts Degree in Project Planning and Management of the  
University of Nairobi**

**2016**

## DECLARATION

This research project report is my original work and has not been presented to any university for academic award

Sign: -----

-----

JOEL MULI KYALO

Date

L50/77279/2015

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

Sign: -----

-----

Dr. Angeline Mulwa

Date

Lecturer,

Department of Extra-Mural Studies,

University of Nairobi

## **DEDICATION**

I dedicate this project report to my wife Caroline Mutheu and my family and I will remain forever grateful for their support and bearing with me during this process.

## **ACKNOWLEDGEMENT**

I would like to express my heartfelt gratitude to my supervisor, Dr. Angeline Mulwa for her invaluable advice, encouragement, guidance, recommendations, and support during the drafting of this project report.

I would like to thank my lecturers for the knowledge that they instilled in me coupled with the wisdom to understand what project planning and management is all about. I would like to thank the whole Machakos Extra Mural Centre for their timely dissemination of information regarding classes and events. Special thanks go to Mr. Joseph Mulwa and Mr. John Mwavu.

I am deeply indebted to my mentors and the entire Masters of Arts in Project Planning and Management students at Machakos Extra Mural Centre who supported me in many ways in the course of preparing this project report.

I would also like to thank my entire family for their support in terms of advice, cheering me on, and encouraging me not to give up.

## TABLE OF CONTENTS

<b>DECLARATION</b> .....	<b>ii</b>
<b>DEDICATION</b> .....	<b>iii</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>iv</b>
<b>TABLE OF CONTENTS</b> .....	<b>v</b>
<b>LIST OF TABLES</b> .....	<b>viii</b>
<b>LIST OF FIGURES</b> .....	<b>x</b>
<b>ABBREVIATIONS AND ACRONYMS</b> .....	<b>xi</b>
<b>ABSTRACT</b> .....	<b>xii</b>
<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>1</b>
1.1 Background to the Study.....	1
1.1.1 Overview of Machakos County .....	7
1.2 Statement of the Problem.....	9
1.3 Purpose of the Study .....	10
1.4 Objectives of the Study.....	10
1.5. Research Questions.....	11
1.6 Significance of the Study.....	11
1.7 Limitations of the Study.....	12
1.8 Delimitation of the Study.....	13
1.9 Assumptions of the Study .....	14
1.10 Definitions of significant terms .....	14
1.11 Organization of the Study .....	16
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>17</b>
2.1 Introduction.....	17
2.2 Telecentres .....	17
2.4 Types of Services Sought in Telecentres and Customer Satisfaction.....	29
2.5 Level of ICT Development in Telecentres and Customer Satisfaction with Government Service Delivery .....	30
2.6 Characteristics of the Service User in Telecentres and Customer Satisfaction with Government Service Delivery.....	31
2.7 Customer Satisfaction with Government Service Delivery .....	33
2.8 Conceptual Framework.....	34
<b>CHAPTER THREE: RESEARCH METHODOLOGY</b> .....	<b>38</b>
3.1 Introduction.....	38
3.2 Research Design.....	38
3.3 Target Population.....	39
3.4 Sample Size and Sampling Procedure .....	39
3.4.1 Sample Size.....	40

3.4.2 Sample Procedure .....	41
3.5 Research Instruments .....	42
3.6. Pretesting of the Instrument .....	42
3.6.1 Pilot Study.....	43
3.7 Validity and Reliability of the Research Instrument.....	43
3.7.1 Validity of the Research Instrument .....	43
3.7.2 Reliability of the Research Instrument .....	44
3.7 Data Collection Procedures.....	45
3.8 Data Analysis .....	45
3.9 Operational Definition of Variables.....	46
3.10 Ethical considerations .....	47
3.11 Summary .....	48
<b>CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION .....</b>	<b>49</b>
4.1 Introduction.....	49
4.2 The Study Response Rate (Responses from Huduma Centre customers) .....	49
4.3 Demographic Characteristics of the Respondents .....	50
4.4 Influence of telecentre platforms’ initiatives on customer satisfaction with government service delivery in Kenya.....	56
4.4.1 Types of Services Sought in Telecentres and Customer Satisfaction.....	57
4.4.2 Level of ICT Development in Telecentres and Customer Satisfaction .....	59
4.4.3 Service User Attitude and Customer Satisfaction.....	62
4.4.4 Service Provider Characteristics and Customer Satisfaction.....	65
4.4.5 Challenges faced by the customers when trying to access services at the Huduma Telecentre.....	68
4.4.6 Machakos County Telecentre Customers’ suggestions/recommendations towards telecentre platforms’ initiatives and customer satisfaction with government service delivery in Kenya.....	69
4.4.7 Regression Analysis.....	70
4.5 Responses from the Huduma Centre Staff in Machakos County .....	75
4.5.1 Respondent’s background information.....	75
4.5.2 Telecentre Platforms’ Initiatives and Customer Satisfaction (Huduma Centre Staff).....	79
4.5.3 Machakos County Huduma Centre staff recommendations towards influence of telecentre platforms’ initiatives on customer satisfaction with government service delivery in Kenya.....	86
<b>CHAPTER FIVE: SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>87</b>
5.1 Introduction.....	87
5.2 Summary of Research Findings .....	87

5.2.1 Major Findings on the Types of Services Sought in Telecentres and Customer Satisfaction.....	89
5.2.2 Major Findings on the Influence of Level of ICT Development in Telecentres and Customer Satisfaction.....	90
5.2.3 Major Findings on the Influence of Service Provider Attitude on Customer Satisfaction.....	91
5.2.4 Major Findings on the Influence of Service Provider Characteristics on Customer Satisfaction in Machakos County .....	92
5.3 Discussions of the Findings .....	94
5.4 Conclusion of the Study.....	99
5.5 Recommendations of the Study .....	99
5.5.1 Recommendations for policy and practice.....	99
5.5.2 Recommendations for further research.....	101
<b>REFERENCES.....</b>	<b>102</b>
<b>APPENDICES .....</b>	<b>112</b>
<b>APPENDIX I: Introduction Letter.....</b>	<b>112</b>
<b>APPENDIX II: Questionnaire (for customers).....</b>	<b>113</b>
<b>APPENDIX III: Questionnaire (for Huduma Telecentre Staff).....</b>	<b>120</b>
<b>APPENDIX IV: Questionnaire (for Huduma Telecentre Staff).....</b>	<b>1204</b>
<b>APPENDIX V: Questionnaire (for Huduma Telecentre Staff) .....</b>	<b>1205</b>

## LIST OF TABLES

Table 4.1: Distribution of the Respondents by Responses Rate (Huduma Customers’)	50
Table 4.2: Distribution of the Respondents by Responses Rate (Staff)	50
Table 4.3: Distribution of Machakos Huduma Telecentre customers’ by Gender	51
Table 4.4: Distribution of Machakos Huduma Telecentre customers’ by Age	51
Table 4.5: Distribution of Machakos Huduma Telecentre customers’ by education level	52
Table 4.6: Type of employer	52
Table 4.7: Category of business/job	53
Table 4.8: Prior training on computers and/or ICT	53
Table 4.9: Availability of the service at the telecentre	54
Table 4.10: Satisfaction with the government service delivery at the Telecentre	55
Table 4.11: Extent of satisfaction with the government service delivery at the Telecentre	55
Table 4.12: Influence of the type of services sought in Telecentres on customer satisfaction with Government Service delivery	57
Table 4.13: Extent to which the type of services sought in Telecentres influences customer satisfaction with Government Service delivery	58
Table 4.14: Extent to which the type of services sought in Telecentres influence customer satisfaction	59
Table 4.15: Influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery	60
Table 4.16: Extent to which level of ICT development in Telecentres on customer satisfaction with Government Service delivery	61
Table 4.17: Extent to level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery	61
Table 4.18: Influence of attitude as a service user on customer satisfaction with Government Service delivery	62
Table 4.19: Extent to which attitude as a service user on customer satisfaction with Government Service delivery	63
Table 4.20: Extent to which service user attitude influences customer satisfaction with Government Service delivery	64
Table 4.21: Influence of service provider characteristics user on customer satisfaction with Government Service delivery	65
Table 4.22: Extent to which server provider characteristics on customer satisfaction with Government Service delivery	66
Table 4.23: Extent to which server provider characteristics influences customer satisfaction with Government Service delivery	66



Table 4.24: Extent to which server provider characteristics influences customer satisfaction with Government Service delivery .....	67
Table 4.25: Model Goodness of Fit .....	70
Table 4.26: Analysis of Variance (ANOVA) .....	71
Table 4.27: Regression Coefficients .....	72
Table 4.28: Distribution of Huduma Centre staff by Gender .....	76
Table 4.29: Distribution of Huduma Centre staff by Age .....	76
Table 4.30: Distribution of Huduma Centre staff officials by Education Level.....	77
Table 4.31: Years worked as civil servant .....	77
Table 4.32: Years worked in Huduma Centre .....	78
Table 4.33: Career Orientation .....	78
Table 4.34: Influence of the type of services sought in Telecentres on customer satisfaction with Government Service delivery (Huduma Centre Staff).....	79
Table 4.35: Extent type of services sought in Telecentres influences customer satisfaction with Government Service delivery (Huduma Centre Staff).....	80
Table 4.36: Influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery (Huduma Centre Staff).....	80
Table 4.37 Extent to which level of ICT development in Telecentres on customer satisfaction with Government Service delivery (Huduma Centre Staff).....	81
Table 4.38: Influence of attitude as a service provider on customer satisfaction with Government Service delivery (Huduma Centre Staff).....	82
Table 4.39: Extent to which attitude as a service provider on customer satisfaction with Government Service delivery (Huduma Centre Staff).....	82
Table 4.40: Influence of service provider characteristics user on customer satisfaction with Government Service delivery (Huduma Centre Staff).....	83
Table 4.41: Extent to which service provider characteristics on customer satisfaction with Government Service delivery (Huduma Centre Staff).....	83
Table 4.42: Level of agreement to following statements as they apply in the department or ministry as a whole.....	84
Table 4.43: Level of satisfaction towards the opinions/feelings regarding customer service .....	85

## LIST OF FIGURES

Figure 1: Conceptual Framework .....	35
--------------------------------------	----

## **ABBREVIATIONS AND ACRONYMS**

<b>BTS</b>	-	Base Transceiver Station
<b>CKC</b>	-	Community Knowledge Center
<b>ICT4D</b>	-	Information and Communication Technologies for Development
<b>ICTs</b>	-	Information communication and technologies
<b>KICTB</b>	-	Kenya ICT Board
<b>KNBS</b>	-	Kenya National Bureau of Statistics
<b>NGOs</b>	-	Non-Governmental Organizations
<b>SQ. KM.</b>	-	Square Kilometres
<b>SPSS</b>	-	Statistical Package of Social Sciences

## ABSTRACT

Information and Communication Technology (ICT) has opened a door for better communication and processing of information, faster and in cost effective ways than ever before. Huduma Centres or telecentres rolled out by Kenya ICT Board (KICTB) have become a relevant and essential part of people's daily lives as they are meant to provide certain ICT training, education, and governmental services (e-Government). The main objective of this study was to determine the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya focusing on Machakos County, Kenya. Specifically the study sought to; establish how types of services sought in telecentres influence customer satisfaction with government service delivery in Machakos County; establish how level of ICT development in telecentres influence customer satisfaction with government service delivery in Machakos County; determine how attitudes of the service provider in telecentres influence customer satisfaction with government service delivery in Machakos County; and to determine how characteristics of service providers in telecentres influence customer satisfaction with government service delivery in Machakos County. The study adopted a descriptive research design. The target population for this study included: Huduma telecentre customers' in Machakos County, and staff of Huduma telecentres Machakos office. The study involved 120 sampled and randomly selected Huduma telecentre customers' of Machakos County, and 36 staff members of Huduma telecentres Machakos office. The study relied on data collected through questionnaires structured to meet the objectives of the study and an interview guide. Responses were tabulated, coded and processed by use of a computer Statistical Package for Social Science (SPSS) version 20.0 programme to analyze the data. It is believed the study will be significant to the National and County Governments, especially to decision makers involved in implementation of ICT strategies for their Counties. Regulators and the policy makers can use the finding as reference for policy guidelines on development and management of ICT projects in the country. The study found that there exists a positive association between: influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery; influence of attitude as a service provider on customer satisfaction with Government Service delivery; and influence of server provider characteristics on customer satisfaction with Government Service delivery to influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. This positive association suggests that when one increases, influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya increases. The study therefore concludes that type of service, level of ICT development, attitude as a service provider and server provider characteristics are factors influencing of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. The study recommends that there is need for the telecentres to be open at hours when people want to use them; and Telecentre management should collaborate with organisations such as academic institutions in order to create localised content as this would partly solve the problem of lack of local content in the Telecentre which many users complained about and perhaps improve quality of government service delivery. There is need to conduct a similar study which will attempt to find out the challenges facing implementation of telecentre platforms' initiatives in Kenya.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background to the Study**

Development in information communication and technologies (ICTs) in the late 20<sup>th</sup> century has revolutionized the world in many ways. Dungal (2011) notes that ICT has not just only created economic opportunities and benefits, but also to larger extent has affected the way people think, live and perform their activities, the way society manage its affairs, and the way state operates and carry out its function. Rapid development, advancement and wider acceptance of ICTs in the society have put large pressure on governments to use this technology in managing states affairs (Buhigiro, 2012; Kariuki, 2009; and Macueve, 2008). With increasing application of ICTs in the day to day life of the people, Governments around the world are increasing their reliance in this technology for better serving the people and to manage their own affairs faster, easier and in efficient manner (Mukerji, 2009).

Public service is defined as all activities delivered by the government to fulfill those needs that society requires to go through life (Deloitte, 2012). Types of public services and the way services are delivered are frequently changing in the context of demand/expectation of the people, changes in the technology, scientific innovation, resource availability, and challenges that internal and external environment brought. Wangari (2011) notes that Information and Communication Technology (ICT) has opened a door for better communication and processing of information, faster and in cost effective ways than ever before. As a result, ICTs has effected

on how public goods and service has been delivered to the people and of course it has created new avenues for better public service delivery (Karim, 2015).

Owing to the rapid global growth in the Internet and information technology, many governments around the world have transformed their services from the traditional to electronic means of service delivery (Baqir & Iyer, 2010; and Muthama, 2012). The growth of the Internet and other aspects of Information Technology have prompted the Kenya government to harness the capability of the Internet and other channels of communication to offer the services to its citizens (Muthama, 2012). According to the Kenyan e-Government Strategy (2004), the aim of utilising Information Communication Technology (ICT) is to promote productivity among public servants, encourage participation of citizens in government and empower Kenyans through the use of e-Government applications. Zhiyaun Fang (2002) found in Muthama (2012) notes that more governments are using technology especially the Internet or web-based network to provide services between government agencies and citizens, business, employee and others.

A number of authors have given different definitions of telecentres. Ernberg (2001) defined telecentres as centers' intended for all members of a rural community or a deprived urban area with the objective to provide universal access to ICT. The telecentres will provide a wide range of ICT-based services, ranging from simple information services, government/community-on line and e-learning to e-commerce and tele-medicine, besides user training and support. A telecentre is a public place where people can get a variety of communication services in an integrated manner (Roman and Colle, 2002; Etta and Parvyn-Wamahiu, 2003). According to

Oestmann and Dymond (2001), telecentres are strategically located facilities providing public access to ICT-based services and applications. They are typically equipped with some combination of telecommunication services such as telephony, fax, e-mail and Internet, office equipment such as computers, multimedia hardware and software, meeting spaces for local business or community use, and training.

The telecentre idea was born in 1985 in a small village called Velmdalen in Sweden with the idea of bringing benefits of ICTs to rural areas. The concept has been widely adopted in the United States, Canada and Australia, while in Africa and Asia the notion is still taking root (Etta & Parvyn-Wamahiu, 2003). Most early telecentres started with a modest goal which was giving people a chance to access and learn about technology. The concept of telecenter is growing as a movement worldwide and it is not just limited with initial goal of educating technical skill to the people. Today's telecenters use computers and the internet to do everything from improving public health to extending education to a wider audiences to strengthening local democracy, to human connection to outside world. Telecenters are commonly known as Community Information Center, Information Access Center, Kiosk and so on. Different telecentres are likely to have its own unique qualities that match the needs of the community.

Telecentres have been hailed as the solution to development problems around the world because of their ability to provide desperately needed access to information and communication technologies (ICTs) (Gómez and Hunt, 1999). Telecentres have considerable potential for narrowing the "digital divide" in remote, rural and disadvantaged communities. Salanje (2006)

defines digital divide as the gap between the ones who have access to ICTs and those who do not have. They can facilitate to take advantage of the information economy, education access, government information, healthcare and other services, and develop socially and economically especially for the developing countries and rural areas (Dangal, 2011). Telecenters have gained prominence as the primary instruments for bringing the benefits of ICTs to poor communities where the technological infrastructure is inadequate and the costs of individual access to these technologies are relatively high. They provide opportunities for access to information by overcoming the barriers of distance and location, and by facilitating access to information and communication, they have the potential to foster social cohesion and interaction (Young, Ridley, & Ridley, 2001).

In developing countries like India, telecentres have emerged as a popular ICT-enabled intervention for rural development (Mukerji, 2009). Telecentres bring about socio-economic development by providing connectivity, removing isolation and remoteness of rural areas, and integrating communities (Kumar & Best, 2006; Oestmann & Dymond, 2001; and Rajalekshmi, 2007). They can enhance livelihood by generating employment, providing information related to market, better farming practices, and employment opportunities, etc. As delivery points for e-government services, telecentres can aid in improving government to citizen interface, increase reach, transparency, responsiveness, accountability, efficiency, effectiveness, citizen's empowerment and participation. Further, telecentres enable delivery of health and education services (Mukerji, 2009).



In most African countries, such as South Africa and Ghana, in spite of universal access criteria laid down by regulatory authorities and governments, and dramatic expansion of telecommunication networks (fixed and mobile) in the past decade, the improvement in connectivity has not yet trickled down to rural areas (Lesame, 2013). The demand for telecentres is aimed at bridging this urban-rural digital divide. In Malawi, these facilities are also being established with the aim of improving social and economic development of rural communities which are often marginalized and outside towns and cities (Isaacs, 2007) as well as empowering rural dwellers. For example, telecentres, through provision of ICTs, are enabling grass root access to global information through the Internet, promoting the sale of local products through the Internet and e-commerce. They are also helping rural communities to reduce travelling costs in search of the service and improving human capital through computer literacy programmes (Etta & Parvyn-Wamahiu 2003; Soriano 2007; Bailey 2009:1; Mukerji 2010).

Regionally, in Kenya, the Kenyan government, together with external stakeholders and private contractors, is increasing its ICT investments in order to reach the entire population regardless of demographic factors, whereas the Digital Villages Project (DVP) also known as telecentres globally is one of the largest efforts (Hallberg et al., 2011). Digital villages are referred to as Pasha Centres, meaning “to inform”, and are located in rural and resource-poor environments. In the Kenyan context, digital villages are what normally other countries, e.g. in Sri Lanka and India, refer to as telecentres (Hansson et al., 2010). A telecentre in Kenya however, normally refers to what Jensen and Esterhuysen (2001) defines as micro and mini telecentres. Therefore, a

digital village in Kenya has a similar role as a telecentre in many other countries, i.e. to provide services with regard to Internet and telecommunication. In addition, digital villages are also meant to provide certain training, education, and governmental services (e-Government) (Hallberg et al., 2011).

Wangari (2011) states that, a country must be e-ready according to United Nations global e-government survey, Kenya is ranked 124 out of 184 United Nation member countries (UN, 2010). The UN survey indicated that Kenya e-readiness index is 0.33, which is below the world average at 0.42. The ICT sector in Kenya is currently more active in urban areas, resulting in wide regional disparities in the distribution of ICT facilities. In order to address this disparity, the Kenya ICT Board (KICTB) has rolled out new “electronic centres” named Pasha Centres (also commonly referred to as Digital Villages or telecentres). Pasha Centres are hubs that provide a host of services to the public via computers connected to the internet, or by using and marketing other ICT-enabled applications. Kenya ICT Board ensures that the people living around the digital villages fully understand how and why they should take advantage of the services available (ICT Board Kenya, 2010). In this way, the Digital villages thus have become a relevant and essential part of people’s daily lives, adding value and creating opportunities. It is expected that this will result in wealth creation, employment, and poverty reduction (Hallberg et al., 2011).

Customer satisfaction is a measure of how products and services supplied by an organisation meet or surpass customer expectation, and of utmost importance for any product or service

provider (Akanlagm, 2011; Wong & Sohal, 2003). Andreassen & Olsen (2008) contend that customer satisfaction provides a leading indicator of consumer purchase intentions and loyalty. Increasing customer satisfaction has been found to lead to higher future profitability, lower costs related to non-defective goods and services, increased buyer willingness to pay premium prices, provide referrals, and use more of the product, and higher levels of customer retention and loyalty (Akanlagm, 2011; Andreassen & Olsen, 2008). Etta and Parvyn-Wamahiu (2003) found that most users are satisfied with services offered in the telecentres because telecentres link them and their communities to wider audiences, facilitate external communication and promote knowledge of computer technology among local community members. Telecentres need to satisfy what users expect of them so that they are deemed relevant.

### **1.1.1 Overview of Machakos County**

Machakos County is the first administrative headquarters of Kenya. The County has a Total Population of 1,098,584 people, 264,500 Households and covers an area of 6,208 SQ. KM. The Population density is 177 persons per SQ. KM. Machakos County has eight (8) constituencies namely; Machakos Town, Mavoko, Masinga, Yatta, Kangundo, Kathiani, Matungulu, and Mwala. Machakos Town is the administrative headquarters of the County. The local climate is semi-arid with a hilly terrain covering most parts of the County. A number of establishments ensure the region has a well-rounded hospitality industry and a number of many small businesses run by upcoming or established entrepreneurs. Subsistence agriculture is practiced with Maize and drought-resistant crops such as sorghum and millet being grown. The county has been selected as the home to the upcoming Konza Technology City due to its proximity to Nairobi,

good infrastructure and availability of massive chunks of land. Machakos County, Nairobi's Eastern neighbour, is home to important industrial and residential centers like Athi River and Mlolongo (Government of Machakos, 2013). Sadly, the developments do not extend to most parts of the huge county, but that is about to change when a planned technology city development is finalized (Machakos County Government, 2016).

Recent statistics conducted in 2014 reveal that only 53.8% of Machakos County population use mobile phones while 4.2% of the population use the internet (Communications Authority of Kenya- CAK, 2014). There is need to increase use of ICT in Machakos County of which the County Government is putting the following initiatives in place to address the issue. The National fiber internet cable will be expanded to cover Schools, Offices, Police stations, etc which will ensure access to online services and enhance communication. Machakos County Government plans on giving free Wi-Fi and internet kiosks infrastructure in Machakos Town & other major towns in the County as a way of promoting access to online services by citizens, businesses, and investors (Machakos County Government, 2016).

Machakos County's ICT affairs fall under the County Ministry of Trade, Industry, ICT & Co-operatives Trade which is in charge of: developing ICT infrastructure and increasing internet connectivity in the County; collaborating with ICT stakeholders and service providers to ensuring there are improved services; increasing investment incentives to ICT service providers; collaborating with ICT providers to increase communication network through erection of additional Base Transceiver Station (BTS) in the county; increasing and deepening ICT adoption

through ICT trainings in institutions, establishment of ICT villages in towns/wards in the county; formulating ICT county policy to regulate use and development of the sector; advocating for further reduction on import duty for ICT equipment's made for training institutions and use in rural areas; developing website for the county government and networking all county and sub-county offices for information flow and public participation/feedback; adopting and promoting e-government, e-commerce and digitization of office and hospitals records; and formulating ICT regulatory laws to curb abuses (Machakos County Government, 2016).

## **1.2 Statement of the Problem**

Access to government services in the 1980s was limited to the wider public, leading to frequent public outcries and dissatisfaction in the service delivery. This access was limited due to a wide range of reasons, including corruption practices by civil servants, unreasonable delays in getting desired services, chronic absenteeism, poor record keeping and retrieval and poor customer care (Abdalla et al., 2015). From the early 1990s, the government tried a variety of changes to remedy the situation. Recently, the Kenyan Government, together with external stakeholders and private contractors, started increasing ICT investments to provide the entire population with information and communication regardless of demographic factors. The ICT sector in Kenya through the Kenya ICT Board (KICTB) in a bid to address the disparity in the distribution of ICT facilities rolled out new “electronic centres” named Pasha Centres (also commonly referred to as Digital Villages or telecentres). The Digital villages thus have become a relevant and essential part of people's daily lives as they are meant to provide certain ICT training, education, and governmental services (e-Government). There is need to find out whether these telecentres

platforms or digital villages influence citizens satisfaction with government service delivery. Therefore, there exists a need for a study attempting to find out the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya.

A number of studies carried out on the ICT sector such by Muthama (2012); Hallberg et al. (2011); Mulwa (2015); Gichoya (2005); Kumar & Best (2006); Karim (2015); Kariuki, G. (2009); and Wangari (2011) have been general or have failed to give detailed insights on telecentre platforms' initiatives and customer satisfaction with government service delivery. Although these studies among others attained their objectives, they did not delve into the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. There is a paucity of published work on telecentre platforms' initiatives and customer satisfaction with government service delivery, particularly in the context of developing countries in the dynamic African region and specifically in Kenya. This study intends to bridge this gap in knowledge that exists.

### **1.3 Purpose of the Study**

The purpose of this study was to determine the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya focusing on Machakos County, Kenya.

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

This study was guided by the following objectives:

- i) To establish how types of services sought in telecentres influence customer satisfaction with government service delivery in Machakos County.
- ii) To establish how level of ICT development in telecentres influence customer satisfaction with government service delivery in Machakos County
- iii) To determine how attitudes of the service user in telecentres influence customer satisfaction with government service delivery in Machakos County
- iv) To determine how characteristics of service providers in telecentres influence customer satisfaction with government service delivery in Machakos County

### **1.5. Research Questions**

This study sought to answer the following questions;

- i) To what extent do type of services sought in telecentres influence customer satisfaction with government service delivery in Machakos County?
- ii) Does level of ICT development in telecentres influence customer satisfaction with government service delivery in Machakos County?
- iii) To what extent do attitudes of the service provider in telecentres influence customer satisfaction with government service delivery in Machakos County?
- iv) To what extent do characteristics of service providers in telecentres influence customer satisfaction with government service delivery in Machakos County?

### **1.6 Significance of the Study**

Findings from the study may be beneficial to various groups of people:

The study was significant to the County Governments, especially to decision makers involved in implementation of ICT strategies for their Counties. The County heads used the findings as the base upon which to review the County's service delivery and county readiness towards adoption of ICT projects.

The regulators and the policy makers can use the finding as reference for policy guidelines on development and management of ICT projects in the country. They will be able to use the findings of the study to formulate viable policy documents that effectively will cope with the barriers and challenges of ICT adoption and digital villages' implementation in counties and in the larger country. Based on the findings, recommendations are made. If followed, these recommendations would be useful to administrators and policy makers in curbing challenges of ICT adoption and implementation.

The study provided additional information into the already existing body of literature regarding the ICT adoption and government service delivery in Kenya. The findings of this study enriched existing knowledge and hence was of interest to both researchers and academicians who seek to explore and carry out further investigations. It provided basis for further research.

### **1.7 Limitations of the Study**

In the course of the study, some of the challenges and constraints that the study encountered included: limited availability of information and literature, inaccurate data, poor cooperation by respondents, gathering and interpreting background research and difficulties with getting



appointments with interviewees. The study handled the challenge by working extra hours so as to finish up the project in time. The problem of limited availability of literature when developing the background research was overcome by conducting extensive and detailed research from various sources such as Kenyan journals, local newspapers and websites. During the course of this study, a continuous, detailed and meticulous research was carried out.

The research came across uncooperative respondents who were unwilling to participate in the study. This challenge was minimized by assuring the respondents that no names of the participants were used in reference to the study since the purpose of the research was only for academic. The researcher also carried an introduction letter from the university as proof.

### **1.8 Delimitation of the Study**

The study was made successful by easy access of respondents by researcher in gathering information regarding the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. The study is also grounded on a well-researched literature review. The study focused on the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya with a focus on Machakos County. The respondents were residents of Machakos County and a County government official were sampled and supplied with questionnaires with the aim of getting their views regarding the subject matter of the study.

## 1.9 Assumptions of the Study

This study was based on the following assumptions:

First, it was assumed that telecentre platforms' initiatives influences customer satisfaction with government service delivery in Kenya which this study sought to establish. Second, it was assumed that the selected respondents would cooperate and provide the required information honestly and objectively. Finally, it was assumed that the information obtained from this study would be very useful in highlighting the critical issues that need to be addressed to improve government service delivery in Kenya.

## 1.10 Definitions of significant terms

**Digital divide:** Gap between the ones who have access to ICTs and those who do not have

**E-commerce:** Commercial transactions conducted electronically on the Internet

**E-government:** Is the process of the government being able to offer its citizens services on-line for example through the internet or mobile phones.

**E-learning:** Learning conducted via electronic media, typically on the Internet

**ICT:** Includes technologies both traditional (for example radio, television, print, video) and newer technologies for example (internet virtual reality, distance education, mobile phones etc) that are intended to fulfill information processing and communication.

**ICT development:** Use of ICT in the fields of socioeconomic development, international development and human rights

- ICT infrastructure:** Physical equipment/hardware and software that enables a network to function
- Innovation:** Something original and more effective and, as a consequence, new, that "breaks into" the market or society
- Multimedia:** Using more than one medium of expression or communication
- Public service:** all activities delivered by the government to fulfill those needs that society requires to go through life
- Readiness:** The state of being fully prepared for ICT projects.
- Service delivery:** the act of providing a service to customers
- Technology:** Collection of techniques, skills, methods and processes used in the production of goods or services or in the accomplishment of objectives, such as scientific investigation
- Telecentres:** Centers' intended for all members of a rural community or a deprived urban area with the objective to provide universal access to ICT
- Tele-medicine:** Remote diagnosis and treatment of patients by means of telecommunications technology.

### **1.11 Organization of the Study**

This study comprises of the proposal which entails chapters one, two and three. This chapter has presented the background information, problem statement, purpose of the study, objectives of the study, research questions, significance of the study, scope of the study, limitations of the study and definition of terms used. Chapter two provides a salient review of literature related to the study that illuminates work which has influenced this research and which justifies the need for extending the current research. Chapter three details the research methodology which will be employed in this research. Chapter four details the data analysis, interpretation and presentation while Chapter five consists of the summary of findings, discussions, conclusions and recommendations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter explores the existing literature relevant to the study as presented by various researchers, scholars', and authors. This section covers the theoretical framework whereby theories related to the study as well as the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery is discussed. The chapter reviews empirical literature and the conceptual framework of variables is be discussed. The review includes other scholar's work both at international and local scale. By pointing at the weaknesses and gaps of the previous researches, it helps support the current study with a view of suggesting possible viable measures or ways of filling them. The review of literature leads to draw some significant conclusions and serve as a guide mark for this study. It also gives a fair chance to identify one gap that exists in the area of research.

#### **2.2 Telecentres**

McNamara (2003); and Rogers & Shukla (2001) note that, one of the most significant approaches in bridging the digital divide within nations and between nations as well as increasing ICT access especially in rural, urban and peri-urban areas, has been the creation of telecentres. Telecentres came to the international scene less than 25 years ago but they only begun attracting the interest of academics recently (Githinji, 2011). The first computer sharing technology emerged in the 1980s particularly with the introduction of the telecottage in Scandinavia (Rega, 2010). According to Rega (2010), the main purpose of the telecottages at that

time was to fight marginalization of remote rural communities in the anticipated information society. In 1990s, with the emergence of the Internet, many were able to get their own computers and connections to the digital world however many others depended on a sort of shared access. As a result a new kind of public access came to light. By 2002, cybercafés, information access points (IAP) and telecentres had emerged (Rega, 2010; Roman & Colle, 2002a).

A telecentre is a shared structured ICT facility that contains a combination of new and old ICTs (television, telephone, books, computers with internet connectivity, video, and facsimile) (Githinji, 2011). Phillip & Foote (2007) contend that a telecentre is a public place where people can access ICTs that enable them to gather information, create, learn and communicate while developing essential digital skills. According to Rothenberg-Aalami & Pal (2005) cited in Githinji (2011), telecentres offer community members the ability to use and publicly share ICTs to support community, economic, educational, cultural and social development through reducing bridging the digital divide, creating economic opportunities, promoting health and other development issues. Over the years, they have been given and are referred to by different names<sup>16</sup> in terms of geography and purpose. They are also differentiated by their funding models and goals (Phillip, & Foote, 2007; Etta & Parvyn-Wamahiu, 2003; Rega, 2010; Rothenberg-Aalami & Pal, 2005).

Attempts to define and classify telecentres have adopted different criterion (Owen & Darkwa, 2000; Roman & Colle, 2002c; Gomez & Hunt, 1999; Colle, 2000; Jensen, 2001). Townsend *et al.* (2001) assert that telecentres may differ in terms of size, services offered, technology used,

and available infrastructure, as well as location, ownership and relationship with other public facilities. In this classification attempt, the telecentre models consider various levels of local development for instance available infrastructure, and economic development, and also consider community necessities and the available resources in different settings in the country (Townsend *et al.*, 2001).

Gomez *et al.* (1999) identified five types of telecentres: 1) Basic telecentre that is normally located in rural areas where there is limited access to basic services and where training of potential users is a general service with Internet access as an addition. 2) Telecentre franchise is a chain of interconnected telecentres that are independently owned and managed. They are usually under supervision by a local organization that offers financial support occasionally as well as technical support. 3) A civil center is one opened by public organizations such as a university and offers say computers for use by the public and telecentre services tend to be an addition to the other daily organizational activities. 4) A cybercafé is commercial and usually located in major towns and cities. 5) The multi-purpose community center is a newer model offering specialized services such as tele-medicine.

An analysis of telecentre definitions by Rega, (2010) brought to light two commonalities in the view of the different classification: (1) Telecentres are community development instruments that have a community development purpose for people living in rural disadvantaged areas; (2) Telecentres provide communication services which are relevant for the local community. Telecentres use a range of both digital and non-digital information and communication

technologies and offer a range of services related to those technologies which, can be defined – communication services and which vary from basic training on the computer and internet to more sophisticated services such as information and education services related to matters of interest for the local community and community based services such as library or meeting place facilities (Watson, 2007).

Roman & Colle (2002a) identified that telecentres tend to be run by governmental or non-governmental organizations (NGOs), provide for low-income clientele, and are community development driven. In addition, a typical telecentre offers a wide range of communication services related to the community's needs, some of which are free or subsidized by external organizations in this case governmental organizations or NGOs (Githinji, 2011). Initial telecentre projects were almost exclusively donor-managed and consequently, issues of financial and social sustainability arose (Bailur, 2008). This is the case with some telecentres to date.

Parkinson (2005); and Etta & Parvyn-Wamahiu (2003) observe that, over the years, efforts to promote universal access to ICTs in the form of community telecentres has become a policy goal for many African governments and international organizations as ICTs are seen as a vital element of the newly emerging global information society. In 1990s the first wave of telecentres was experienced in Africa all of which were started as pilot projects by International Telecommunications Union, IDRC, UNESCO, the World Bank Group and USAID (Otiso & Moseley, 2009). Numerous telecentres sprung up in countries such as Mali, Tanzania, Uganda and South Africa. The rapid increase of telecentres in Africa was attributed to the potential of



these facilities to provide universal access to ICTs for development (Githinji, 2011). Over the years, organizations, technology and applications have developed significantly and this has helped increase efficiency and relevance of telecentres in the rural areas. More and more telecentres particularly in Kenya, Rwanda, Egypt, Botswana, Uganda, South Africa, Ghana and Tunisia are now being supported with local resources (Mayanja, 2009).

A study by McConnell (2001) cited in Githinji (2011) revealed that the success of the telecentre facilities is closely related to the level of support from the community. Telecentres are public facilities that are shared and provide telecommunication services to people who do not have them available individually due to various reasons (Ariyabandu, 2009). However, ensuring that communities understand, value and use telecentres remains a challenge. Telecentres are the most visible tools for bridging not only technological gaps but educational, economic and social divides as well, all of which are precisely at the heart of the obstacles to participation in telecentre initiatives (Roman & Colle, 2002).

Social obstacles revolve around gender, age, cultural issues, literacy and education, language, locality, and technophobia (Roman and Colle, 2001; Prado, 2009). The perceived role of women in society impede their access to and use of ICTs initiatives These barriers exist widely however they are more severe among African women as well as in some parts of Asia and Latin America where they are more often resilient to change (Roman & Colle, 2002).

Parkinson (2005) asserts that in many telecentre initiatives throughout the world, the youth are the largest part of the population using computers and Internet opportunities. An IDRC telecentre study in Latin America, Uganda and Mozambique (cited in McConnell, 2006) shows that most of the users were students and between the age of 15 and 34 years and majority of these were male while the minority was female (McConnell, 2006; Etta & Parvyn-Wamahiu, 2003). Colle (2001) identified that women in many parts of the world do not feel welcome in telecentres because of the “maleness” of the environment and the accompanying intimidation. Intimidation impedes participation of both groups in the telecentre initiative (Roman & Colle, 2002a). In yet another study done by Etta & Parvyn-Wamahiu (2003) and Gill *et al.* (2010), telecentre users in Africa have been disadvantaged on the basis of gender, age, education, literacy levels and socio-economic status. Noticeably, the absence of the elderly and disabled population at the telecentres was observed. In their study, Gill *et al.* (2010) affirm that fewer women use the telecentre services, which confirmed the poor standing of African women in science and technology. This issue is also a familiar reality in Kenya.

Odame (2005) argues, for feminists, the history of activities relating to ICT4D has been perceptive given the potential for manipulation of propaganda messages and male-dominance of media structures. Furthermore, ICTs are not unique in the sense that women are lacking relative to men in access to all modern types of technology. According to Gill *et al.* (2011) found in Githinji (2011), women especially those in the rural areas are said to have less education, time, income, mobility and experience religious or cultural limitations that hinder their access and use of technology. In Nguruman (2010), for instance, the majority of the users are young men and

this impeded participation by women (old and young). Separate locations or rooms were suggested for the women because they feel intimidated in the presence of the young men and it is deemed culturally inappropriate to mix with young men (Gill *et al.*, 2011).

Technophobia according to Roman & Colle (2001) is a major obstacle that prevents people from getting involved in telecentre activities and directly benefiting from the use of ICTs. This is partly due to lack of training of individuals on the use of technologies. There is therefore the need to put emphasis on value addition to the potential services provided by the ICTs. The community needs to know that the telecentre exists and the telecentre activities should be able to offer what is relevant to the community as well as meet their communication and information needs (Prado, 2009).

Rural populations particularly in Africa face a set of challenges that impede their access and use of telecentre initiatives (Parkinson, 2005). Establishment of telecentres comes with it great challenges such as availability of affordable technology, use of the facility remains a problem due to security and maintenance, connectivity is a struggle, reliability of affordable power supply, and, weak policies and regulations regarding rural ICT initiatives (Githinji, 2011). It has also been noted that economic, political and social sustainability of telecentres are key issues with important inter-relationships (Jhunhunwala, 2008; Bailey, 2009). In Nguruman (2010) for instance, there is no electricity though solar power is available in homesteads that can afford, it is linked to the nearest township with one dusty road that is in poor condition, the transport system

is inefficient, and it is prone to natural catastrophes such as the flooding of its river sources (Maruti & Mwalili, 2003).

Phillip & Foote (2007) purport sustainability issues are more often cast on financial sustainability in terms of the ability of the telecentre to generate enough funds to cover its expenses. In addition, social, cultural, political and technical sustainability should also be taken into consideration. Otiso & Moseley (2009) highlight that, financial and social sustainability of telecentres remain key obstacles of digital inclusion projects. However, whether telecentres remain an influential component in the community development agenda in the long run however, depends on how they respond to the urgent need to build social and financial sustainability capacities (Mayanja, 2006; Bailey, 2009).

Recently, the issue of sustainability has come to be seen as more complex and multidimensional dependent on more than just the availability of financial resources (Githinji, 2011). Further, issues commonly associated with sustainability of telecentres include the operating environment, ownership and management styles, community participation, relevance of the services and content (Rega, 2010; Etta & Parvyn-Wamahiu, 2003). Phillip & Foote (2007) argue that providing locally relevant services should form the basis for sustainability. This should be based on assessing the community's needs, specific services, content and developing the business models and applications.

Ariyabandu (2009) argues that the present challenge is developing the telecentres further into sustainable knowledge centers with the involvement of NGOs, government and other key stakeholders. Telecentres may have been in existence for many years in the development field but knowledge seems to be underutilized for sustainable development. Ariyabandu (2009) further argues that many stand-alone telecentres have not been able to adequately share information and experience, especially among the poor and the disadvantage communities. This has reduced the demand and sustainability of ICT access points to continue serving the poor (Prado, 2009).

In her study, Githinji (2011) uses a participatory ethnographic research method to explore the application of Information and Communication Technologies for Development (ICT4D) in a rural community in Kenya by evaluating the Nguruman Community Knowledge Center (CKC), which was established in 2003 by a development organization. The study found that ICTs, particularly traditional ICTs (radio and television) can significantly contribute to improving people's living conditions by making information available that will help solve real problems they encounter. The expectations of community members who use these ICTs reflect their level of understanding of the relationship that exists between these tools and the improvement of their living conditions as well as enhancing development efforts.

Hallberg et al. (2011) did case studies of Kenyan digital villages with a focus on women and girls. In the Kenyan context, digital villages are what normally other countries refer to as telecentres, i.e. a centre that provides services with regard to Internet and telecommunication. In this case, the digital villages also offer education, learning, and e-Government. This study sought

to establish whether DVP is accessible, and appropriate to women and girls in resource-poor environments and, thus, successful. The results show that male users generally believe that women have a lack of knowledge and understanding of ICT. The results also show that what is said by the government is not fully implemented at the local levels.

Sellina (2014) carried out a study with the purpose of examining factors influencing the acceptance and use of telecentres and their services in Malawi. Specifically, the study aimed at establishing: the access and usage patterns of telecentres and their services; relevance of telecentre service to the community members; factors affecting the usage of telecentres; and challenges facing telecentres and their users. The study employed Rogers's Diffusion of Innovation Theory which explains how innovations are taken up. The study found that convenience and cheaper services; compatibility of services with community's needs; communication channels, social system, visibility of the benefits of using the Telecentre; and complexity of ICTs influences the use and non-use of the Telecentre. Furthermore, the Telecentre and users are facing several challenges that have a negative impact on telecentre usage. Some of the challenges are: lack of Internet searching skills, frequent blackouts, lack of local content and high costs of services.

Bailey and Ngwenyama (2009) study in Jamaica investigated factors that influence usage and success of telecentres in developing countries. It targeted four telecentres which were selected purposively based on their location (two rural areas and the other two from urban area). Data was collected through analysis of documents and observation of persons using telecentre facilities

and services, and training sessions. The researchers also conducted interviews with four telecentre managers, one from each telecentre. The study found that social ties (existing social networks and bonds like friendships and family relationships), location (the proximity and distance from the communities), literacy (how educated people are) and employment opportunities influence telecentre usage. Social ties influence the telecentre usage because people go to communicate with friends and family members. This also influences older people to start using the telecentres with the aim of communicating with their children who are abroad.

In their study, Attwood *et al.* (2013) also analysed the structural factors deterring or advancing the effective use of telecentres by the local community. Like any other study on usage of telecentres, this study revealed that there are several factors that affect the usage of telecentres. The researchers found that gender norms affect the usage of telecentres by women negatively. The study found that some norms dictate that women are not supposed to use ICTs. This therefore, affects their participation and use of the telecentres. The study also revealed that lack of ICT awareness and skills and distance to where the telecentres are located affect the use of telecentres. The study found that some community members perceive computers to be meant for rich people only and that some users do not use telecentres because they have to travel long distances to reach telecentres. The implication to telecentre managers is that the services should fit in community's norms and telecentres should be located close to people. Awareness campaigns should also be undertaken for people in the rural communities to have a clear picture of what is offered within telecentres.

Dangal (2011) carried out a study whose overall objective was to assess ICTs penetration in rural Nepal and analyze its role in facilitating services delivery. The study found the accessibility and participation in the process of e-services is affected by socio-economic, organizational and technical factors. Higher education showed different relationship with the ICTs usage rate, similarly young age people have higher accessibility to ICTs. The study found that difference in gender has not any effect on the usage of ICTs among male and female users. Availability of effective content and e-services seems to have direct effect on the accessibility and participation in the e-services. ICTs infrastructure have effects on the service offered and service diversification, which ultimately affects the accessibility and participation in the e-services. Telecenters operational rules and regulation had positive relationship with the users' participation and accessibility to e-services. Study found that telecenters have helped positively for increasing accessibility to e-services but participation in e-services is not encouraging though increasing.

Kumar and Best (2007) conducted a study in India to understand why kiosk use had not been able to diffuse among a wider section of the communities in which they were located. A sample size of five telecentres was chosen. It targeted users, non-users, telecentre operators and telecentre project officials. The study surveyed 132 kiosk users in five telecentres. The users were selected randomly from the records of the telecentres. Interviews were conducted with users, 12 kiosk operators, four SARI Project officials and eight government officials. The findings indicate that relative advantage affects the adoption of telecentres positively. Respondents indicated that they use the telecentres because it saves money, time and effort as



compared to alternative providers of the same services which were far away and expensive. Compatibility affects the telecentre usage both positively and negatively. Telecentres were compatible with the needs of the community. The respondents indicated that they use the telecentres because they offer services like e-government services which are mostly needed by the communities. However, computer lessons were not compatible with social norms such that women who did not have power in controlling financial resources did not use them and this affected the adoption of telecentres by women negatively.

Nimmi (2008) conducted a study on Telecenters and Internet Cafés, a case of ICTs in small businesses. The study discusses a variety of context specific and commercial instances of ICT services as manifest in everyday commerce. The study revealed that Internet cafés make a major contribution to digital immersion in information poor contexts and that these so-called non-developmental spaces successfully use ICTs to sustain businesses, to generate regular clientele and to adapt to local demand. The study concludes that in an effort to open up debate around telecenters as privileged sites of digital inclusion, the functions of Internet cafés are then compared and contrasted with processes and behaviors associated with telecenters.

#### **2.4 Types of Services Sought in Telecentres and Customer Satisfaction**

The findings of Kumar and Best (2007) study are to some extent in line with the findings of Chigona and Licker (2008) who conducted a study to understand the adoption of Smart Cape computing facilities among the urban poor in Cape Town, South Africa. The study used the same Rogers's DoI Theory. The researchers collected data from users, nonuser, librarians (in charge of

the libraries in which the computing facilities were located) and project managers. The study also discovered that community members will adopt telecentres if they draw benefits from their use, when telecentres offer services that are compatible with their needs and when the facilities are not complex to use. It also revealed that the social system, especially bonds existing in communities, influences adoption of telecentres. The respondents indicated that they use telecentres because they were told by friends. This is linked to interpersonal channels of communication. Just like the Kumar and Best's (2007) study, a study by Chigona and Licker (2008) also found that consequences of an innovation affect the telecentre adoption negatively. This study revealed that the Smart Cape facilities increase skills divide as the facilities are mostly enjoyed by those who have computer skills obtained elsewhere and not in the facilities because the facilities do not provide the training (Chigona & Licker 2008).

## **2.5 Level of ICT Development in Telecentres and Customer Satisfaction with Government Service Delivery**

According to Government of Kenya ICT policy (2005), inadequate ICT infrastructure has hampered provision of efficient and affordable ICT services in the country. There is therefore need to put more emphasis on provision of support infrastructure, such as, energy and roads; supporting software development; promotion of local manufacture and assembly of ICT equipment and accessories; and provision of incentives for the provision of ICT infrastructure. Telecommunication infrastructure is a major issue that stands as an impediment to access of information, most people are not able to access digital information due to lack of the necessary infrastructure (GoK, 2007). This has left a bigger part of the population unable to access the

digital information hence discouraging the adoption of ICT thus widening digital divide between developed and developing economies as well as between haves and have not, setting classes and levels of learning institutions rather than sink poverty levels and narrow economic gaps (ICT Authority of Kenya, 2014).

## **2.6 Characteristics of the Service User in Telecentres and Customer Satisfaction with Government Service Delivery**

Characteristic of service user revolves around gender, age, cultural issues, literacy and education, language, locality, and technophobia (Roman and Colle, 2001; Prado, 2009). The perceived role of women in society impede their access to and use of ICTs initiatives These barriers exist widely however they are more severe among African women as well as in some parts of Asia and Latin America where they are more often resilient to change (Roman & Colle, 2002).

Parkinson (2005) asserts that in many telecentre initiatives throughout the world, the youth are the largest part of the population using computers and Internet opportunities. An IDRC telecentre study in Latin America, Uganda and Mozambique (cited in McConnell, 2006) shows that most of the users were students and between the age of 15 and 34 years and majority of these were male while the minority was female (McConnell, 2006; Etta & Parvyn-Wamahiu, 2003). Colle (2001) identified that women in many parts of the world do not feel welcome in telecentres because of the “maleness” of the environment and the accompanying intimidation. Intimidation impedes participation of both groups in the telecentre initiative (Roman & Colle, 2002a). In yet another study done by Etta & Parvyn-Wamahiu (2003) and Gill *et al.* (2010), telecentre users in Africa

have been disadvantaged on the basis of gender, age, education, literacy levels and socio-economic status. Noticeably, the absence of the elderly and disabled population at the telecentres was observed. In their study, Gill *et al.* (2010) affirm that fewer women use the telecentre services, which confirmed the poor standing of African women in science and technology. This issue is also a familiar reality in Kenya.

Literacy affects telecentre usage both negatively and positively because at first, the illiterate did not use the telecentre services but it offered opportunities to telecentres to start offering literacy skills which made people who were illiterate to start using the telecentres. Bailey & Ngwenyama (2009) study revealed that employment opportunities affect the telecentre usage positively because the jobless community members were helping the telecentres voluntarily and ended up being offered job placement within the telecentres. This motivated other community members to also start using telecentres (Bailey & Ngwenyama, 2009). Therefore, the implication of this is that if the telecentres are to be adopted by many, telecentre operators and managers should allocate them close to people, should offer literacy classes to those who are illiterate, should offer employment opportunities or services that will help the jobless find jobs. On bonds and social ties, telecentres should be providing room for interactions so that people should build friendships which will make users to go to telecentres to meet their friends and consequently, use the telecentre services.

## **2.7 Customer Satisfaction with Government Service Delivery**

Customer satisfaction is of utmost importance for any product or service provider (Akanlagm, 2011). Customer satisfaction is a measure of how products and services supplied by an organisation meet or surpass customer expectation (Wong & Sohal, 2003). It is defined as “the number of customers or percentage of total customers, whose reported experience with a firm, its products or services exceeds specified satisfaction goals” (Anderson et al., 1994). In a competitive market place where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy (Caruana et al., 2000).

Andreassen & Olsen (2008) contend that customer satisfaction provides a leading indicator of consumer purchase intentions and loyalty. Customer satisfaction data are among the most frequently collected indicators of market perceptions. Customer satisfaction is a key and valued outcome of good marketing practice. According to Drucker (1954), the principal purpose of a business is to create satisfied customers. Winning and retaining satisfied customers has immense benefits (Wong & Sohal, 2003). Increasing customer satisfaction has been found to lead to higher future profitability, lower costs related to non-defective goods and services, increased buyer willingness to pay premium prices, provide referrals, and use more of the product, and higher levels of customer retention and loyalty (Akanlagm, 2011; Andreassen & Olsen, 2008).

Customer satisfaction has become a key intermediary objective in service operations due to the benefits it brings to organizations (Ranaweera and Prabhu, 2003). The importance of customer

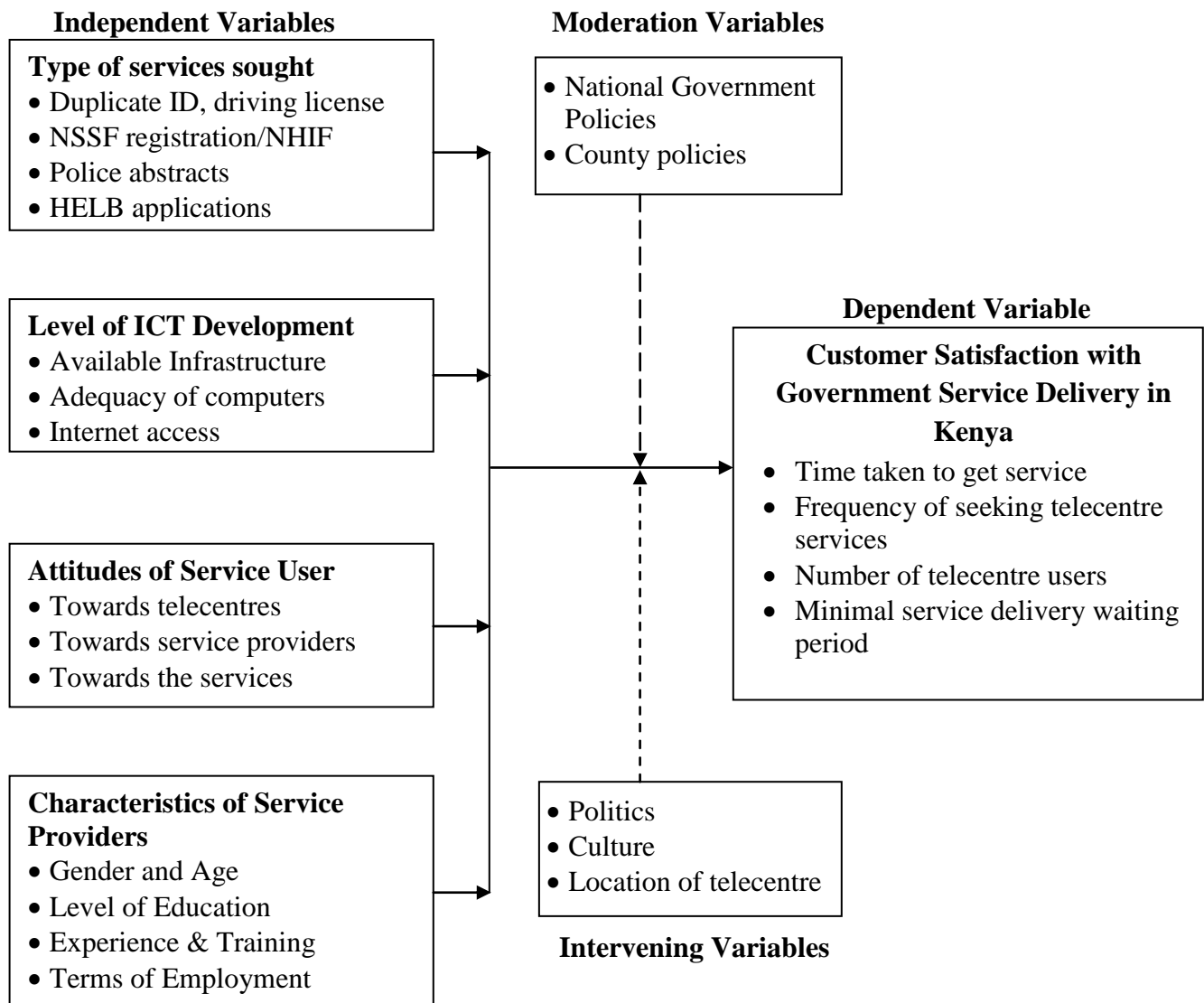
satisfaction is derived from the generally accepted philosophy that for a business to be successful and profitable, it must satisfy customers (Shin and Elliott, 2001). Previous research has demonstrated that satisfaction is strongly associated with re-purchase intentions (Cronin and Taylor, 1992; Fornell, 1992). Customer satisfaction also serves as an exit barrier, helping a firm to retain its customers (Fornell, 1992; Halstead and Page, 1992).

Telecentres need to satisfy what users expect of them so that they are deemed relevant. In general, research studies have shown that majority of users are satisfied with the services that the telecentres offer to them. In their study, Etta and Parvyn-Wamahiu (2003) found that most users are satisfied with services offered in the telecentres because telecentres link them and their communities to wider audiences, facilitate external communication and promote knowledge of computer technology among local community members. However, those who indicated that they are not satisfied with the telecentres, attributed this to lack of failure of telecentres to provide them with needed information (Githinji, 2011).

## **2.8 Conceptual Framework**

Mugenda and Mugenda (2003), define a conceptual framework as a hypothesized model identifying the concepts under study and their relationships. In this framework, there are certain factors influencing customer satisfaction with government service delivery in Kenya. These factors include but are not limited to types of services sought, level of ICT development, attitudes of service user, and characteristics of service providers. National government and county policies are the moderating variables while politics, culture, and location of telecentres

are the intervening variables. Customer satisfaction with government service delivery in Kenya is the dependent variable that is affected by the independent variables. The study will be guided by the conceptual framework as shown in Figure 1 relating the dependent and independent variables. Indicators of customer satisfaction with government service delivery in Kenya are time taken to get service, frequency of seeking telecentre services, number of telecentre users, and minimal service delivery waiting period.



**Figure 1: Conceptual Framework**

**Table 2.1: Research Gaps Table**

Author	Focus of the Study	Methodology used	Findings	Gap in Knowledge	Focus of current study
Sellina, K. (2014)	Factors influencing the acceptance and use of telecentres and their services in Malawi	Cross-Sectional Descriptive Survey	Convenience and cheaper services; compatibility of services with community's needs; communication channels, social system, visibility of the benefits of using the Telecentre; and complexity of ICTs influences the use and non-use of the Telecentre	This study only looks at acceptance and use of telecentres	This study focuses on the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery
Abdalla et al., (2015)	Effect of Huduma Centers (One Stop Shops) in Service Delivery – A Case Study of Mombasa Huduma Centre	Case study	Majority of the customers were pleased with the level of transparency, with but slightly low levels of service awareness and clarity of procedures of accessing the relevant service. Most were generally satisfied with the reliability of service delivery at the Huduma Centre.	This study looked at service delivery	This study looks at the relationship between telecentre platforms' initiatives and customer satisfaction with government service delivery
Githinji, R. (2011).	Application of Information and Communication Technologies for Development (ICT4D) in a Rural Community in Kenya	Participatory ethnographic research	ICTs, particularly traditional ICTs (radio and television) can significantly contribute to improving people's living conditions by making information available that will help solve real problems they encounter.	This study looked at ICT development in rural areas	This study focuses on the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery
Hallberg et al. (2011)	Kenyan digital villages with a focus on women and girls	Descriptive survey	The results show that male users generally believe that women have a lack of knowledge and understanding of ICT.	This study only sought to establish whether DVP is accessible, and appropriate to women and girls in resource-poor environments	This study specifically focuses the relation between telecentre platforms' initiatives and customer satisfaction



			The results also show that what is said by the government is not fully implemented at the local levels.	and, thus, successful.	with government service delivery
Bailey and Ngwenyama (2009)	Factors that influence usage and success of telecentres in developing countries	Cross-Sectional Descriptive Survey	Social ties (existing social networks and bonds like friendships and family relationships), location (the proximity and distance from the communities), literacy (how educated people are) and employment opportunities influence telecentre usage.	The study only focused on telecentre usage	This study specifically looks at the relation between telecentre platforms' initiatives and customer satisfaction with government service delivery
Attwood <i>et al.</i> (2013)	Structural factors deterring or advancing the effective use of telecentres by the local community	Cross-Sectional Descriptive Survey	Gender norms affect the usage of telecentres by women negatively affecting their participation and use of the telecentres. The study also revealed that lack of ICT awareness and skills and distance to where the telecentres are located affect the use of telecentres.	The study considered use of telecentres	This study addresses the influence of telecentres on customer satisfaction with government service delivery
Dangal, K. (2011)	ICTs penetration in rural Nepal and analyze its role in facilitating services delivery.	Survey using qualitative and quantitative approaches	The study found the accessibility and participation in the process of e-services is affected by socio-economic, organizational and technical factors.	The study focused ICT penetration	This study broadly covers the relationship between telecentre platforms' initiatives and customer satisfaction with government service delivery

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

Research methodology is an overall scheme, plan or structure conceived to aid the study in answering the raised research questions and objectives (Bridget and Lewin, 2005). This chapter analyzes the methods and design that will be used to carry out the study. It is a blueprint for the collection, measurement and analysis of data. Therefore in this section the research identifies the procedures and techniques that were used in the collection, processing and analysis of data. The sub-topics covered in this chapter are: research design, target population, sample size and sampling procedure, research instruments, data collection methods, research procedures, pre testing of instruments, data analysis, operational definitions of terms, and ethical considerations.

#### **3.2 Research Design**

Zikmund (2003) defines a research design as a master plan that specifies the techniques and procedures for collecting and analysing desired information. The current study employed a descriptive research design. The research design was chosen for this research due to its ability to ensure minimization of bias and maximization of reliability of information gathered. Kothari (2008) contends that a descriptive research design is appropriate where the study needs to draw conclusions from a larger population. Mugenda and Mugenda (2003) asserts the purpose of descriptive research is to determine and report the way things are and it helps in establishing the current status of the population under study. According to Nachmias and Nachmias (2007) the descriptive survey research attempts to collect data from members of a population, helps the

researcher to get the descriptive existing phenomena by asking individuals about their perceptions, attitudes, behavior or values. Descriptive research design is ideal for this study because it ascertains and describes the characteristics of the variable of interest in a situation (Kothari, 2008).

### **3.3 Target Population**

Wambugu, Kyalo, Mbi & Nyonje (2015) define a population as the entire group of people, events or things of interest that the researcher wishes to investigate and is abbreviated as N. Cohen, Manion, and Morrison (2007) define a target population as a specific proportion of the entire population that can be narrowed to achieve research objectives. The target population for this study included: the registered voters in Machakos County, and staff of Huduma telecentres Machakos office. The County of Machakos has a total population of 445,096 registered voters (Independent Electoral and Boundaries Commission- IEBC, 2015). Registered voters were chosen since they all represent the adult population of 18 years and above who are prospective users of Huduma telecentres. Huduma telecentres Machakos office has thirty six (36) staff members (Huduma Telecentre- Machakos Records, 2015).

### **3.4 Sample Size and Sampling Procedure**

A sample is a subset of the population. Cohen, Manion, and Morrison (2007) define sampling as the process of selecting a small part (sample) from the entire population to be studied. The ideal sample is large enough to serve as an adequate representation of the population about which the researcher wishes to generalize and small enough to be selected economically (Wambugu *et al.*,

2015). This section of the study comprised the sample procedures used to derive the sample for the study used to generalize the findings for the larger population. Sampling involves the researcher securing a representative group that enabled him/her to gain information about the population (Mugenda and Mugenda, 2003). Choosing a sample is a key feature of any research undertaking.

### 3.4.1 Sample Size

According to the Independent Electoral and Boundaries Commission- IEBC (2015), the County of Machakos has a total population of 445,096 registered voters. In order to determine the size of the sample of public to be used, the Yamani Taro (1967) formula was used. It states that the desired sample size is a function of the target population and the maximum acceptable margin of error (also known as the sampling error) and it expressed mathematically thus:

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

Where:

$n$  =sample size

$N$  = target population

$e$  =maximum acceptable margin of error (5%)

Thus in this study, the desired sample size given that the total population of the county is 445,096 is:

$$n = \frac{445,096}{1 + 445,096 (0.05)^2}$$

Applying this to the above formula the minimum sample size obtained was 400. The study then purposively used 30% of the sampled population as a representative of the whole implying 120 respondents. This was in line with Mugenda & Mugenda (2003) and Borg & Gall (2003) who state that a sample size of between 10% and 30% is a good representation of the target population and hence the 30% is adequate for this study. This study involved 120 residents of Machakos County, and thirty six (36) staff members of Huduma telecentre- Machakos Office. Salkind (2005) proposes a rule of the thumb for determining a sample size and says that a size of 30 to 500 is appropriate for most academic researches.

### **3.4.2 Sample Procedure**

For triangulation of themes, a mix of both probability and non-probability sampling techniques was combined to achieve maximum reliable responses. Probability sampling comprises of simple random sampling, systematic sampling and stratified sampling while Non-probability sampling includes purposive sampling, quota sampling, convenience sampling and snowball sampling (Bridget and Lewin, 2005; and Mugenda and Mugenda, 2003). This study used both probability and non-probability sampling techniques to achieve maximum reliable responses.

The probability sampling technique for this study was simple random sampling technique which was used to randomly select the sampled 400 respondents to participate in the study. Simple random sampling was applied in order to randomly pick the respondents who were the general public to participate in the study. This study randomly selected the respondents (members of public) from the telecentre hall inside as they seek services. The non-probability sampling

technique for the study was purposive sampling. Purposive sampling was used to select Machakos County as the study area due to proximity to the researcher, time available for research and budgetary constraints. All staff at the Machakos Huduma telecentre were involved in the study.

### **3.5 Research Instruments**

This section of the study discusses the research instrument or tool to be used for this study. This study collected both primary and secondary data using a number of methods so as to generate quantitative and qualitative data. Quantitative data was collected from the respondents using a questionnaire. A questionnaire has the ability to collect a large amount of information in a reasonably quick span of time (Kothari, 2008; Wambugu *et al.*, 2015). The questionnaire was comprised questions which were seeking to answer questions related to the objectives of this study. The questionnaire was divided into five sections; the first section delved into demographics data of the respondents while the rest of the sections 2-5 looked into the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya presented as per the objectives of the study. Secondary data for the study was collected from literature from library materials, journals, and various internet search engines.

### **3.6. Pretesting of the Instrument**

Before administering the research instruments to the respondents, pre-testing was done so as to help in determining the validity and reliability of the research tools to ensure that the questions are applicable and clearly understandable.

### **3.6.1 Pilot Study**

The research instrument was piloted on a small representative sample but the group was not used in the actual study. The pilot study enabled the researcher check whether the items used were valid and reliable, and also corrects misunderstanding, check language level and eliminate ubiquity at the right time. The piloting also extracted comments from respondents which helped in the improving the instruments modifying and making clear the instructions given in order to avoid misinterpretation during the actual data collection. The piloting for this study involved 10 random adults in Machakos town who were approached and interviewed. These respondents were not be included in the actual research sample size.

### **3.7 Validity and Reliability of the Research Instrument**

This section presented the validity and reliability of the research instrument of the study.

#### **3.7.1 Validity of the Research Instrument**

Wambugu et al. (2015) note that, validity refers to the appropriateness, meaningfulness and usefulness of the inferences a researcher makes. According to Kothari (2004) validity is the most critical criterion of sound measurement and indicates the degree to which an instrument measures what it purports to measure. This study adopted content validity which is the extent to which a measuring instrument provides adequate coverage of the topic under study. This study used content validity to examine whether the instruments answered the research questions. In order to establish content validity and make adjustments and/or additions to the research

instruments, consultations and discussions with the supervisor was done. Any abstruseness in the questionnaire item was cleared before the questionnaire was taken to the field for data collection.

### **3.7.2 Reliability of the Research Instrument**

Reliability is the degree of consistency that the instrument or tool demonstrates on repeat trials (Kothari, 2007; Wambugu *et al.*, 2015). To ensure reliability the study employed self-administration approach of data collection and monitored the process to ensure that people outside the sample did not fill the questionnaires. In many cases, the questionnaire was filled while the researcher waited, thereby providing clarification where necessary whereas in cases where the questionnaires were to be left behind, the respondents were asked to go through the questions and seek clarification where necessary, thus raising the reliability.

Cronbach's Coefficient Alpha approach recommended by Cohen, Manion and Morrison (2007) for its ability to give average split-half correlation for all possible ways of dividing the test into two parts was used to measure internal consistency of the research instruments. Cronbach's Coefficient Alpha is a scale measurement tool appropriate in measuring internal consistency in descriptive survey researches. Computation of Cronbach's Alpha was done using SPSS for windows version 20.0 programme. Correlation coefficient varies on a scale of 0.00 (indicating total unreliability and 1.00 (indicating perfect reliability). 0.8-0.9 indicates high reliability, 0.6-0.8 indicates acceptable reliability value while below 0.5 is unacceptable (Wambugu *et al.*, 2015). The questionnaires were accepted at reliability indices of 0.70 and above.



### **3.7 Data Collection Procedures**

The researcher obtained a transmittal letter from the University department offices and a permit from the National Council for Science and Technology in order to aid get authorization from the manager of Huduma Centre Machakos to collect data from the respondents in the premises. The researcher used trained and qualified research assistants to assist with the questionnaire distribution. To ensure that the purpose of the study was achieved, the researcher interviewed one person at a time in a period less than five minutes each. The researcher explained the purpose of the study and offered guidance to the respondents on the way to fill in the questionnaire before administering the questionnaire. For those respondents with difficulties in reading and filling in, the researcher interviewed and filled in the information in the questionnaire for them as they respond. The respondents were assured verbally that the information obtained from them would be treated with ultimate confidentiality. They were therefore requested to provide the information truthfully and honestly. As for the Huduma staff, the questionnaires were administered through drop and pick method whereby the respondents were left with the questionnaire to fill in their convenient time. The researcher made subsequent visits and courtesy calls when necessary to remind the respondents to fill the questionnaires and in so doing increasing the response rate. The study relied on data collected through a questionnaire structured to meet the objectives of the study.

### **3.8 Data Analysis**

Data collected from the completed questionnaires was summarized, coded, Tabulated and checked for any errors and omissions. Frequency Tables, percentages and means were used to

present the findings. Responses in the questionnaires were processed by use of a computer Statistical Package for Social Science (SPSS) version 20.0 programme to analyze the data. The responses from the open-ended questions were listed to obtain proportions appropriately; the responses were then reported by descriptive narrative as qualitative analysis. Quantitative data was analyzed using descriptive statistics including, averages, percentages, means and standard deviations. Correlation analysis was done to establish the relationship between the variables. Regression analysis was applied in all the cases where correlation was found to exist between the independent and dependent variables. It is important to carry out regression analysis so as to establish the extent of the influence exerted on the dependent variable by the independent variable.

### 3.9 Operational Definition of Variables

Table 3.1 gives a summary of research objectives, variables of study, their indicators, level of measurement, tools of analysis for each objective and type of tool employed for each objective.

**Table 3.1: Operational Definition of Variables**

Research Objectives	Variable	Indicators	Measurement scale	Tools of Analysis	Analysis Techniques
Influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya	Customer satisfaction with government service delivery in Kenya	<ul style="list-style-type: none"> <li>• Time taken to get service</li> <li>• Frequency of seeking telecentre services</li> <li>• Number of telecentres users</li> <li>• Minimal service delivery waiting time</li> </ul>	-Interval -Nominal	SPSS	Percentages, frequencies, means, and standard deviation Model goodness of fit ANOVA
To establish how types of services sought in telecentres influence	Types of services sought	<ul style="list-style-type: none"> <li>• Police abstract</li> <li>• Driving license</li> <li>• NSSF/NHIF</li> </ul>	-Interval -Nominal	SPSS	Percentages, frequencies, means, and

customer satisfaction with government service delivery in Machakos County		<ul style="list-style-type: none"> <li>• Registration of businesses</li> </ul>			standard deviation Model goodness of fit ANOVA
To establish how level of ICT development in telecentres influence customer satisfaction with government service delivery in Machakos County	Level of ICT development	<ul style="list-style-type: none"> <li>• Infrastructure</li> <li>• Connectivity and hotspots</li> <li>• Adequacy of computers</li> <li>• Internet access</li> </ul>	-Interval -Nominal	SPSS	Percentages, frequencies, means, and standard deviation Model goodness of fit ANOVA
To determine how attitudes of the service user in telecentres influence customer satisfaction with government service delivery in Machakos County	Attitudes of the service user	<ul style="list-style-type: none"> <li>• Towards telecentres</li> <li>• Towards service providers</li> <li>• Training</li> <li>• Towards service</li> </ul>	-Interval -Nominal	SPSS	Percentages, frequencies, means, and standard deviation Model goodness of fit ANOVA
To determine how characteristics of service providers in telecentres influence customer satisfaction with government service delivery in Machakos County	Characteristics of service providers	<ul style="list-style-type: none"> <li>• Gender and age</li> <li>• Level of education</li> <li>• Experience</li> <li>• Training</li> <li>• Terms of employment</li> </ul>	-Interval -Nominal	SPSS	Percentages, frequencies, means, and standard deviation Model goodness of fit ANOVA

### 3.10 Ethical considerations

As this research aims at adding to the knowledge of ICT, it upheld utmost confidentiality about the respondents. The study made certain that all respondents were given free will to participate and contribute voluntarily to the study. The researcher adhered to appropriate behaviour in relation to the rights of the respondents. A verbal consent was sought from the sample respondents before being interviewed. In addition, the study ensured that necessary research authorities were consulted and consent approved and appropriate explanations specified to the respondents before commencement of the study. In addition, all forms of plagiarism were

avoided through proper referencing of all sources used. Confidentiality is the non-disclosure of research findings to an unauthorized party who may use the research data for their own purposes.

### **3.11 Summary**

This chapter outlines the overall approach to be taken in the research study and describes the population. The chapter also describes the research procedures indicating the data collection methods and data collection instruments. It then describes the data analysis methods stating the various methods and procedures to be used. It has indicated how the data will be analyzed. It has specifically dealt with determination of research design, determination of the type and sources of data, estimation of the research population, sampling design, data collection and design of data collection instrument, and data analysis.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND INTERPRETATION**

#### **4.1 Introduction**

In this chapter the key issues related to data presentation, analysis and interpretation have been discussed. This chapter is presented in three different sections looking into two different respondents. The first section looks at responses from Machakos Huduma Telecentre customers' and the second section looks at responses from the Huduma Centre staff in Machakos County. All two sections present study responses regarding influence of telecentre platforms' initiatives on customer satisfaction with Government service delivery in Kenya with a focus on Machakos County. First, the research response rate has been computed and presented for each section. Secondly, the demographic characteristics of the participants have been described. Thirdly, the findings on the four key objective areas of the study have been presented and interpreted. The responses were analyzed using descriptive and inferential statistics. The data has been presented in tables.

#### **4.2 The Study Response Rate (Responses from Huduma Centre customers)**

Out of 120 questionnaires which had been administered to the interviewees, 116 of them were returned for analysis. This translates to 96.7 percent return rate of the respondents. Overall, the response rate was considered very high and adequate for the study as shown in Table 4.1:

**Table 4.1: Distribution of the Respondents by Responses Rate (Huduma Customers’)**

<b>Response Rate</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Returned	116	96.7
Not Returned	4	3.3
<b>Issued</b>	<b>120</b>	<b>100.0</b>

Out of 36 questionnaires which had been administered to the interviewees, 35 of them were returned for analysis. This translates to 97.2 percent return rate of the respondents. Overall, the response rate was considered very high and adequate for the study as shown in Table 4.2:

**Table 4.2: Distribution of the Respondents by Responses Rate (Staff)**

<b>Response Rate</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Returned	35	97.2
Not Returned	1	2.8
<b>Issued</b>	<b>36</b>	<b>100.0</b>

### **4.3 Demographic Characteristics of the Respondents**

The respondents in this section of the study were Huduma Telecentre customers drawn from Machakos County who were of different categories. The categories were characterized by gender, age, academic achievement, occupation and duration lived in Machakos County. The summary of the Huduma Telecentre customers’ distribution by their gender is given in Table 4.3

**Table 4.3: Distribution of Machakos Huduma Telecentre customers' by Gender**

<b>Gender</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Male	62	53.4
Female	54	46.6
<b>Total</b>	<b>116</b>	<b>100.0</b>

According to the data shown in Table 4.3, out of 116 Machakos Huduma Telecentre customers' who participated in the study, 62 (53.4%) the majority were males while 54 (46.6%) were female. The findings could be an indication that most of the Machakos Huduma Telecentre customers' are males. The distribution of the customers by age is given in Table 4.4:

**Table 4.4: Distribution of Machakos Huduma Telecentre customers' by Age**

<b>Age</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
18-22 years	7	5.5
23-27 years	18	14.3
28-32 years	30	23.8
33-37 years	32	25.5
38-42 years	19	15.1
43-47 years	15	11.9
48-52 years	5	3.9
<b>Total</b>	<b>126</b>	<b>100.0</b>

It is evident from the data shown in Table 4.4 that, majority of the Machakos Huduma Telecentre customers' 32 (25.5%) fell under the age bracket of 33-37 years, 30 (23.8%) were aged 28-32 years, 19 (15.1%) were aged 38-42 years, 18 (14.3%) were aged 23-27 years, 15 (11.9%) were

aged 43-47 years, 7 (5.5%) were aged 18-22 years and 5 (3.9%) were aged 48-52 years. The findings reveal that Machakos Huduma Telecentre customers' comprises of young and middle aged people. The distribution of the Machakos County customers' by education level is given in Table 4.5:

**Table 4.5: Distribution of Machakos Huduma Telecentre customers' by education level**

<b>Academic Achievements</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Certificate	19	15.1
Diploma	21	16.7
Undergraduate	43	34.1
Post graduate	32	25.4
PhD	11	8.7
<b>Total</b>	<b>126</b>	<b>100.0</b>

The results in Table 4.5 indicate that, majority 43 (34.1%) of the Machakos Huduma Telecentre customers' have attained undergraduate level of education, 32 (25.4%) have attained a post-graduate level of education, 21 (16.7%) have attained diploma education, 19 (15.1%) have attained certificate level of education and 11 (8.7%) have attained PhD level of education. The findings point that majority of Machakos Huduma Telecentre customers' have attained tertiary education. The distribution of the Machakos Huduma Telecentre customers' by type of employer is given in Table 4.6:

**Table 4.6: Type of employer**

<b>Employer</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Private	32	25.4
State	24	19.0
Self employed	39	30.9
Retired	7	5.6
Student	13	10.3
<b>Total</b>	<b>126</b>	<b>100.0</b>



The findings on Table 4.6 indicate majority 39 (30.9%) Machakos Huduma Telecentre customers' are self-employed, 32 (25.4%) are privately employed, 24 (19.0%) are state employed, 13 (10.3%) are students and 7 (5.6%) are retired. The distribution of the respondents by category of business/job they are in is given in Table 4.7:

**Table 4.7: Category of business/job**

<b>Category of business/job</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Manufacturing	7	5.5
Trade	32	25.5
Agriculture	30	23.8
Construction	18	14.3
Education	19	15.1
Textile	15	11.9
Hotel	5	3.9
<b>Total</b>	<b>126</b>	<b>100.0</b>

The findings on Table 4.7 reveal that, majority of the Machakos Huduma Telecentre customers' 32 (25.5%) are in trade, 30 (23.8%) are in agriculture, 19 (15.1%) are in education, 18 (14.3%) are in construction, 15 (11.9%) are in textile business, 7 (5.5%) are in manufacturing and 5 (3.9%) are in hotel business. The knowledge of prior training on computers and/or ICT is given in Table 4.8:

**Table 4.8: Prior training on computers and/or ICT**

<b>Training</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	79	62.6
No	47	37.4
<b>Total</b>	<b>126</b>	<b>100.0</b>

It is evident from the data shown in Table 4.8 that majority of the Machakos Huduma Telecentre customers' 79 (62.6%) who participated in the study agreed that they have prior training on computers and/or ICT while 47 (37.4%) do not have any prior training on computers and/or ICT. The type of services the respondents were seeking at the telecentre include: renewal of drivers licenses; duplicate national identity card; NHIF registration; NHIF member statements; payment of stamp duty for land; getting a single business permit'; search and registration of business names; registration of chama; HELB loan application; NSSF registration; NSSF member statements; checking status of pension claims; and getting a Kenya police abstract. The availability of the service at the telecentre is shown in Table 4.9:

**Table 4.9: Availability of the service at the telecentre**

<b>Availability</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	126	100.0
No	0	0.0
<b>Total</b>	<b>126</b>	<b>100.0</b>

It is evident from the data shown in Table 4.9 that all the Machakos Huduma Telecentre customers' 126 (100.0%) who participated in the study agreed that they got the service they were seeking at the telecentre. The satisfaction with the government service delivery at the Telecentre is given in Table 4.10:

**Table 4.10: Satisfaction with the government service delivery at the Telecentre**

<b>Satisfaction</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	105	83.3
No	21	16.7
<b>Total</b>	<b>126</b>	<b>100.0</b>

The findings in Table 4.10 show that majority of the Machakos Huduma Telecentre customers' 105 (83.3%) who participated in the study agreed that they were satisfied with the government service delivery at the Telecentre while 21 (16.7%) disagreed. The extent to which the respondent was satisfied with the government service delivery at the Telecentre is given in Table 4.11:

**Table 4.11: Extent of satisfaction with the government service delivery at the Telecentre**

<b>Extent of satisfaction</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	62	25.4
Great extent	32	25.4
Moderate extent	21	16.7
Low extent	11	8.7
Very low extent	0	0.0
<b>Total</b>	<b>126</b>	<b>100.0</b>

The findings on Table 4.11 indicate that majority 62 of the Machakos Huduma Telecentre customers' agreed to a very great extent that they are satisfied with the government service delivery at the Telecentre, 32 (25.4%) agreed to a great extent, 21 (16.7%) agreed to a moderate

extent while 11 (8.7%) agreed to a low extent that they are satisfied with the government service delivery at the Telecentre.

#### **4.4 Influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya**

This section presents the study findings in regard to the objectives of the study on the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. The first objective was to determine the influence of the type of services sought in Telecentres on customer satisfaction with Government Service delivery which was measured by: renewal of drivers licenses; duplicate national identity card; NHIF registration; NHIF member statements; payment of stamp duty for land; getting a single business permit'; search and registration of business names; registration of chama; HELB loan application; NSSF registration; NSSF member statements; checking status of pension claims; and getting a Kenya police abstract.

The second objective was to establish how level of ICT development in telecentres influence customer satisfaction with government service delivery in Machakos County which was measured by: infrastructure, connectivity and hotspots, adequacy of computers, and internet access.

The third objective was to determine how attitudes of service users in telecentres influence customer satisfaction with government service delivery in Machakos County which was

measured by the service users' attitude: towards telecentres, towards service providers, training, and towards service.

The fourth objective was to determine how characteristics of the service provider in telecentres influence customer satisfaction with government service delivery in Machakos County which was measured by service provider characteristics which include: gender and age, level of education, experience, training, and terms of employment.

#### 4.4.1 Types of Services Sought in Telecentres and Customer Satisfaction

This section looks at the types of services sought in telecentres and customer satisfaction which is one of the objectives of the study. The influence of the type of services sought in Telecentres on customer satisfaction with Government Service delivery is given in Table 4.12

**Table 4.12: Influence of the type of services sought in Telecentres on customer satisfaction with Government Service delivery**

<b>Type of service</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	126	100.0
No	0	0.0
<b>Total</b>	<b>126</b>	<b>100.0</b>

It is evident from the data shown in Table 4.12 that majority of the Machakos Huduma Telecentre customers' 126 (100.0%) who participated in the study agreed that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery. The findings are in line with Kumar and Best's (2007) who note that community

members will adopt telecentres if they draw benefits from their use, when telecentres offer services that are compatible with their needs and when the facilities are not complex to use. It also revealed that the social system, especially bonds existing in communities, influences adoption of telecentres. The extent to which the type of services sought in Telecentres influences customer satisfaction with Government Service delivery is given in Table 4.13:

**Table 4.13: Extent to which the type of services sought in Telecentres influences customer satisfaction with Government Service delivery**

<b>Extent</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	83	65.9
Great extent	32	25.4
Moderate extent	11	8.7
Low extent	0	0.0
Very low extent	0	0.0
<b>Total</b>	<b>126</b>	<b>100.0</b>

The findings on Table 4.13 indicate that majority (83) of the Machakos Huduma Telecentre customers' agreed to a very great extent that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery, 32 (25.4%) agreed to a great extent while 11 (8.7%) agreed to a moderate extent that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery. The extent to which the type of services sought in Telecentres influence customer satisfaction is given in Table 4.14:

**Table 4.14: Extent to which the type of services sought in Telecentres influence customer satisfaction**

	<b>Very Great (%)</b>	<b>Great extent (%)</b>	<b>Moderate extent (%)</b>	<b>Little extent (%)</b>	<b>No extent at all (%)</b>
The type of service am seeking	100.0	0.0	0.0	0.0	0.0
I get all the government services I need from the Telecentre	83.3	16.7	0.0	0.0	0.0
I am happy with the services I get from the Telecentre	91.1	8.9	0.0	0.0	8.9
Accessibility of the services leave me satisfied	100.0	0.0	0.0	0.0	0.0

The results in Table 4.14 indicate that, majority of the Machakos Huduma Telecentre customers’ agreed to a very great extent that the type of service they are seeking (100.0%), accessibility of the services leave them satisfied (100.0%), they are happy with the services they get from the Telecentre (91.1%) and they get all the government services they need from the Telecentre (83.3%) are statements regarding influence of type of services sought in Telecentres on customer satisfaction.

#### **4.4.2 Level of ICT Development in Telecentres and Customer Satisfaction**

This section looks at the level of ICT development in telecentres and customer satisfaction in with government service delivery which is another objective of the study. The influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery in Machakos County is given in Table 4.15:

**Table 4.15: Influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery**

<b>ICT development</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	115	91.1
No	11	8.9
<b>Total</b>	<b>126</b>	<b>100.0</b>

The results in Table 4.15 indicate that, majority of the customers 115 (91.1%) agreed that level of ICT development in Telecentres influences customer satisfaction with government service delivery while 11 (8.9%) disagreed. The findings are in line with researchers such as GOK (2007) who contends that inadequate ICT infrastructure has hampered provision of efficient and affordable ICT services in the country. Telecommunication infrastructure is a major issue that stands as an impediment to access of information, most people are not able to access digital information due to lack of the necessary infrastructure (GoK, 2007). There is therefore need to put more emphasis on provision of support infrastructure, such as, energy and roads; supporting software development; promotion of local manufacture and assembly of ICT equipment and accessories; and provision of incentives for the provision of ICT infrastructure (GoK, 2007). The extent to which level of ICT development in Telecentres on customer satisfaction with Government Service delivery is given in Table 4.16:



**Table 4.16: Extent to which level of ICT development in Telecentres on customer satisfaction with Government Service delivery**

<b>Extent of ICT development</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	92	73.3
Great extent	34	26.7
Moderate extent	0	0.0
<b>Total</b>	<b>126</b>	<b>100.0</b>

The findings on Table 4.16 indicate that majority 92 (73.3%) of the customers agreed to a very great extent that level of ICT development in Telecentres influence customer satisfaction with Government Service delivery while 34 (26.7%) agreed to a great extent that level of ICT development in Telecentres influence customer satisfaction with Government Service delivery. The extent to which the following statements in regard to level of ICT development in Telecentres influence customer satisfaction with Government Service delivery is given in Table 4.17:

**Table 4.17: Extent to level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery**

	<b>Very Great (%)</b>	<b>Great extent (%)</b>	<b>Moderate extent (%)</b>	<b>Little extent (%)</b>	<b>No extent at all (%)</b>
The Telecentre has sufficient computers for everyone	0.0	63.2	0.0	36.8	0.0
The Telecentre has enough infrastructure and modern looking equipment	23.3	50.0	26.7	0.0	0.0
The Telecentre has full time accessible internet	76.7	11.1	12.2	0.0	8.9

The results in Table 4.17 indicate that, majority of the Machakos Huduma Telecentre customers’ agreed to a very great extent that the Telecentre has full time accessible internet (100.0%) and The Telecentre has enough infrastructure and modern looking equipment (23.3%) are statements regarding level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery. The respondents further agreed to a great extent that the Telecentre has sufficient computers for everyone (63.2%) and Telecentre has enough infrastructure and modern looking equipment (50.0%) are statements regarding level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery. However, a large proportion of the respondents agreed to a little extent that the Telecentre has sufficient computers for everyone (36.8%) are statements regarding level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery.

#### **4.4.3 Service User Attitude and Customer Satisfaction**

This section looks at the service user attitude and customer satisfaction in Machakos County which is a further objective of the study. The influence of attitude as a service user on customer satisfaction with Government Service delivery is given in Table 4.18.

**Table 4.18: Influence of attitude as a service user on customer satisfaction with Government Service delivery**

<b>Attitude</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	126	100.0
No	0	0.0
<b>Total</b>	<b>126</b>	<b>100.0</b>

The findings on Table 4.18 indicate that all 126 (100.0%) of the customers agreed that attitude as a service user influences customer satisfaction with government service delivery. The findings support Parkinson (2005) who asserts that in many telecentre initiatives throughout the world, the youth are the largest part of the population using computers and Internet opportunities. Etta & Parvyn-Wamahiu (2003) and Gill *et al.* (2010), note that telecentre users in Africa have been disadvantaged on the basis of gender, age, education, literacy levels and socio-economic status. Noticeably, the absence of the elderly and disabled population at the telecentres was observed. In their study, Gill *et al.* (2010) affirm that fewer women use the telecentre services, which confirmed the poor standing of African women in science and technology. Literacy affects telecentre usage both negatively and positively because at first, the illiterate did not use the telecentre services but it offered opportunities to telecentres to start offering literacy skills which made people who were illiterate to start using the telecentres (Bailey & Ngwenyama, 2009). This issue is also a familiar reality in Kenya. The extent to which attitude as a service user on customer satisfaction with government service delivery is given in Table 4.19

**Table 4.19: Extent to which attitude as a service user on customer satisfaction with Government Service delivery**

<b>Extent of attitude</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	97	77.0
Great extent	27	21.4
Moderate extent	2	1.6
<b>Total</b>	<b>126</b>	<b>100.0</b>

The results in Table 4.19 indicate that, majority 97 (77.0%) of the customers indicated that attitude as a service user influences customer satisfaction with Government Service delivery to a very great extent while 27(21.4%) agreed to a great extent and 2 (1.6%) agreed that attitude as a service user influences customer satisfaction with Government Service delivery to a moderate extent. The extent to which service user attitude influences customer satisfaction with Government Service delivery is given in Table 4.20

**Table 4.20: Extent to which service user attitude influences customer satisfaction with Government Service delivery**

	<b>Very Great (%)</b>	<b>Great extent (%)</b>	<b>Moderate extent (%)</b>	<b>Little extent (%)</b>	<b>No extent at all (%)</b>
I really like telecentres set up by the government for ease of access of services	100.0	0.0	0.0	0.0	0.0
The services offered in the telecentre cater for my needs	65.7	34.3	0.0	0.0	0.0
The staff at the telecentres are friendly and guide me well through the processes	77.8	22.2	0.0	0.0	0.0

The results in Table 4.20 indicate that, majority of the Machakos Huduma Telecentre customers' agreed to a very great extent that they really like telecentres set up by the government for ease of access of services (100.0%), the staff at the telecentres are friendly and guide them well through the processes (77.8%) and the services offered in the telecentre cater for their needs (65.7%) are statements regarding influence of service user attitude on customer satisfaction with Government Service delivery.

#### 4.4.4 Service Provider Characteristics and Customer Satisfaction

This section looks at the service provider characteristics and customer satisfaction in Machakos County which is a further objective of the study. The influence of server provider characteristics on customer satisfaction with Government Service delivery is given in Table 4.21.

**Table 4.21: Influence of service provider characteristics user on customer satisfaction with Government Service delivery**

<b>Resource mobilization</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	126	100.0
No	0	0.0
<b>Total</b>	<b>126</b>	<b>100.0</b>

The findings on Table 4.21 indicate that all 126 (100.0%) Machakos Huduma Telecentre customers' agreed that server provider characteristics influences customer satisfaction with Government Service delivery. The findings support Bailey & Ngwenyama (2009) who contend that if the telecentres are to be adopted by many, telecentre operators and managers should allocate them close to people, should offer literacy classes to those who are illiterate, should offer employment opportunities or services that will help the jobless find jobs. On bonds and social ties, telecentres should be providing room for interactions so that people should build friendships which will make users to go to telecentres to meet their friends and consequently, use the telecentre services. The extent to which server provider characteristics influences customer satisfaction with Government Service delivery is given in Table 4.22

**Table 4.22: Extent to which service provider characteristics on customer satisfaction with Government Service delivery**

<b>Extent of attitude</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	64	50.8
Great extent	49	38.9
Moderate extent	13	10.3
<b>Total</b>	<b>126</b>	<b>100.0</b>

The results in Table 4.22 indicate that, majority 64 (50.8%) of the customers indicated that server provider characteristics influences customer satisfaction with Government Service delivery to a very great extent while 49(38.9%) agreed to a great extent and 13 (10.3%) agreed that server provider characteristics influences customer satisfaction with Government Service delivery to a moderate extent. The extent to which server provider characteristics influences customer satisfaction with Government Service delivery is given in Table 4.23

**Table 4.23: Extent to which server provider characteristics influences customer satisfaction with Government Service delivery**

	<b>Very Great (%)</b>	<b>Great extent (%)</b>	<b>Moderate extent (%)</b>	<b>Small extent (%)</b>	<b>No extent at all (%)</b>
Telecentre staff give prompt services to customers	100.0	0.0	0.0	0.0	0.0
Telecentre staff are always willing to help customers	85.7	14.3	0.0	0.0	0.0
Telecentre staff get thing right the first time	41.3	36.4	23.3	0.0	0.0
Telecentre staff never too busy to respond to customers' requests	67.8	27.2	10.0	0.0	0.0
Telecentre staff consistently courteous with customers	74.1	23.2	3.6	0.0	0.0

The results in Table 4.23 indicate that, majority of the Machakos Huduma Telecentre customers' agreed to a very great extent that Telecentre staff give prompt services to customers (100.0%), Telecentre staff are always willing to help customers (85.7%), Telecentre staff consistently courteous with customers (74.1%), Telecentre staff never too busy to respond to customers' requests (67.8%) and Telecentre staff get thing right the first time (41.3%) are statements regarding influence of server provider characteristics on customer satisfaction with Government Service delivery. The level of agreement to the following factors regarding customer satisfaction with Government Service delivery at Telecentres is given in Table 4.24.

**Table 4.24: Extent to which server provider characteristics influences customer satisfaction with Government Service delivery**

	<b>Very Satisfied (%)</b>	<b>Satisfied (%)</b>	<b>Not Satisfied (%)</b>	<b>Not satisfied at all (%)</b>
Convenience of Telecentre location	76.7	23.3	0.0	0.0
My questions are well answered	57.3	42.7	0.0	0.0
Telecentre operating hours are convenient	53.4	46.6	0.0	0.0
Efficiency and speed in completing a transaction	98.7	1.3	0.0	0.0
Courtesy of employees	27.4	72.6	0.0	0.0
Ease of reaching senior officers	7.6	41.6	50.8	0.0
Ease of accessing services through telecommunication (ICT)	83.7	16.3	0.0	0.0
Accuracy of the information provided by staff	97.6	2.4	0.0	0.0
Ease in understanding information provided by staff	89.1	10.1	0.0	0.0
Prompt response to customer complaints	83.7	11.1	5.2	0.0
Follow-through to see if the customers get what they need	0.0	64.3	23.2	12.5
Making appropriate corrections if there is a problem	34.2	56.7	9.1	0.0

Table 4.24 reveals that majority of the respondents are very satisfied with efficiency and speed in completing a transaction (98.7%), accuracy of information provided by staff (97.6%), ease in understanding information provided by staff (89.1%), prompt response to customer complaints (83.7%), ease of accessing services through telecommunication (ICT) (83.7%), convenience of telecentre location (76.7%), their questions are well answered (57.3%), telecentre operating hours are convenient (53.4%), making appropriate corrections if there is a problem (34.2%), courtesy of employees (27.4%), and ease of reaching senior officers (7.6%) as factors regarding customer satisfaction with government service delivery at telecentres. The customers however, felt satisfied with the follow-through to see if the customers get what you need (64.3%) and making appropriate corrections if there is a problem (56.7%) as factors regarding customer satisfaction with Government Service delivery at telecentres.

#### **4.4.5 Challenges faced by the customers when trying to access services at the Huduma Telecentre**

The challenges faced by the customers when trying to access services at the Huduma Telecentre include: long queues; shortage of employees leading to delays at birth certificate service and good conduct counters; poor location of telecentres is another challenge that users face as the facilities are located far such that users have to incur transport costs; lack of information in local content is another challenge that many telecentre users complain about because a lot of web based information are in foreign languages like English not understood by local communities; inadequate physical facilities since the available space is small and this therefore, leads to little privacy for users; the telecentre keep formal government working hours which limits the time during which the facilities are open to the public; slow speed of Internet; inability to assess the



quality of information; lack of Internet searching skills; difficulties in tracing the service counters that offered the services they required; poor staff attitude and high costs of services.

The challenges faced by the Huduma Centre staff when giving services at the Huduma Telecentre include: facing illiterate customers; inadequate physical facilities and at times slow internet speed leading to delays in several counters; and difficulty in understanding local languages hence spending a lot of time finding someone to translate.

#### **4.4.6 Machakos County Telecentre Customers' suggestions/recommendations towards telecentre platforms' initiatives and customer satisfaction with government service delivery in Kenya**

The study sought to find out from the Machakos Huduma Telecentre customers' suggestions/recommendations towards influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. The responses given include: telecentres must be open at hours when people want to use them; train telecentre staff on customer care services; telecentre ICTs should be simple to use and the staff support should be readily available; technical expertise should be available within the telecentres which would mean employing another staff member as a technician or capacity building among the already existing staff; telecentre management should buy an alternative power supply e.g. a generator; literacy classes should also be introduced because many services indeed need people who are able to read and write.

More suggestions given include; public education and awareness to remove misconception that telecentres are only meant for educated; conducting needs assessments regularly; telecentre services and the programmes should be linked to what people need from the telecentre; in order to incorporate all groups in the community, telecentre managers and operators should be providing various programmes targeting different groups of people. Other suggestions include: Telecentre management should collaborate with organisations such as academic institutions in order to create localised content. This would partly solve the problem of lack of local content in the Telecentre which many users complained about and perhaps in the end improve government service delivery and customer satisfaction.

#### 4.4.7 Regression Analysis

**Table 4.25: Model Goodness of Fit**

<b>Model Summary</b>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.320 <sup>a</sup>	.102	.026	.178

a. Predictors: (Constant), Convenience of Telecentre location, My questions are well answered, Telecentre operating hours are convenient, Efficiency and speed in completing a transaction, Courtesy of employees, Ease of reaching senior officers, Ease of accessing services through telecommunication (ICT), Accuracy of the information provided by staff, Ease in understanding information provided by staff, Prompt response to customer complaints, Follow-through to see if the customers get what they need, Making appropriate corrections if there is a problem

The study used Table 4.25 to establish whether factors regarding customer satisfaction with Government Service delivery at Telecentres have a linear dependence on the independent

variables. The study established a correlation value of 0.320. This depicts a good linear dependence between the two variables. An R-square value of 0.102 was established and adjusted to 0.026. The coefficient of determination depicts that factors regarding customer satisfaction with Government Service delivery at Telecentres brings about 17.8% variations in customer satisfaction; however 82.2% of variations are brought about by factors not captured in the objectives.

**Table 4.26: Analysis of Variance (ANOVA)**

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.297	7	.042	1.336	.244 <sup>a</sup>
	Residual	2.603	82	.032		
	Total	2.900	89			

a. Predictors: (Constant), Convenience of Telecentre location, My questions are well answered, Telecentre operating hours are convenient, Efficiency and speed in completing a transaction, Courtesy of employees, Ease of reaching senior officers, Ease of accessing services through telecommunication (ICT), Accuracy of the information provided by staff, Ease in understanding information provided by staff, Prompt response to customer complaints, Follow-through to see if the customers get what they need, Making appropriate corrections if there is a problem

b. Dependent Variable: factors regarding customer satisfaction with Government Service delivery at Telecentres

Analysis of Variance was used to test the significance of the regression model as pertains to significance in the differences in means of the dependent and independent variables. The ANOVA test produced an f-value of 1.336 which was significant at  $p=0.244$ . This depicts that

the regression model is not significant at 95% confidence level. That is, it has 75.6% probability of misrepresentation.

**Table 4.27: Regression Coefficients**

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.510	.279		5.417	.000
	Convenience of Telecentre location	.022	.055	.105	.398	.691
	My questions are well answered	.046	.137	.183	.337	.737
	Telecentre operating hours are convenient	.128	.276	.257	.465	.687
	Efficiency and speed in completing a transaction	.033	.027	.220	1.205	.232
	Courtesy of employees	.065	.083	.387	.784	.435
	Ease of reaching senior officers	.178	.130	.617	1.372	.174
	Ease of accessing services through telecommunication (ICT)	.023	.062	.111	.372	.711
	Accuracy of the information provided by staff	.207	.241	.096	.858	.392
	Ease in understanding information provided by staff	.011	.053	.065	.217	.829
	Prompt response to customer complaints	.239	.273	.097	.877	.382
	Follow-through to see if the customers get what they need	.141	.413	.057	.341	.733
	Making appropriate corrections if there is a problem	.460	.235	.196	0.857	.052

a. Dependent Variable: Factors regarding customer satisfaction with Government Service delivery at Telecentres

Holding other factors constant, a unit increase in Convenience of Telecentre location would yield a 0.022 increase in Factors regarding customer satisfaction with Government Service delivery at

Telecentres however t-significance value 0.398 was established depicting that Convenience of Telecentre location is significantly related with Factors regarding customer satisfaction with Government Service delivery at Telecentres. A unit increase in the questions are well answered would yield a 0.046 increase in Factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.337 was established depicting that the questions are well answered is significantly related with Factors regarding customer satisfaction with Government Service delivery at Telecentres.

A unit increase in Telecentre operating hours are convenient would yield a 0.28 increase in Factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.465 was established depicting that Telecentre operating hours are convenient is significantly related with Factors regarding customer satisfaction with Government Service delivery at Telecentres. A unit increase in efficiency and speed in completing a transaction would yield a 0.033 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 1.205 was established depicting that Efficiency and speed in completing a transaction is significantly related with Factors regarding customer satisfaction with Government Service delivery at Telecentres.

A unit increase in Courtesy of employees would yield a 0.065 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.784 was established depicting that Courtesy of employees is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres. A unit

increase in ease of reaching senior officers would yield a 0.178 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 1.209 was established depicting that ease of reaching senior officers is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres. A unit increase in ease of accessing services through telecommunication (ICT) would yield a 0.023 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.372 was established depicting that ease of accessing services through telecommunication (ICT) is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres.

A unit increase in accuracy of the information provided by staff would yield a 0.207 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.858 was established depicting that accuracy of the information provided by staff is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres. A unit increase in ease in understanding information provided by staff would yield a 0.011 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.217 was established depicting that ease in understanding information provided by staff is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres.

A unit increase in prompt response to customer complaints would yield a 0.239 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.877 was established depicting that prompt response to customer complaints is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres. A unit increase in follow-through to see if the customers get what they need would yield a 0.141 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.341 was established depicting that follow-through to see if the customers get what they need follow-through to see if the customers get what they need is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres.

A unit increase in making appropriate corrections if there is a problem would yield a 0.460 increase in factors regarding customer satisfaction with Government Service delivery at Telecentres however t-significance value 0.857 was established depicting that making appropriate corrections if there is a problem is significantly related with factors regarding customer satisfaction with Government Service delivery at Telecentres.

#### **4.5 Responses from the Huduma Centre Staff in Machakos County**

This section presents responses from Huduma centre staff who participated in the study;

##### **4.5.1 Respondent's background information**

The respondents in this section of the study were Huduma Centre administrative staff in Machakos County. The categories were characterized by gender, age, academic achievement,

occupation and duration lived in Machakos County. The summary of the Huduma Centre staff distribution by their gender is given in Table 4.28:

**Table 4.28: Distribution of Huduma Centre staff by Gender**

<b>Gender</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Male	22	62.8
Female	13	37.2
<b>Total</b>	<b>35</b>	<b>100.0</b>

According to the data shown in Table 4.28, out of 35 Huduma Centre staff who participated in the study, 22 (62.8%) the majority were males while 13 (37.2) were female. The findings give an indication that most of the Huduma Centre staff in Machakos County are males. The distribution of Huduma Centre staff by age is given in Table 4.29:

**Table 4.29: Distribution of Huduma Centre staff by Age**

<b>Age</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
20-30 years	10	28.6
31-40 years	13	37.1
41-50 years	9	25.8
51 and above years	3	8.6
<b>Total</b>	<b>35</b>	<b>100.0</b>

It is evident from the data shown in Table 4.29 that, majority of the Huduma Centre staff (13) were aged 31-40 years (37.1%), 10 (28.6%) were aged 20-30 years, 9 (25.8%) were aged 41-50 years and 3 (8.6%) are aged 51 years and above years. The distribution of the Huduma Centre staff by education level is given in Table 4.30:



**Table 4.30: Distribution of Huduma Centre staff officials by Education Level**

<b>Academic Achievements</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Certificate	4	11.4
Diploma	11	31.5
Undergraduate	13	37.1
Masters	7	20.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

The results in Table 4.30 indicate that, majority (13), of the Huduma Centre staff have attained an undergraduate degree (37.1%), 11 (31.5%) have attained a diploma, 7 (20.0%) have attained a master's degree and 4 (11.4%) have attained a certificate level of education. The findings point that majority of Huduma Centre staff in Machakos County are well educated for their jobs. The distribution of the Huduma Centre staff by how long they have worked with the ministry is given in Table 4.31:

**Table 4.31: Years worked as civil servant**

<b>Years in the Ministry</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Less than 1 year	3	8.6
1-3 years	7	20.0
4-7 years	7	20.0
8-11 years	9	25.7
Over 11 years	9	25.7
<b>Total</b>	<b>35</b>	<b>100.0</b>

The findings on Table 4.31 indicate that majority of Huduma Centre staff have worked as a civil servant for over 11 years, 9 (25.7%), 9 (25.7%) for 8-11 years, 7 (20.0%) for 4-7 years, 7 (20.0%) for 1-3 years and 3 (8.6%) have worked as civil servants for less than 1 year. The

distribution of the Huduma Centre staff by how long they have worked at Huduma Centre is given in Table 4.32:

**Table 4.32: Years worked in Huduma Centre**

<b>Years in Huduma Centre</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Less than 1 year	13	37.1
1-3 years	21	62.9
<b>Total</b>	<b>35</b>	<b>100.0</b>

The findings on Table 4.32 indicate that majority of Huduma Centre staff have worked in Huduma Centre 21 (62.9%) for 1-3 years and 13 (37.1%) have worked in Huduma Centre for less than 1 year. The distribution of the Huduma Centre staff by career orientation is given in Table 4.33:

**Table 4.33: Career Orientation**

<b>Career Orientation</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Marketing	4	11.4
Accounts	6	17.1
Engineering	2	5.7
ICT	3	8.6
Procurement	9	25.7
Business Management	11	31.4
<b>Total</b>	<b>35</b>	<b>100.0</b>

The findings on Table 4.33 indicate that majority of Huduma Centre staff indicated that their career orientation is 11 (31.4%) business management, 9(25.7%) procurement, 6(17.1%)

accounts, 4(11.4%) marketing, 3(8.6%) ICT and 2(5.7%) are in engineering. The respondents indicated that they are in Finance and Customer service departments.

#### **4.5.2 Telecentre Platforms’ Initiatives and Customer Satisfaction (Huduma Centre Staff)**

This section looks at the telecentre platforms’ initiatives and customer satisfaction which is one of the objectives of the study. The influence of the type of services sought in Telecentres on customer satisfaction with Government Service delivery is given in Table 4.34:

**Table 4.34: Influence of the type of services sought in Telecentres on customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>Type of service</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	35	100.0
No	0	0.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

It is evident from the data shown in Table 4.34 that majority of the Machakos County Huduma Centre Staff 35 (100.0%) who participated in the study agreed that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery. The extent to which the type of services sought in Telecentres influences customer satisfaction with Government Service delivery is given in Table 4.35:

**Table 4.35: Extent type of services sought in Telecentres influences customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>Extent</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	30	85.7
Great extent	5	14.3
Moderate extent	0	0.0
Low extent	0	0.0
Very low extent	0	0.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

The findings on Table 4.35 indicate that majority 30 (85.7) of the Machakos County Huduma Centre staff agreed to a very great extent that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery while 5 (14.3%) agreed to a great extent that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery. The influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery in Machakos County is given in Table 4.36:

**Table 4.36: Influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>ICT development</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	35	100.0
No	0	0.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

The results in Table 4.36 indicate that, all the Huduma Centre Staff 35 (100.0%) agreed that level of ICT development in Telecentres influences customer satisfaction with Government Service delivery. The extent to which level of ICT development in Telecentres on customer satisfaction with Government Service delivery is given in Table 4.37:

**Table 4.37 Extent to which level of ICT development in Telecentres on customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>Extent of ICT development</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	35	100.0
Great extent	0	0.0
Moderate extent	0	0.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

The findings on Table 4.37 indicate that majority 35 (100.0%) of the Huduma Centre Staff agreed to a very great extent that level of ICT development in Telecentres influence customer satisfaction with Government Service delivery while 24 (26.7%) agreed to a great extent that level of ICT development in Telecentres influence customer satisfaction with Government Service delivery. The influence of attitude as a service user on customer satisfaction with Government Service delivery is given in Table 4.38:

**Table 4.38: Influence of attitude as a service provider on customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>Attitude</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	35	100.0
No	0	0.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

The findings on Table 4.38 indicate that all 35 (100.0%) of the Huduma Centre Staff agreed that attitude as a service provider on customer satisfaction with Government Service delivery. The extent to which attitude as a service provider on customer satisfaction with Government Service delivery is given in Table 4.39:

**Table 4.39: Extent to which attitude as a service provider on customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>Extent of attitude</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	30	85.7
Great extent	5	14.3
Moderate extent	2	1.6
<b>Total</b>	<b>35</b>	<b>100.0</b>

The results in Table 4.39 indicate that, majority 30 (85.7%) of the Huduma Centre Staff indicated that attitude as a service user influences customer satisfaction with Government Service delivery to a very great extent while 5(14.3%) agreed to a great extent that attitude as a service provider influences customer satisfaction with Government Service delivery to a

moderate extent. The influence of server provider characteristics on customer satisfaction with Government Service delivery is given in Table 4.40:

**Table 4.40: Influence of service provider characteristics user on customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>Resource mobilization</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Yes	35	100.0
No	0	0.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

The findings on Table 4.40 indicate that all 35 (100.0%) of the Huduma Centre Staff agreed that server provider characteristics on customer satisfaction with Government Service delivery. The extent to which server provider characteristics influences customer satisfaction with Government Service delivery is given in Table 4.41:

**Table 4.41: Extent to which service provider characteristics on customer satisfaction with Government Service delivery (Huduma Centre Staff)**

<b>Extent of attitude</b>	<b>Frequency (F)</b>	<b>Percentage (%)</b>
Very great extent	35	100.0
Great extent	0	0.0
Moderate extent	0	0.0
<b>Total</b>	<b>35</b>	<b>100.0</b>

The results in Table 4.41 indicate that all 35 (100.0%) of the Huduma Centre Staff indicated that server provider characteristics influences customer satisfaction with Government Service delivery to a very great extent.

The level of agreement to the following statements as they apply in the department or ministry as a whole is given in Table 4.42:

**Table 4.42: Level of agreement to the following statements as they apply in the department or ministry as a whole**

	<b>Strongly Agree (%)</b>	<b>Agree (%)</b>	<b>Neutral (%)</b>	<b>Disagree (%)</b>	<b>Strongly Disagree (%)</b>
I understand the vision and mission of the Telecentre	100.0	0.0	0.0	0.0	0.0
The Telecentre has customer focus	100.0	0.0	0.0	0.0	0.0
The Telecentre has capacity to offer excellent services	100.0	0.0	0.0	0.0	0.0
The type of work I do is fulfilling (satisfying)	76.7	23.3	0.0	0.0	0.0
There is team spirit in the Telecentre	98.7	1.3	0.0	0.0	0.0
The goals, work and work environment is good	100.0	0.0	0.0	0.0	0.0
There is participation in decision-making	85.7	14.3	0.0	0.0	0.0
There is recognition of good performance	85.7	14.3	0.0	0.0	0.0
I feel motivated by the work I do	85.7	14.3	0.0	0.0	0.0
There are opportunities for staff development and training	85.7	14.3	0.0	0.0	0.0

Table 4.42 reveals that majority of the respondents strongly agreed with the statements that: they understand the vision and mission of the telecentre (100.0%), the telecentre has customer focus (100.0%), the telecentre has capacity to offer excellent services (100.0%), the goals, work and



work environment is good (100.0%), there is team spirit in the telecentre (98.7%), there is participation in decision-making (85.7%), there is recognition of good performance (85.7%), they feel motivated by the work they do (85.7%), there are opportunities for staff development and training (85.7%) and the type of work they do is fulfilling (satisfying) (76.7%), and ease of reaching senior officers (7.6%) as statements as they apply in their department or ministry as a whole. The level of satisfaction towards the opinions/feelings regarding customer service is given in Table 4.43:

**Table 4.43: Level of satisfaction towards the opinions/feelings regarding customer service**

	<b>Very Satisfied (%)</b>	<b>Satisfied (%)</b>	<b>Indifferent (%)</b>	<b>Dissatisfied (%)</b>	<b>Very Dissatisfied (%)</b>
Staff are competent and knowledgeable	100.0	0.0	0.0	0.0	0.0
The Ministry is responsive to my needs	14.3	85.7	0.0	0.0	0.0
The waiting time at the office is reasonable	14.3	85.7	0.0	0.0	0.0
Staff deliver their promises	100.0	0.0	0.0	0.0	0.0
Customers are treated fairly	100.0	0.0	0.0	0.0	0.0
Customers individual circumstances are taken into account	100.0	0.0	0.0	0.0	0.0
I feel confident that the information provided to the Telecentre will remain confidential	85.7	14.3	0.0	0.0	0.0

Table 4.43 reveals that majority of the respondents are very satisfied with: staff are competent and knowledgeable (100.0%), staff deliver their promises (100.0%), customers are treated fairly (100.0%), customers individual circumstances are taken into account (100.0%), and feel confident that the information provided to the telecentre will remain confidential (85.7%) as their opinions/feelings regarding customer service. A large proportion of the respondents are satisfied

with the waiting time at the office is reasonable (85.7%) and are dissatisfied with the Ministry is responsive to their needs as their opinions/feelings regarding customer service.

#### **4.5.3 Machakos County Huduma Centre staff recommendations towards influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya**

The study sought to find out from the Machakos County Huduma Centre staff suggestions/recommendations towards influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. The responses given include: Basic ICT infrastructure like power and connectivity; frequent training of the staff; employee motivation and rewards; regular monitoring and evaluation of the Huduma Centre to ensure that they are operating as they should be as well as improving on the challenged areas; opening of more spread out branches to meet the demand function as well as full centralization of services at Huduma Centre; deployment of customer stewards as well as more training for customers to create awareness of the available services and the procedures to be followed in service delivery; employment of more skilled personnel to give quality and efficient services; assessing the skills of employees working at Huduma Centre.

## **CHAPTER FIVE**

### **SUMMARY, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary, discussions, conclusions and recommendations of the study. The chapter provides the summary, discussion, conclusions and recommendations of the study. This was based on the research findings that is presented and discussed in the previous chapters. The study established several findings which make a direct contribution to knowledge and policy formulation. Recommendations both for further research as well as policy and practice have been made.

#### **5.2 Summary of Research Findings**

This study aimed at determining the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya focusing on Machakos County, Kenya. The task included; establishing how types of services sought in telecentres influence customer satisfaction with government service delivery in Machakos County; establishing how level of ICT development in telecentres influence customer satisfaction with government service delivery in Machakos County; determining how attitudes of the service provider in telecentres influence customer satisfaction with government service delivery in Machakos County; and determining how characteristics of service providers in telecentres influence customer satisfaction with government service delivery in Machakos County. The study reviewed previous studies with a view to establish academic gaps which the present study sought to bridge. This was done through library research.

This study adopted a descriptive survey design and employed quantitative research as the main approach to guide the study. The study targeted 120 huduma telecentre customers of Machakos County, and thirty six (36) staff members of Huduma telecentre- Machakos Office. The research instrument used in data collection was a questionnaire to draw information from the respondents. To ensure validity of the instruments, expert opinion was sought. Data analysis was started immediately after the field. Data was summarized into frequencies and percentages and presented in tables. This section comprises of discussions based on the specific research objectives of the study.

The study findings reveal that majority of Machakos telecentre customers' or users are males aged between 33-37 years who have completed undergraduate level of education. The findings also reveal that majority of Machakos telecentre customers' are self-employed and are in trade business. The study findings further reveal that the customers have prior training on computers and/or ICT and the type of services they were seeking at the telecentre include: renewal of drivers licenses; duplicate national identity card; NHIF registration; NHIF member statements; payment of stamp duty for land; getting a single business permit'; search and registration of business names; registration of chama; HELB loan application; NSSF registration; NSSF member statements; checking status of pension claims; and getting a Kenya police abstract. The study findings reveal that the customers they got the service they were seeking at the telecentre and that they were satisfied with the government service delivery at the Telecentre to a very great extent.

The study findings reveal that majority of the Huduma Centre staff are males aged 31-40 years years who have attained an undergraduate degree. The study findings reveal that majority of Huduma Centre staff have worked as civil servants for over 11 years, and have served in Huduma Centre for 1-3 years. The study findings reveal that majority in Huduma Centre staff indicated that their career orientation is business management.

### **5.2.1 Major Findings on the Types of Services Sought in Telecentres and Customer Satisfaction**

The objective was to establish the types of services sought in telecentres and customer satisfaction. The measurement of this objective was based on one indicator namely; types of services sought in telecentres. The major finding of this objective was that majority of the Machakos telecentre customers' agreed that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery. The findings reveal that majority of the customers agreed that type of services sought in Telecentres influences customer satisfaction with Government Service delivery to a very great extent. The type of services they sought which are indicators for this study included: renewal of drivers licenses; duplicate national identity card; NHIF registration; NHIF member statements; payment of stamp duty for land; getting a single business permit'; search and registration of business names; registration of chama; HELB loan application; NSSF registration; NSSF member statements; checking status of pension claims; and getting a Kenya police abstract.

The findings further reveal that majority of the Machakos telecentre customers' agreed to a very great extent that the type of service they are seeking, accessibility of the services leave them satisfied, they are happy with the services they get from the Telecentre and they get all the government services they need from the Telecentre are statements regarding influence of type of services sought in Telecentres on customer satisfaction. The study findings reveal that all the Huduma Centre staff agreed that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery. The findings reveal that majority of the Huduma Centre staff agreed that type of services sought in Telecentres influences customer satisfaction with Government Service delivery to a very great extent to a very great extent.

### **5.2.2 Major Findings on the Influence of Level of ICT Development in Telecentres and Customer Satisfaction**

The second objective was to establish the influence of level of ICT development in telecentres and customer satisfaction in Machakos County. The measurement of this objective was based on one indicator namely; level of ICT development whose indicators were infrastructure, connectivity and hotspots, adequacy of computers, and internet access. The major finding of this objective was that majority of the majority of the customers agreed that level of ICT development in Telecentres influences customer satisfaction with Government Service delivery. The findings reveal that majority of the customers agreed that level of ICT development in Telecentres influences customer satisfaction with Government Service delivery to a very great extent.

The findings further reveal that majority of the customers agreed to a very great extent that the Telecentre has full time accessible internet and the Telecentre has enough infrastructure and modern looking equipment are statements regarding level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery. The respondents further agreed to a great extent that the Telecentre has sufficient computers for everyone and Telecentre has enough infrastructure and modern looking equipment are statements regarding level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery.

However, a large proportion of the respondents agreed to a little extent that the Telecentre has sufficient computers for everyone are statements regarding level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery. The findings reveal that majority of the Huduma Centre staff agreed that that of ICT development in Telecentres influences customer satisfaction with Government Service delivery. The findings reveal that majority of the Huduma Centre staff agreed that level of ICT development in Telecentres influences customer satisfaction with Government Service delivery to a very great extent.

### **5.2.3 Major Findings on the Influence of Service Provider Attitude on Customer Satisfaction**

The third objective was to establish the influence of service provider attitude on customer satisfaction in Machakos County. The measurement of this objective was based on one indicator

namely; service provider attitude. The major finding of this objective was that all the customers agreed that attitude as a service provider influences customer satisfaction with Government Service delivery. Majority of the customers indicated that attitude as a service provider influences customer satisfaction with Government Service delivery in Machakos County to a very great extent. the findings also reveal that majority of the Machakos telecentre customers' agreed to a very great extent that they really like telecentres set up by the government for ease of access of services, the staff at the telecentres are friendly and guide them well through the processes and the services offered in the telecentre cater for their needs are statements regarding influence of service user attitude on customer satisfaction with Government Service delivery.

The findings reveal that all the all the Huduma Centre staff agreed that attitude as a service user on customer satisfaction with Government Service delivery to a very great extent. The findings reveal that majority of Huduma Centre staff agreed that attitude as a service user on customer satisfaction with Government Service delivery to a very great extent.

#### **5.2.4 Major Findings on the Influence of Service Provider Characteristics on Customer Satisfaction in Machakos County**

The fourth objective of the study was to examine the influence of service provider characteristics on customer satisfaction in Machakos County. The measurement of this objective was based on one indicator namely; service provider characteristics. The major finding of this objective was that all the customers agreed that server provider characteristics on customer satisfaction with Government Service delivery. The findings further reveal that majority of the Huduma Centre



customers agreed that attitude as a service user influences customer satisfaction with Government Service delivery to a very great extent. The findings reveal that majority of the Machakos County customers agreed to a very great extent that Telecentre staff give prompt services to customers, Telecentre staff are always willing to help customers, Telecentre staff consistently courteous with customers, Telecentre staff never too busy to respond to customers' requests and Telecentre staff get thing right the first time are statements regarding influence of server provider characteristics on customer satisfaction with Government Service delivery.

The findings reveal that all the Huduma Centre staff agreed that server provider characteristics influences customer satisfaction with Government Service delivery. The findings further reveal that majority of the Huduma Centre staff customers agreed that attitude as a service user influences customer satisfaction with Government Service delivery to a very great extent.

The findings reveal that majority of the very satisfied with efficiency and speed in completing a transaction, accuracy of information provided by staff, ease in understanding information provided by staff, prompt response to customer complaints, ease of accessing services through telecommunication (ICT), convenience of telecentre location, their questions are well answered, telecentre operating hours are convenient, making appropriate corrections if there is a problem, courtesy of employees, and ease of reaching senior officers as factors regarding customer satisfaction with government service delivery at telecentres.

The findings indicate that the challenges faced by the customers when trying to access services at the Huduma Telecentre include: long queues; shortage of employees leading to delays at birth certificate service and good conduct counters; poor location of telecentres is another challenge that users face as the facilities are located far such that users have to incur transport costs; lack of information in local content is another challenge that many telecentre users complain about because a lot of web based information are in foreign languages like English not understood by local communities; inadequate physical facilities since the available space is small or poorly managed leading to little privacy for users; the telecentre keep formal government working hours which limits the time during which the facilities are open to the public; slow speed of Internet which is as a result of low bandwidth in many telecentres; inability to assess the quality of information; lack of Internet searching skills; difficulties in tracing the service counters that offered the services they required; and poor staff attitude.

The findings reveal that the challenges faced by the Huduma Centre staff when giving services at the Huduma Telecentre include: facing illiterate customers; inadequate physical facilities and at times slow internet speed leading to delays in several counters; and difficulty in understanding local languages hence spending a lot of time finding someone to translate.

### **5.3 Discussions of the Findings**

The study findings revealed that the type of services sought in Telecentres influences customer satisfaction with Government Service delivery in Machakos County. The major finding of this objective was that the type of services sought in Telecentres influences customer satisfaction

with Government Service delivery in Machakos County to a very great extent. Other major findings are that; the type of service they are seeking, accessibility of the services leave them satisfied, they are happy with the services they get from the Telecentre and they get all the government services they need from the Telecentre are statements regarding influence of type of services sought in Telecentres on customer satisfaction. The findings are in line with Kumar and Best's (2007) who note that community members will adopt telecentres if they draw benefits from their use, when telecentres offer services that are compatible with their needs and when the facilities are not complex to use. It also revealed that the social system, especially bonds existing in communities, influences adoption of telecentres.

The study findings reveal that level of ICT development in Telecentres influences customer satisfaction with Government Service delivery in Machakos County. The major finding on this objective was that level of ICT development in Telecentres influences customer satisfaction with Government Service delivery in Machakos County to a very great extent. The findings reveal that the Telecentre has full time accessible internet and the Telecentre has enough infrastructure and modern looking equipment are statements regarding level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery. The findings are in line with researchers such as GOK (2007) who contends that inadequate ICT infrastructure has hampered provision of efficient and affordable ICT services in the country. Telecommunication infrastructure is a major issue that stands as an impediment to access of information, most people are not able to access digital information due to lack of the necessary infrastructure (GoK, 2007). There is therefore need to put more emphasis on provision of support infrastructure, such as,

energy and roads; supporting software development; promotion of local manufacture and assembly of ICT equipment and accessories; and provision of incentives for the provision of ICT infrastructure (GoK, 2007).

The study findings reveal that attitude as a service provider influences customer satisfaction with Government Service delivery in Machakos County. The major finding on this objective was that attitude as a service provider influences customer satisfaction with Government Service delivery in Machakos County to a very great extent. The study results also revealed that the customers really like telecentres set up by the government for ease of access of services, the staff at the telecentres are friendly and guide them well through the processes and the services offered in the telecentre cater for their needs are statements regarding influence of service user attitude on customer satisfaction with Government Service delivery. The findings support Parkinson (2005) who asserts that in many telecentre initiatives throughout the world, the youth are the largest part of the population using computers and Internet opportunities. Etta & Parvyn-Wamahiu (2003) and Gill *et al.* (2010), note that telecentre users in Africa have been disadvantaged on the basis of gender, age, education, literacy levels and socio-economic status. Noticeably, the absence of the elderly and disabled population at the telecentres was observed. In their study, Gill *et al.* (2010) affirm that fewer women use the telecentre services, which confirmed the poor standing of African women in science and technology. Literacy affects telecentre usage both negatively and positively because at first, the illiterate did not use the telecentre services but it offered opportunities to telecentres to start offering literacy skills which made people who were illiterate to start using the telecentres (Bailey & Ngwenyama, 2009).

Findings from the study reveal that server provider characteristics influences customer satisfaction with Government Service delivery in Machakos County. The study findings revealed that server provider characteristics influences customer satisfaction with Government Service delivery in Machakos County to a very great extent. the findings further reveal that Telecentre staff give prompt services to customers, Telecentre staff are always willing to help customers, Telecentre staff consistently courteous with customers, Telecentre staff never too busy to respond to customers' requests and Telecentre staff get thing right the first time are statements regarding influence of server provider characteristics on customer satisfaction with Government Service delivery. The findings support Bailey & Ngwenyama (2009) who contend that if the telecentres are to be adopted by many, telecentre operators and managers should allocate them close to people, should offer literacy classes to those who are illiterate, should offer employment opportunities or services that will help the jobless find jobs. On bonds and social ties, telecentres should be providing room for interactions so that people should build friendships which will make users to go to telecentres to meet their friends and consequently, use the telecentre services.

The study findings revealed that the customers are very satisfied with respondents are very satisfied with efficiency and speed in completing a transaction, accuracy of information provided by staff, ease in understanding information provided by staff, prompt response to customer complaints, ease of accessing services through telecommunication (ICT), convenience of telecentre location, their questions are well answered, telecentre operating hours are convenient, making appropriate corrections if there is a problem, courtesy of employees, and ease of reaching

senior officers as factors regarding customer satisfaction with government service delivery at telecentres.

The study results revealed that challenges faced by the customers when trying to access services at the Huduma Telecentre include: long queues; shortage of employees leading to delays at birth certificate service and good conduct counters; poor location of telecentres is another challenge that users face as the facilities are located far such that users have to incur transport costs; lack of information in local content is another challenge that many telecentre users complain about because a lot of web based information are in foreign languages like English not understood by local communities; inadequate physical facilities since the available space is small and this therefore, leads to little privacy for users; the telecentre keep formal government working hours which limits the time during which the facilities are open to the public; slow speed of Internet; inability to assess the quality of information; lack of Internet searching skills; difficulties in tracing the service counters that offered the services they required; poor staff attitude and high costs of services.

The study findings reveal that the challenges faced by the Huduma Centre staff when rendering services at the Huduma Telecentre include: facing illiterate customers; inadequate physical facilities and at times slow internet speed leading to delays in several counters; and difficulty in understanding local languages hence spending a lot of time finding someone to translate.

#### **5.4 Conclusion of the Study**

The study found that there exists a positive association between: influence of level of ICT development in Telecentres on customer satisfaction with Government Service delivery; influence of attitude as a service provider on customer satisfaction with Government Service delivery; and influence of server provider characteristics on customer satisfaction with Government Service delivery to influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya. This positive association suggests that when one increases, influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya increases. The study therefore concludes that type of service, level of ICT development, attitude as a service provider and server provider characteristics are factors influencing of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya with a focus on Machakos County.

#### **5.5 Recommendations of the Study**

On the basis of the above, conclusions, the following recommendations were made for influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya.

##### **5.5.1 Recommendations for policy and practice**

The study recommends there is need for the telecentres to be open at hours when people want to use them; train telecentre staff on customer care services; telecentre ICTs should be simple to use and the staff support should be readily available; technical expertise should be available within the telecentres which would mean employing another staff member as a technician or capacity

building among the already existing staff; telecentre management should buy an alternative power supply e.g. a generator; literacy classes should also be introduced because many services indeed need people who are able to read and write; education is needed to remove misconception that telecentres are only meant for educated; conducting needs assessments regularly; telecentre services and the programmes should be linked to what people need from the telecentre; in order to incorporate all groups in the community, telecentre managers and operators should be providing various programmes targeting different groups of people.

Other suggestions include; Telecentre management should collaborate with organisations such as academic institutions in order to create localised content as this would partly solve the problem of lack of local content in the Telecentre which many users complained about and perhaps in the end attract many new members; Basic ICT infrastructure like power and connectivity, continuous technological up gradation and follow up is essential for spreading e-services; frequent training of the staff; employee motivation and rewards; regular monitoring and evaluation of the Huduma Centre to ensure that they are operating as they should be as well as improving on the challenged areas; opening of more spread out branches to meet the demand function as well as full centralization of services at Huduma Centre; assessing the skills of employees working at Huduma Centre.

The study recommends there is need for educating the locals through doing trips and seminars to the villages; community should be trained on importance of ICT; deployment of customer stewards as well as more training for customers to create awareness of the available services and the



procedures to be followed in service delivery; and employment of more skilled personnel to give quality and efficient services.

### **5.5.2 Recommendations for further research**

This study sought to establish the influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya with a focus on Machakos County attempting to bridge the gap in knowledge that existed. Although the study attained these, it mainly focused on One County that is Machakos County. Then there is need to replicate the study using many other Counties in Kenya in an attempt to compare the findings. The there is need to conduct a similar study which will attempt to find out the challenges facing implementation of telecentre platforms' initiatives in Kenya.

## REFERENCES

- Abdalla, A., Kiragu, J., Waswa, F., Ono, F., Kariuki, J., and Ikua, D. (2015). Effect of Huduma Centers (One Stop Shops) in Service Delivery – A Case Study of Mombasa Huduma Centre. *International Journal of Academic Research in Business and Social Sciences*, Vol. 5, No. 6, pp.102-107.
- Akanlagm, J. (2011). Promoting customer satisfaction in the insurance industry in Ghana: A case study of selected insurance companies in the tamale metropolis. A published thesis for the degree of commonwealth executive master's in business administration, Kwame Nkrumah University of Science and Technology.
- Anderson, E., Fornell, C., & Lehmann, R. (1994). Customer satisfaction, market share and Profitability: *Journal of Marketing*. pp. 10-14.
- Andreassen, T. and Olsen, L. (2008). “The impact of customers’ perception of varying degrees of customer service on commitment and perceived relative attractiveness”, *Managing Service Quality*, Vol. 18 No. 4, pp. 309-28.
- Ariyabandu, R. (2009). Role of telecentres as knowledge networks: Successes and challenges. ESCAP Technical Paper. Information and Communications Technology and Disaster Risk Reduction Division. [Accessed 13 January 2016], available at: [www.unescap.org/idd/.../IDDWP\\_7\\_2\\_905.pdf](http://www.unescap.org/idd/.../IDDWP_7_2_905.pdf)
- Attwood, H., Diga, K. Braathen, E. & May, J. (2013). Telecentre functionality in South Africa:Re-enabling the community ICT access environment. *The Journal of Community Informatics*, 9(4). [Online]. <http://ci-journal.net/index.php/ciej/article/view/970/1060>
- Bailey, A. & Ngwenyama, O. (2009). Social ties, literacy, location and the perception of economic opportunity: factors influencing telecentre success in a development context.

- Proceedings of the 42nd Annual Hawaii International Conference*. 1- 11. [Online]. <http://ekarine.org/wpcontent/uploads/lib/social%20ties.pdf>.
- Bailey, A. (2009). Issues affecting the social sustainability of telecentres in developing contexts: a field study of sixteen telecentres in Jamaica. *The Electronic Journal of Information Systems in Developing Countries*, Vol 36, [Accessed 12 January 2016], available at: <http://www.ejisdc.org/ojs2.../index.php/ejisdc/article/view/512>
- Bailur, S. (2008). Deconstructing community participation in telecentre projects. *Development Informatics*, working paper No. 31. [Accessed 14 January 2016], available at: <http://www.sed.manchester.ac.uk/idpm/research/publications/wp/di/index.htm>
- Baqir, N. & Iyer, L. (2010). "E-Government Maturity over 10 Years: A Comparative Analysis of E-Government Maturity in Select Countries around the World," in *Comparative E-Government*, C. G. Reddick (ed.), New York: Springer, pp. 3-22.
- Bertolini, R. (2002). *Telecommunication Services in Sub-Saharan Africa: An Analysis of Access and Use in the Southern Volta Region in Ghana*. Frankfurt: Peter Lang.
- Bridget, S., and Lewin, C. (2005). *Research Methods in the Social Sciences*. London: Sage publications Inc.
- Buhigiro, S. 2012. The role of telecentres in promoting socio-economic development in Rwanda. Master's thesis. University of the Witwatersrand. <http://hdl.handle.net/10539/12464>. (Accessed 12 January 2016).
- Caruana, A., Money, A.H. & Berthon P.R. (2000). "Service quality and satisfaction, the moderating role of value", *European Journal of Marketing*, 34(11/12), pp.1338-1352.

- Cohen, B. Manion, C. and Morrison, A. (2007). *Essentials of education and social science research methods*. Canada: Masolp publishers. pp 12-24.
- Colle, R. D. (2000). Communication shops and telecenters in developing nations. In M. Gurstein (Ed.), *Community Informatics: Enabling Communities with Information and Communications Technologies*. London: Idea Group Publishing.
- Communications Authority of Kenya- CAK, (2014). Study on ICT Access Gaps in Kenya
- Cronin, J. and Taylor, S. (1992). “SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality”, *Journal of Marketing*, Vol. 58, pp. 125-31.
- Dangal, M. (2011). E-Services in Rural Nepal: A study of telecenters. A published thesis on Master in Public Policy and Governance Program, North South University, Bangladesh
- Deloitte (2012). eTransform Africa: Modernising Government through ICTs. Transformation-Ready: The strategic application of ICTs in Africa. Pp1-5
- Ernberg, J. (2001). Telecenters and the incubation of public policy. *Journal of Development Communication*, 12(2). [Accessed 12 January 2016], available at: <http://ip.cals.cornell.edu/commdev/documents/jdc-ernberg.doc>
- Etta, F. & Parvyn-Wamahiu, S. (2003). Introduction: Joining the information society 2003. *Communication Technologies for Development In Africa: Volume 2 The Experience with Community Telecentres*. Ottawa: IDRC. [Accessed 12 January 2016], available at: [http://web.idrc.ca/en/ev-56545-201-1-DO\\_TOPIC.html](http://web.idrc.ca/en/ev-56545-201-1-DO_TOPIC.html)

- Filip, B. & Foote, D. (2007). *Making the Connection: Scaling Telecentres for development*. Washington, D.C: Information Technology Applications Center (ITAC).
- Gichoya, D. (2005). "Factors Affecting the Successful Implementation of ICT Projects in Government" *The Electronic Journal of e-Government* Volume 3 Issue 4, pp 175-184, available online at [www.ejeg.com](http://www.ejeg.com)
- Gill, K., Brooks, K., McDougall, J., Patel, P., & Kes, A. (2010). *Bridging the gender divide: How technology can advance women economically*. International Center for Research on Women (ICRW). Retrieved from [www.icrw.org/publications/bridging-gender-divide](http://www.icrw.org/publications/bridging-gender-divide)
- Githinji, R. (2011). *Application of Information and Communication Technologies for Development (ICT4D) in a Rural Community in Kenya: An Ethnographic Approach*. A published thesis for the Degree of Master of Social Practice, UNITEC, New Zealand.
- Gómez, R. and Hunt, P. (1999). *Telecenter Evaluation: A Global Perspective*. International Development Research Centre (IDRC), Ottawa. [Accessed 12 January 2016], Available at: [www.idrc.ca/telecentre/evaluation/html/06\\_Tel.html](http://www.idrc.ca/telecentre/evaluation/html/06_Tel.html)
- Gomez, R., Hunt, P., & Lamoureux, E. (1999). *Enchanted by telecentres: a critical look at universal access to information technologies for international development*. University of Maryland: College Park.
- Hallberg, D., Kulecho, M., Kulecho, A., and Okoth, L. (2011). Case studies of Kenyan digital villages with a focus on women and girls. *Journal of Language, Technology & Entrepreneurship in Africa* Vol. 3 No. 1, pp.255-260.

- Hansson, H., Mozelius, P., Gaiani, S., & Meegamma, N. (2010). Women Empowerment in Rural Areas through the Usage of Telecentres - A Sri Lankan Case Study. 2010 International Conference on Advances in ICT for Emerging Regions (ICTer), 5-10.
- Jensen, M. (2001). Technology and infrastructure for telecentres: Combining best practice with new developments. *Journal of Development Communication* 12(2). [Accessed 14 January 2016], available at: <http://ip.cals.cornell.edu/commdev/documents/jdcjensen.doc>
- Jensen, M. and Esterhuysen, A. (2001). The Community Telecentre Cookbook for Africa. Recipes for Self-sustainability, How to Establish a Multi-purpose Community Telecentre in Africa. United Nations Educational Scientific and Cultural Organization Paris, 2001.
- Karim, M. (2015). E-government in service delivery and citizen's satisfaction: a case study on public sectors in Bangladesh. *International Journal of Managing Public Sector Information and Communication Technologies*, Vol. 6, No. 2, pp. 42-44.
- Kariuki, G. (2009). Growth and improvement of information communication technology in Kenya, *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, Vol. 5, pp. 146-160
- Kothari, C. R. (2008). Research Methodology: Methods and Techniques. New Delhi: New Age International Publishers.
- Kumar, R., & Best, M. (2006). Social impact and diffusion of telecentre use: A study from the sustainable access in rural India project. *The Journal of Community Informatics*, 2(3).
- Lesame, Z. (2013). Telecentres and sustainable community development in South Africa, Pretoria: Van Schaik Publishers.

- Maruti, J., & Mwalili, N. (2003). E-Centers for poverty reduction technical Report. Unpublished report. World Corps Kenya: Kenya.
- Mayanja, M. (2009). Networking telecentres in Africa. *Telecentre magazine: Examining the role of public access to technology* Vol II, Issue 6. [Accessed 12 January 2016], available at: [http://issuu.com/telecentre\\_magazine/docs/telecentre\\_june\\_2009\\_issue](http://issuu.com/telecentre_magazine/docs/telecentre_june_2009_issue)
- McConnell, S. (2001). Telecentres around the world: Issues to be considered and lessons learned. Retrieved from [www.portal.unesco.org/telecentres+around+the+world.pdf](http://www.portal.unesco.org/telecentres+around+the+world.pdf), [Accessed 12 January 2016]
- Mugenda, O. and Mugenda, A. (2003). *Research methods: Quantitative and qualitative approaches*. 2<sup>nd</sup>. Rev. ed. Nairobi: Act press.
- Mukerji, M. (2008). Telecentres in Rural India: Emergence and Typology. *The Electronic Journal on Information Systems in Developing Countries*, 35(5), 1-13.
- Mukerji, M. (2009). *ICTs and Development: A study of Telecenters in Rural India*. Ph.D. Institute of Rural Management.
- Mulwa, J. (2015). *Factors influencing adoption of ICT in the management of County Governments' in Kenya: a case of Kitui County, Kenya*. An unpublished thesis for Master of Arts Degree in Project Planning and Management, University of Nairobi.
- Muthama, C. (2012). *Framework for Quality Assessment of E-Government Services Delivery in Kenya*. Thesis Submitted for the Degree of Master of Science in Information Technology, Strathmore University.

- Nachmias, C. F., & Nachmias, D. (2007). *Research Methods in the Social Sciences*, 7<sup>th</sup> Ed., Oxford University Press, New York
- Nguruman escarpments, (2010). Retrieved from <http://www.kenyasafaridirect.com/nguruman-escarpment/info>, [Accessed 12 January 2016]
- Nimmi, R. (2008). Telecenters and Internet Cafés: The Case of ICTs in Small Businesses, *Asian Journal of Communication*, 18 (4) pp.365-378.
- Odame, H. (2005). Introduction: gender and ICTs for development: Setting the context. In Koninklijk Instituut voor de Tropen; Oxfam GB Gender and ICTs for development: a global sourcebook. Amsterdam: KIT; Oxford: Oxfam GB
- Oestmann, S., & Dymond, A. C. (2001). Telecentres - experiences, lessons and trends. In C. Latchem & D. Walker (Ed.) *Telecentre: Case Studies and Key Issues*. The Commonwealth of Learning. [Accessed 11 January 2016], available at: <http://www.col.org/telecentres/chapter%2001.pdf>
- Otiso, K. M., & Moseley, W. G. (2009). Examining claims for Information and Communication Technology-Led Development in Africa, *African Geographical Review*, 28, pp.99–116,
- Owen, W. & Darkwa, O. (2000). Role of multipurpose community telecentres in accelerating national development in Ghana. *First Monday*, 5(1). Retrieved from [http://firstmonday.org/issues/issue5\\_1/owen/index.html](http://firstmonday.org/issues/issue5_1/owen/index.html), [Accessed 12 January 2016],
- Parkinson, S. (2005). Telecentres, access and development: Experience and Lessons from Uganda and South Africa. Ottawa: International Development Research Centre. Retrieved from Ebrary database.



- Prado, P. (2009). Bridging digital poverty: Adoption of Information and Communication Technologies at a community center in the Dominican Republic. Unpublished Ph.D. dissertation. University of Miami, Florida, USA.
- Rajalekshmi, K. G. (2007). E-Governance services through telecentres: The role of human intermediary and issues of trust. *Information Technologies and International Development*, 4(1), 19-35.
- Rega, I. (2010). What do local people think about telecentres? A key issue for sustainability. A published dissertation in Ph.D. in Communication Sciences, University of Lugano
- Roman, R. & Colle, D. (2001). Digital divide or digital bridge. Exploring threats and opportunities to participation in telecentre initiatives. TechKnowLogia. Retrieved from [www.josiah.berkeley.edu/2007Fall/ER275/TermPaper/282.pdf](http://www.josiah.berkeley.edu/2007Fall/ER275/TermPaper/282.pdf), [Accessed 12 January 2016]
- Roman, R. & Colle, R. D. (2002c). Themes and issues in telecentre sustainability. Development informatics. Working paper No. 10. Retrieved from [www.unpan1.un.org/intradoc/groups/public/.../unpan015544.pdf](http://www.unpan1.un.org/intradoc/groups/public/.../unpan015544.pdf), [Accessed 12 January 2016]
- Roman, R., & Colle, R. D. (2002). Themes and issues in telecentre sustainability. *Development Informatics*, Working Paper Series no. 10, Manchester: Institute for Development Policy and Management. [Accessed 12 January 2016], available at: [http://www.sed.manchester.ac.uk/idpm/publications/wp/di/di\\_wp10.pdf](http://www.sed.manchester.ac.uk/idpm/publications/wp/di/di_wp10.pdf)
- Roman, R., & Colle, R. D. (2002a). Editorial: The telecentre environment in 2002. Retrieved from [www.telecentres.isoc.am/references/managers/ebook1/jdccolle.doc](http://www.telecentres.isoc.am/references/managers/ebook1/jdccolle.doc), [Accessed 12 January 2016]

- Rothenberg-Aalami, J., & Pal, J. (2005). Rural telecentre impact assessments and the political economy of ICT for development (ICT4D). BRIE Working Paper 164 January 2005. Retrieved from: [www.brie.berkeley.edu/publications/WP%20164revised.pdf](http://www.brie.berkeley.edu/publications/WP%20164revised.pdf) [Accessed 16 January 2016]
- Salanje, G. 2006. The role of librarians in bridging the digital divide in developing countries: a case for Malawi. *Paper presented at the 32nd IAMSLIC Annual Conference Portland, Oregon, USA 9-12.* [Accessed 11 January 2016], available at: <https://darchive.mblwhoilibrary.org/handle/1912/2140>.
- Salkind, N. J. (2005). *Exploring Research*. 6<sup>th</sup> Ed., Prentice Hall, Upper Saddle River, New Jersey, USA.
- Sellina, K. (2014). The use of multipurpose community telecentres and their services in Malawi: the case of lupaso community telecentre. An unpublished mini-dissertation submitted, University of the Western Cape
- Townsend, D. N., Espitia, D. G., Jorge, S. N., & Lee, C., B. (2001). Telecentres and telecommunications development: Options and strategies. Retrieved from: [http://wsispapers.choike.org/options\\_strategies.pdf](http://wsispapers.choike.org/options_strategies.pdf), [Accessed 12 January 2016].
- Wambugu, L., Kyalo, D., Mbii, M., and Nyonje, R. (2015). Research Methods: Theory and Practice. Aura Publishers. Pp. 101-104
- Wangari, J. (2011). Implications of E-Government on Public Policy and Challenges of Adopting Technology: The case of Kenya, *Journal of global affairs and public policy*, volume 1, number 1, pp. 216-219

- Watson, V. (2007). *Beyond the digital divide: Mapping communicative ecologies among indigenous communities and ICT consumers*. Penang: Southbound.
- Wong, A. & Sohal, A. (2003). "Service quality and customer loyalty perspectives on two levels of retail relationships", *Journal of service marketing*, 17(5), pp.495-513.
- Young, J., Ridley, G., & Ridley, J. (2001). A preliminary evaluation of online access centres: Promoting micro e-business activity in small, isolated communities. *The Electronic Journal on Information Systems in Developing Countries*, 4(1), 1-17.
- Zikmund, W. (2003). *Exploring marketing research*. New Jersey: Thomson/South- Western Publishers, pp 40-43.

## APPENDICES

### APPENDIX I: INTRODUCTION LETTER

Joel Muli,  
P.O Box 30197,  
Nairobi, Kenya  
13th February, 2016.

Dear Respondent,

RE: **DATA COLLECTION**

I am a student at University of Nairobi currently undertaking a research study to fulfill the requirements of the Award of Master in Project Planning and Management on the **Influence of Telecentre Platforms' Initiatives on Customer Satisfaction with Government Service Delivery in Kenya**. You have been selected to participate in this study and I would highly appreciate if you assisted me by responding to all questions in the attached questionnaire as completely, correctly and honestly as possible. Your response will be treated with utmost confidentiality and will be used only for research purposes of this study only.

Kindly note that the study will be conducted as academic research and the information you provide will be treated as confidential. Your participation in the exercise is voluntary and so you are free to choose to or not to participate. But it would be helpful if you could participate fully. Kindly spare a few minutes from your busy schedule to complete the attached questionnaire.

Thank you in advance for your co-operation.

Yours Faithfully,

Joel Muli  
Researcher

## APPENDIX II: QUESTIONNAIRE (for customers)

This questionnaire is designed to collect data on the influence of telecentre platforms' initiatives on customer satisfaction with Government service delivery in Kenya. Kindly complete the following questionnaire using the instructions provided for each set of question. Tick appropriately. Instructions: Please tick as appropriate. Do not write your name on this questionnaire.

### PART A: Respondent's Background Information

1. What is your gender?

Male [  ]          Female [  ]

2. In which of the following age brackets does your age fall?

18-22 years [  ]    23-27 years [  ]    28-32 years [  ]    33-37 years [  ]  
38-42 years [  ]    43-47 years [  ]    48-52 years [  ]    53 and above [  ]

3. What is your education level (state the highest level)

Certificate [  ]          Diploma [  ]          Undergraduate [  ]  
Post Graduate [  ]          PhD [  ]          Other \_\_\_\_\_ [  ]

4. Type of employer?

Private [  ]          State [  ]          Self-employed [  ]          Retired [  ]  
Student [  ]          Other, (specify) \_\_\_\_\_ [  ]

5. If you are working, what category of business/job are you in?

Manufacturing [  ]    Trade [  ]    Agriculture [  ]    Services [  ]  
Construction [  ]    Education [  ]    Textile [  ]    Hotel [  ]

6. Do you have any prior training on computers and/or ICT?

Yes [ ] No [ ]

7. What service were you seeking from the Telecentre? \_\_\_\_\_

8. Did you get the service you were seeking at the telecentre?

Yes [ ] No [ ]

9. a) Were you satisfied with the government service delivery at the Telecentre?

Yes [ ] No [ ]

b) If yes to Q 9. (a), kindly indicate to what extent

To a very great extent [ ] To a great extent [ ] To a moderate extent [ ]

To a low extent [ ] To a very low extent [ ]

c) Kindly explain your response to Q. 9 (a)

---

---

**PART B: Types of Services Sought in Telecentres and Customer Satisfaction**

10. Do you think the type of services sought in Telecentres influence customer satisfaction with

Government Service delivery?

Yes [ ] No [ ]

To what extent

To a very great extent [ ] To a great extent [ ] To a moderate extent [ ]

To a low extent [ ] To a very low extent [ ]

11. To what extent do you agree to the following in regard to type of services sought in Telecentres influence customer satisfaction? Indicate your response based on a 5-point scale by using a tick (✓) or X to mark the applicable box.

Type of services sought	Not at all (1)	Little extent (2)	Moderate extent (3)	Great extent (4)	Very great extent (5)
The type of service am seeking					
I get all the government services I need from the Telecentre					
I am happy with the services I get from the Telecentre					
Accessibility of the services leave me satisfied					

**PART C: Level of ICT Development in Telecentres and Customer Satisfaction**

12. In your opinion, does level of ICT development in Telecentres influence customer satisfaction with Government Service delivery?

Yes [    ]                      No [    ]

To what extent

To a very great extent [    ]      To a great extent [    ]      To a moderate extent [    ]  
 To a low extent [    ]              To a very low extent [    ]

13. To what extent do you agree to the following in regard to level of ICT development in Telecentres and its influence on customer satisfaction with Government Service delivery? Indicate your response based on a 5-point scale by using a tick (✓) or X to mark the applicable box.

<b>Level of ICT development</b>	<b>Not at all (1)</b>	<b>Little extent (2)</b>	<b>Moderate extent (3)</b>	<b>Great extent (4)</b>	<b>Very great extent (5)</b>
The Telecentre has sufficient computers for everyone					
The Telecentre has enough infrastructure and modern looking equipment					
The Telecentre has full time accessible internet					

**PART D: Service User Attitude and Customer Satisfaction**

14. In your opinion, does your attitude as a service user influence customer satisfaction with Government Service delivery?

Yes [    ]                      No [    ]

To what extent

To a very great extent [    ]      To a great extent [    ]      To a moderate extent [    ]  
 To a low extent [    ]              To a very low extent [    ]

15. To what extent do you agree to the following in regard to service user attitude and its influence on customer satisfaction with Government Service delivery? Indicate your response based on a 5-point scale by using a tick (✓) or X to mark the applicable box.

<b>Service user attitude</b>	<b>Not at all (1)</b>	<b>Little extent (2)</b>	<b>Moderate extent (3)</b>	<b>Great extent (4)</b>	<b>Very great extent (5)</b>
I really like telecentres set up by the government for ease of access of services					
The services offered in the telecentre cater for my needs					
The staff at the telecentres are friendly and guide me well through the processes					



**PART E: Service Provider Characteristics and Customer Satisfaction**

16. In your opinion, do service provider characteristics influence customer satisfaction with

Government Service delivery?

Yes [    ]

No [    ]

To what extent

To a very great extent [    ]      To a great extent [    ]      To a moderate extent [    ]

To a low extent [    ]      To a very low extent [    ]

17. To what extent do you agree to the following in regard to service provider characteristics and its influence on customer satisfaction with Government Service delivery? Indicate your response based on a 5-point scale by using a tick (√) or X to mark the applicable box.

<b>Service provider characteristics</b>	<b>Not at all (1)</b>	<b>Little extent (2)</b>	<b>Moderate extent (3)</b>	<b>Great extent (4)</b>	<b>Very great extent (5)</b>
Telecentre staff give prompt services to customers					
Telecentre staff are always willing to help customers					
Telecentre staff get thing right the first time					
Telecentre staff never too busy to respond to customers requests					
Telecentre staff consistently courteous with customers					

18. Kindly indicate how much you agree with the following factors regarding customer satisfaction with Government Service delivery at Telecentres. On a Scale of 1-4 where 1=Not satisfied at all and 4=very satisfied.

No	STATEMENT	Very Satisfied	Satisfied	Not Satisfied	Not Satisfied At all
1	Convenience of Telecentre location	4	3	2	1
2	My questions are well answered	4	3	2	1
3	Telecentre operating hours are convenient	4	3	2	1
4	Efficiency and speed in completing a transaction	4	3	2	1
5	Courtesy of employees	4	3	2	1
6	Ease of reaching senior officers	4	3	2	1
7	Ease of accessing services through telecommunication (ICT)	4	3	2	1
8	Accuracy of the information provided by staff	4	3	2	1
9	Ease in understanding information provided by staff	4	3	2	1
10	Prompt response to customer complaints	4	3	2	1
11.	Follow-through to see if the customers get what they need	4	3	2	1
12.	Making appropriate corrections if there is a problem	4	3	2	1

19. What challenges do you face when trying to access services at the Huduma Telecentre?

---

---

---

20. Please give suggestions/recommendations towards influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya.

---

---

---

**THANK YOU FOR YOUR TIME AND COOPERATION!!**

### APPENDIX III: QUESTIONNAIRE (for Huduma Telecentre Staff)

This questionnaire is designed to collect data on the influence of telecentre platforms' initiatives on customer satisfaction with Government service delivery in Kenya. Kindly complete the following questionnaire using the instructions provided for each set of question. Tick appropriately. Instructions: Please tick as appropriate. Do not write your name on this questionnaire.

#### PART A: Respondent's Background Information

1. What is your gender?

Male [  ]      Female [  ]

2. In which of the following age brackets does your age fall?

20-30 years [  ]      31-40 years [  ]      41-50 years [  ]      50 and above [  ]

3. State your highest education level

Certificate [  ]      Diploma [  ]      Undergraduate [  ]  
Post Graduate [  ]      PhD [  ]      Other \_\_\_\_\_ [  ]

4. How many years have you worked as a civil servant?

Less than 1 year [  ]      1-3 years [  ]      4-6 years [  ]      7-10 years [  ]      More than 10 years [  ]

5. How many years have you worked with the Huduma Telecentre of Machakos? \_\_\_\_\_

6. What is your career orientation?

Marketing [  ]      Accounts [  ]      Engineering [  ]  
ICT [  ]      Procurement [  ]      Other \_\_\_\_\_ [  ]

7. Which department are you in? \_\_\_\_\_

**PART B: Telecentre Platforms' Initiatives and Customer Satisfaction**

8. Do you think the type of services sought in Telecentres influence customer satisfaction?

Yes [    ]                      No [    ]

To what extent

To a very great extent [    ]      To a great extent [    ]      To a moderate extent [    ]  
To a low extent [    ]              To a very low extent [    ]

9. In your opinion, does attitude as a service user influence customer satisfaction?

Yes [    ]                      No [    ]

To what extent

To a very great extent [    ]      To a great extent [    ]      To a moderate extent [    ]  
To a low extent [    ]              To a very low extent [    ]

10. In your opinion, does level of ICT development influence customer satisfaction?

Yes [    ]                      No [    ]

To what extent

To a very great extent [    ]      To a great extent [    ]      To a moderate extent [    ]  
To a low extent [    ]              To a very low extent [    ]

11. In your opinion, do service provider characteristics influence customer satisfaction?

Yes [    ]                      No [    ]

To what extent

To a very great extent [    ]      To a great extent [    ]      To a moderate extent [    ]  
To a low extent [    ]              To a very low extent [    ]

12. Please indicate the extent to which you agree or disagree with the following statements as they apply in your department or ministry as a whole? Indicate your response based on a 5-point scale by using a tick (✓) or X to mark the applicable box.

<b>Perceptions of Staff</b>	<b>Strongly Disagree (1)</b>	<b>Disagree (2)</b>	<b>Neutral (3)</b>	<b>Agree (4)</b>	<b>Strongly Agree (5)</b>
I understand the vision and mission of the Telecentre					
The Telecentre has customer focus					
The Telecentre has capacity to offer excellent services					
The type of work I do is fulfilling (satisfying)					
There is team spirit in the Telecentre					
The goals, work and work environment is good					
There is participation in decision-making					
There is recognition of good performance					
I feel motivated by the work I do					
There are opportunities for staff development and training					

13. What challenges do you face when giving services at the Huduma Telecentre?

---



---



---

14. Kindly tick the box that represents your opinions/feelings regarding customer service. On a Scale of 1-5 where 1=Not satisfied at all and 5=very satisfied and Scale of 1-5 where 1=Not applicable at all and 5=very important.

No	STATEMENT	Your Level of Satisfaction with Bank's Services					Level of importance that you attach to the factor				
		Very Satisfied	Satisfied	Undecided	Dissatisfied	Very Dissatisfied	Very Important	Important	Indifferent	Not important at all	Not applicable
1	Staff are competent and knowledgeable	1	2	3	4	5	1	2	3	4	5
2	The Ministry is responsive to my needs	1	2	3	4	5	1	2	3	4	5
3	The waiting time at the office is reasonable	1	2	3	4	5	1	2	3	4	5
4	Staff deliver their promises	1	2	3	4	5	1	2	3	4	5
5	Customers are treated fairly	1	2	3	4	5	1	2	3	4	5
6	Customers individual circumstances are taken into account	1	2	3	4	5	1	2	3	4	5
7	I feel confident that the information provided to the Telecentre will remain confidential	1	2	3	4	5	1	2	3	4	5

15. Please give suggestions/recommendations towards influence of telecentre platforms' initiatives on customer satisfaction with government service delivery in Kenya.

---



---



---


**THANK YOU FOR YOUR TIME AND COOPERATION!!**

## Appendix IV: Research Permit

**THIS IS TO CERTIFY THAT:**

**MR. JOEL MULI KYALO**  
**OF UNIVERSITY OF NAIROBI, 19022-501**  
**NAIROBI, has been permitted to conduct**  
**research in Machakos County**  
**on the topic: INFLUENCE OF**  
**TELECENTRE PLATFORMS' INITIATIVE ON**  
**CUSTOMER SATISFACTION WITH**  
**GOVERNMENT SERVICE DELIVERY: A**  
**CASE OF MACHAKOS COUNTY**  
**for the period ending:**  
**20th June, 2017**

**Permit No. : NACOSTI/P/16/54501/10911**  
**Date Of Issue : 20th June, 2016**  
**Fee Received : ksh 1000**



*[Signature]*  
**Director General**  
**National Commission for Science, Technology & Innovation**

**CONDITIONS**

**1. You must report to the County Commissioner and the County Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.**

**2. Government Officers will not be interviewed without prior appointment.**

**3. No questionnaire will be used unless it has been approved.**

**4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.**

**5. You are required to submit at least two(2) hard copies and one(1) soft copy of your final report.**

**6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.**

**REPUBLIC OF KENYA**  
**NACOSTI**  
**National Commission for Science, Technology and Innovation**

**RESEARCH CLEARANCE PERMIT**

**Serial No. A 96771**

**CONDITIONS: see back page**



## Appendix V: Authorization Letter



### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349, 3310571, 2219420  
Fax: +254-20-318245, 318249  
Email: dg@nacosti.go.ke  
Website: www.nacosti.go.ke  
when replying please quote

9<sup>th</sup> Floor, Utalii House  
Uhuru Highway  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref: No.

Date:

**NACOSTI/P/16/54501/10911**

**20<sup>th</sup> June, 2016**

Joel Muli Kyalo  
University of Nairobi  
P.O. Box 30197-00100  
**NAIROBI.**

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on *“Influence of telecentre platforms’ initiative on customer satisfaction with government service delivery: A case of Machakos County,”* I am pleased to inform you that you have been authorized to undertake research in **Machakos County** for the period ending **20<sup>th</sup> June, 2017.**

You are advised to report to **the County Commissioner and the County Director of Education, Machakos County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

**BONIFACE WANYAMA  
FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Machakos County.

The County Director of Education  
Machakos County.

*National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified*