

**STRATEGIES ADOPTED BY THE KENYAN GOVERNMENT IN
INTRODUCING E-GOVERNANCE**

BY

AGWELI, PHILIP WERE

**MANAGEMENT RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE OF MASTER
OF BUSINESS ADMINISTRATION OF SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI**

APRIL 2010


DECLARATION

This research project is my own original work and has not been presented for a degree in any other university.

Signed.......... Date.....*14/4/2010*.....

PHILIP WERE AGWELI
D61/P/8630/2005

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

Signed.......... Date.....*14-04-2010*.....

DR. JOHN YABS
LECTURER, SCHOOL OF BUSINESS,
UNIVERSITY OF NAIROBI

DEDICATION

To my wife Josephine and two daughters Pat and Barb, who have brought immeasurable joy to my life and assisted me to develop the patience to see activities to a desired end.

To Mum and Dad and my siblings for the role they played in my education, especially in the early part of my life that laid the foundation of what I am today.

ACKNOWLEDGEMENT

I am greatly indebted to my supervisor Dr. John Yabs for his continuance guidance, devoted contribution, creative insights and advice during the preparation of the Research Project. In addition, I thank Dr. Yabs for making himself available during his private time to assist me with the project.

To my data collection team of my sister Connie (Nairobi- Dandora and Westlands areas), my colleague Dan and Adeka (Government Ministries), my dear friends Moses (for Nairobi-Parklands area and Nyando District), Violet (Nairobi-Pumwani area), and Vincent (Khayega-Kakamega), I have no proper words that can express my gratitude.

In addition I would to sincerely thank my friend Bill Muturi and wife Joyce, and Nyangi, Julius and Ochieng for their encouragement. To my MBA colleagues Fred, Christine, Sizzy, Zippy, Joyce and Zilpa, I wish to express to them my gratitude for their encouragement and various term papers we did and presented in teams.

Kudos to the staff of the Directorate of e-Government and my colleague for their insight and helpful material have my. In particular, the Director of e-Government, Mr. John Sergon, Kimani, Violet, and Mueni. In IPPD Implementation Unit, I wish to sincerely thank Andrew, Mureithi, Njogu, Guchu, Nelson, and Kimanathi for their information and encouragement.

TABLE OF CONTENTS

	Page
Declaration.....	ii
Dedication	iii
Acknowledgement.....	iv
List of Tables	vii
List of Figures.....	viii
List of Acronyms and Abbreviations	ix
Abstract.....	x
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 The Concept of Strategy and Strategic Change Management	2
1.1.2 The Concept of Government.....	5
1.1.3 The Concept of e-Government.....	5
1.2 The Organization of Government of Kenya.....	6
1.3 The Strategies Adopted by Kenyan Government in introducing for e-Governance	8
1.3.1 The Institutional Framework for e-Government in Kenya	8
1.3.2 Phases of e-Government Implementation.....	11
1.3.3 Models of e-Government Implementation.....	11
1.3.4 Training and awareness creation to reform and change.....	13
1.3.5 Regulatory and legal framework reviewing.....	14
1.4 Objectives of e-Government in Kenya.....	14
1.5 Statement of the Problem	15
1.6 Objectives of the Study	16
1.7 Research Question.....	16
1.8 Importance of the Study	17
1.9 Scope of the Study.....	17
CHAPTER TWO:LITERATURE REVIEW.....	18
2.1 Overview of Major Global and Technology Changes	18
2.2 Relationship between Information, Culture, and Power	21
2.3 Overview of e-Government.....	23
2.3.1 Localization.....	28
2.4 The UN Global e-Government Readiness Index 2008.....	30
2.5 Best e-Government Practices	33
CHAPTER THREE:RESEARCH METHODOLOGY	36
3.1 Research Design.....	36
3.2 Population of the Study	36

3.3	Sample and Sampling Technique	36
3.4	Data Collection.....	36
3.4	Data Analysis	37
CHAPTER FOUR: DATA PRESENTATION AND FINDINGS		38
4.0	Introduction	38
4.1	Sample Demographics.....	38
4.2	Analysis of Variables	41
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS		54
5.1	Summary	54
5.2	Conclusion.....	54
5.3	Recommendations	55
5.4	Limitations of the Study	57
5.5	Suggestion for Further Research.....	58
REFERENCES.....		59
APPENDICES.....		63
	Appendix 1: Letter to Respondents	63
	Appendix 2: Questionnaire	64

LIST OF TABLES

	Page
Table 1: Regional Average of e-Government Readiness	30
Table 2: African Regional e-Government Readiness Ranking	31
Table 3: e-Government Readiness for Eastern Africa.....	33
Table 4: Respondents by Sector.....	38
Table 5: The Age Classification of the respondents	39
Table 6: Respondents by Geographical Location	40
Table 7: EducationLevel of the Respondents	40
Table 8: Occupational Level of the Respondents	41
Table 9: Familiarity with e-Government by Age.....	41

LIST OF FIGURES

	Page
Figure 1: Strategic Alignment Governance Framework.....	3
Figure 2: The Kenya e-Government Organogram.....	10
Figure 3: e-Government Model ,.....	24
Figure 4: Regional Average of e-Government Readiness.....	31
Figure 5: e-Government Readiness of Africa.....	32
Figure 6: Respondents by Gender.....	39
Figure 7: e-Government Familiarity by Gender	42
Figure 8: Familiarity with e-Government by Geographical Location.....	43
Figure 9: Familiarity with e-Government by Occupational Level.....	43
Figure 10: ICT Training in ICT by Age.....	44
Figure 11: Training in ICT by Gender.....	45
Figure 12: ICT Training by Geographical Location.....	45
Figure 13: Access to Internet Services by Geographical Location.....	46
Figure 14: Access to Internet by Sector.....	47
Figure 15: Place of Accessing the Internet	47
Figure 16: Mode of Communication With/Within the Government by Age	48
Figure 17: Mode of Communication With/Within the Government by Geographical Location...49	49
Figure 18: Mode of Communication With/Within the Government by Occupation.....	50
Figure 19: Satisfaction with Government Service by Age.....	51
Figure 20: Satisfaction with Government Service by Geographical Location.....	52
Figure 21: Satisfaction with Government Service by Sector.....	53

LIST OF ACRONYMS AND ABBREVIATIONS

EA- East Africa

e-Government- Electronic Government

G2B- Government-to-Business

G2C- Government-to-Citizen

G2G - Government-to- Government

G8 – Great Eight World Nations

ICT- Information Communication Technology

IFMS- Integrated Financial Management Services

IPPD- Integrated Payroll and Personnel Database

MDGs-Millennium Development Goals

MMPs - Mission Mode Projects

NeGP- National e-Governance Plan

SMS- Short Message Services

UN- United Nations

ABSTRACT

Technology is an emerging and important trend. New information and communication technologies are both cause and effect of these changes. On the same breath, the emergence of e-Government offers potential to reshape the public sector and build relationships between citizens and the government through provisioning convenient access to government information and services, to improve the quality of services and provide better opportunities to participate in democratic institutions and processes. The e-Government movement is being driven by the need for Government to cut costs and improve efficiency, meet citizen expectations and improve citizen relationship and facilitate economic development.

Kenya has put in place strategies that include a fully functional Institutional Framework for e-Government. The implementation actions were operationalized in three phases, namely short term, medium term and long term. This was done to ensure systematic implementation of e-Government that could easily be evaluated using the target set, the achievements and the variance.

Further, the primary delivery models of e-Government can be divided into four: Government-to-Government communication; Government-to-Citizen; and Government-to-Business. In addition, the Government is undertaking to accomplish the Instituting Structure and Operational Reforms through training and awareness creation to reform and change approach to communication. The Government further aims at accomplishing regulatory and legal framework by reviewing, enacting and enforcing laws related to electronic communication and develop secure and reliable Infrastructure.

The general objective of this study was to find out the appropriateness of strategies used by government to implement e-Government. The research findings revealed that there is a relationship between various demographical characteristics and the knowledge of e-Government and ICT literacy. In order to be effective in implementation of e-Governance, the Kenyan Government has adopted different modes of reaching different classes of its citizens and other stakeholders on e-Government process. In some of these have been successful but others have not been. The study recommends the best way forward in this regard.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

All organizations are environment dependant and environment serving and continuously depend on the environment they operate in, for survival through inputs and outputs. However, the environment is dynamic and turbulent, although the rate of turbulence differs from one environment to the other and one time to another.

Ansoff's (1990) success formula states that whenever there is a significant change in the environment, there is pressure for organizations to change their strategy along with the internal capabilities/dynamics to adapt to the environment. An organizations performance is optimized when its strategy and internal capability are both matched to the turbulence of its external environment. If there is a lag between change in the environment and change in strategy of an organization, there develops a strategic gap and if there is a lag between strategy and capability then there develops a capability gap. Both these negatively affect the organization to optimally operate towards achieving its goals and may bring about systematic resistance, which is a passive incompetence of an organization.

We work in what is herald as the 'dawn of the information age'. The importance accorded to knowledge and to information and communications technology (ICT) as drivers of the world economy and key factors in development (Powell, 2003). Information communication technology is no longer the preserve of privileged few. ICTs are now transforming the governance from being passive and unilateral to interactive and participative (Sahu, 2008).

Technology is another emerging and important trend. New information and communication technologies are both cause and effect of these changes. Rapid world-wide communication means that people and organizations can find out what is happening- in politics or in markets or in cultural action- far more quickly than in the past. This means that they can respond to change faster- and their response engenders further change. The cycle of change becomes ever faster (Powell, 2003).

Kenya Vision 2030 is the country's new long term development blueprint. It is motivated by collective aspiration for a much better society than the one it has today, by the year 2030. The Vision aims at transforming Kenya into a "newly industrializing, middle income country providing high quality life for all its citizens by the year 2030". The Vision calls for Kenya to be globally

competitive and prosperous nation with a high quality of life for all citizens by 2030 (Government of Republic of Kenya, 2007). With these in mind the Government of Kenya has embraced the strategy of e-Governance in order to provide the service expected of it in this changing environment. This is in line with the Government of Kenya, which is among the 189 nations that adopted the Millennium Development Goals (MDGs). The eight goals are to be achieved by 2015. Among these goals the ones that the Government can have real impact on by embracing e-Government are: Eradicating extreme poverty and hunger; Promote gender equality and empower women, Ensure environmental sustainability, and develop a Global Partnership for Development.

1.1.1 The Concept of Strategy and Strategic Change Management

The concept of strategy is defined as a long-term direction envisaged for the organization should be taking and the types of action required achieving objectives for example of new products or services, or ways of operating. (Johnson and Scholes, 1997).

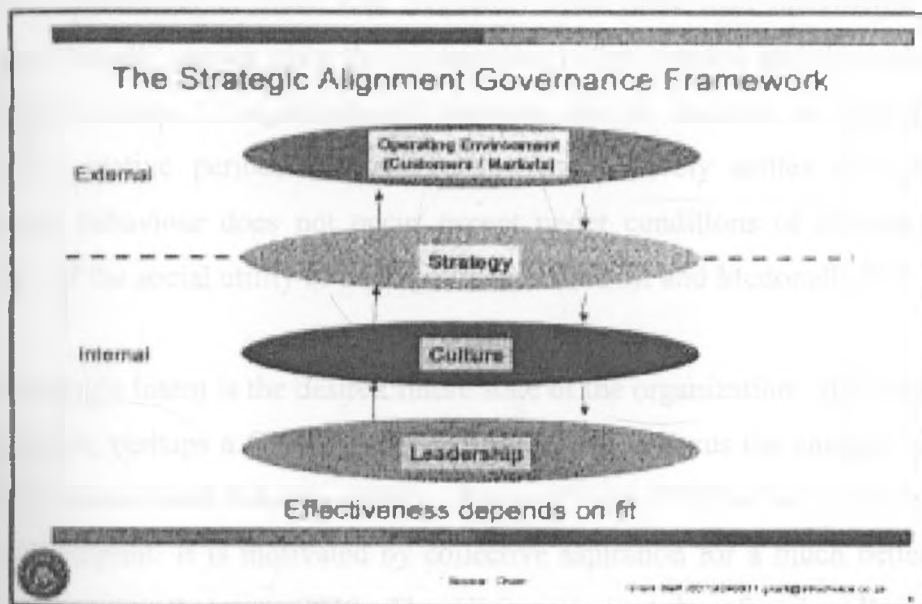
According to Hax and Majluf (1996) strategy can be viewed in many dimensions. Strategy can be seen as a multidimensional concept that embraces all critical activities of the organization, providing it with a sense of unity, direction, and purpose, as well as facilitating the necessary changes induced by its environment. Further, that it can be seen as a response to external opportunities and threats, and internal strengths and weaknesses, in order to achieve a sustainable competitive advantage. Strategy can also be seen as an expression of strategic intent (that is stretching the organization). The two scholars state that strategy can further be seen as a coherent, unifying, and integrative pattern of decisions. Strategy can be seen as means to develop the competencies of the organization. Finally, strategy can be viewed as a means of investing in tangible and intangible resources to develop the capabilities that assure a sustainable advantage.

The concept of strategy and strategic management are just as important in the public sector as in commercial firms. However, like the private sector, the public sector is diverse (Johnson and Scholes, 1997). According to Ansoff and McDonnell (1990), strategic management is a systematic approach to a major and increasingly important responsibility of general management: to position and relate the firm to its environment in a way which will ensure its continued success and make it secure from surprises. Any strategy put in place by an organization has to meet an objective or a

goal. Johnson (2002) refers to these goals and objective as performance targets and says that they refer to the output of an organization.

The performance of an organization can be judged internally or externally on its ability to meet these targets. Strategic architecture means the combination of resources, activities and competences needed to put the strategy into effect. This in turn will need to be translated into specific operational issues and individuals. It is then important to exercise some degree of control so as to monitor the extent to which the action is achieving the objectives and goals (Johnson and Scholes, 1997).

Figure 1: Strategic Alignment Governance Framework



Source: Sieff G (2003), *Good Governance and the Primary Management Challenges*, Unpublished Management Programme, Kenya, Wits Business School, Johannesburg

Overall the role of ideology in development of strategy in the public sector is probably greater than that in commercial organizations. The criterion of acceptability to stakeholders in strategic choice is probably of greater significance in the public sector than in commercial sector (Johnson and Scholes, 1997).

The understanding of the dynamics of change have been enhanced by Lewin who postulated that changes result from the impact of a set of driving forces acting upon some restraining forces

(Johnson and Scholes, 2002). Lewin argued that, in any situation, there are forces that push (driving) for change as well as forces that hinder (restraining) change. This he called the Force-Field Analysis, which is a powerful and tool essential tool in the study of change management.

Wehrich and Koontz (1993) emphasized that organizations may be in a state of equilibrium, with forces pushing for change on one hand and forces resisting change by attempting to maintain the status quo on the other. Manuela and Fuentes (2003) define resistance as the active psychological opposition to bringing of unconscious, usually repressed material to consciousness. It is the process of change. Resistance normally occurs to all employees, from the chief executives (senior management) to middle and lower cardre staff.

Entrepreneurial behaviour is much less frequently observable than incremental. In non-business organizations it usually occurs when the organization is first created, and the early post birth period is devoted to definition of organizational purposes, and to creation of administrative structure. Following the creative period, the organization progressively settles into incremental mode. Entrepreneurial behaviour does not occur except under conditions of extreme crisis caused by severe erosion of the social utility of the organization (Ansoff and Mcdonell, 1990).

A vision or strategic intent is the desired future state of the organization. It is an inspiration around which a strategist, perhaps a Chief Executive, might seek to focus the energies of members of the organization (Johnson and Scholes, 1997). Kenya Vision 2030 is the country's new long term development blueprint. It is motivated by collective aspiration for a much better society than the one it has today, by the year 2030. The Vision aims at transforming Kenya into a "newly industrializing, middle income country providing high quality life for all its citizens by the year 2030". The Vision calls for Kenya to be globally competitive and prosperous nation with a high quality of life for all citizens by 2030 (Government of Republic of Kenya, 2007). Since, whenever there is a significant change in the environment, there is pressure for organizations to change their strategy along with the internal capabilities/dynamics to adapt to the environment, the Government of Kenya has embraced e-Government.

1.1.2 The Concept of Government

The term government refers to the act or process of governing and administration of public policy (Dixit and Choudhary, 2008). According to Oxford Advanced Learner's Dictionary, a Government is the group of people who are responsible for controlling a country or a state, while Governance is the activity of governing a country or controlling a company or an organization. People in a community create and submit to government for the purpose of establishing for themselves, safety and public order. A sovereign state is a political association with effective internal and external sovereignty over a geographic area and population which is not dependent on, or subject to any other power or state.

Leadership unites people towards a common goal and is natural part of change. An effective change leader is one capable of reframing the thinking of those whom they guide, enabling them to see that significant changes are not only imperative, but achievable (Conner, 1998). Strategic change leader must influence the organization efforts towards achieving the change goal by adapting the organization to change (Mugo, 2006).

1.1.3 The Concept of e-Government

e-Government is the short name for electronic government, digital government, online government or transformational government. e-Governance aims to benefit from use of most innovative forms of information technologies, particularly web-based internet applications, in improving governments' fundamental functions. These functions are now evolving into mobile and wireless technologies and heading towards a new direction termed as mobile government (m-Government) (Dixit and Choudhary, 2008). e-Government is the use of Information Technology in particular the internet to deliver public services in a much more convenient, customer oriented, cost effective and altogether different and better way (Razik, 2007).

The emergence of e-Government offers potential to reshape the public sector and build relationships between citizens and the government through provisioning convenient access to government information and services, to improve the quality of services and provide better opportunities to participate in democratic institutions and processes (Dixit and Choudhary, 2008). The e-Government movement is being driven by the need for Government to cut costs and improve

efficiency, meet citizen expectations and improve citizen relationship and facilitate economic development (Razik, 2007).

1.2 The Organization of Government of Kenya

Kenya has three arms of the Government, namely the Executive, the Legislature (Parliament) and the Judiciary. Therefore all Government activities in Kenya fall under the three arms. This division of the Government of Kenya into three organs or arms is to make sure that there are checks and balances that ensure equity of treatment of the citizens and other residents and consequently, hopefully improve their livelihood- economically, socially and politically.

The first organ of the Government is the Legislature and has its powers exercised by the parliament, which consists of the President and the National Assembly. The National Assembly is composed of Constituency elected members, Nominated members, and two Ex-Offio members, namely the Speaker and the Attorney General. The functions of the Parliament include legislation (enacting of Laws of the country) and formulation of policies, control of finance, control of the Executive, and representation of the people.

The Executive is the second organ of the Government whose duty is to carry out the decisions or policies passed by the Legislature. The Composition consists of the President, the Vice President, the Prime Minister, the Deputy Prime Ministers, Ministers, and Assistant Ministers, (who are all members of the National Assembly) and the Attorney General. The Cabinet which is composed of the above-mentioned, with the exception of the Assistant Ministers, is supposed to assist and advice the President in running of the Government.

In addition, they consider and formulate Government policies, prepare and approve Bills to be tabled in Parliament and direct action to be taken by Government Ministries and Departments. The Cabinet is also responsible in assisting the President in appointing Commissions and/or having the matter debated in the Parliament. Finally, it gives final approval to Budget, prepared by the Minister of Finance.

Government Departments form machinery which enables Government policy to be put into effect. The work of a department can be divided into three categories, namely the collection and analysis of information, taking the decision and execution of that decision. The political head of each department or departments (Ministry) is a Minister, who is assisted by one or more Assistant Ministers. Each Ministry has several functions to perform and its permanent staff consist civil servants. Every Ministry is under the supervision of a Permanent Secretary.

The **third** organ of the Government, whose duty is the administration of justice according to law and safeguard the Constitution, is the Judiciary. The Constitution lies as the base of power in Kenya. The functions of the Judiciary include interpreting of Laws passed by the Legislature, punish those who break the Law and determine disputes between individuals or an individual and the state. In addition, it ensures that the Executive actions of the Government officials are in accordance with the provisions of the Constitution and that Acts passed by Parliament do not conflict the Constitution.

Kenya gained independence in 1963, from its colonial master- Britain. The traditional way of delivering services that were left behind by the British to the Government of Kenya, which most are still in place were manual. This is because the Information Communication Technology is a relatively new field that is evolving globally at a very fast rate. It is because of this that the phenomenon of e-Government has caught up with Kenya.

The Government has many roles to play for the community it represents. Government Kenya is involved in a national economy has more than just a purpose of stabilizing it for the benefit of the people, economically. The Government also provides social services in order to reduce the impact on the cycle of poverty. By reducing the cycle of poverty, government creates a self-reinforcing cycle. A government also plays a major role (with importance varying from a country to another) in contributing to the health of the citizens. This role includes funding (directly or indirectly via subsidies) and even managing the healthcare system. It also contributes by elaborating Laws aiming at protecting the health of the citizens.

The Government plays a crucial role in managing environmental public goods such as the atmosphere, forests and water bodies. Governments are valuable institutions for resolving problems

involving these public goods at both the local and global scales (e.g., climate change, deforestation, overfishing). The government plays a central role in the education of the citizens. In particular it finances (directly or via subsidizing) a huge portion of the educational system (Schools, Universities, continuous education).

Public administration can be broadly described as the development, implementation and study of branches of government policy. The pursuit of the public good by enhancing civil society, ensuring a well-run, fair, and effective public service are some of the goals of the field. The goals of the field of public administration are related to the democratic values of improving equality, justice, security, effectiveness of public services; business administration is primarily concerned with profit.

Public administration is carried out by public servants who work in public departments and agencies, at all levels of government, and perform a wide range of tasks. Public administrators collect and analyze data (statistics), monitor budgets, draft legislation, develop policy, and execute legally mandated government activities. Public administrators serve in many roles: ranging from "front-line" positions serving the public (e.g., peace officers, parole officers, border guards); administrators (e.g., auditors); analysts (e.g., policy analysts); and managers and executives of government branches and agencies.

1.3 The Strategies Adopted by Kenyan Government in Introducing for e-Governance

The Government of Kenya has put in place several strategies in its pursuit in introducing the e-Government into the country. The first among these is the establishment of institutional framework.

1.3.1 The Institutional Framework for e-Government in Kenya

Kenya has put in place a fully functional Institutional Framework for e-Government. The process of e-Government is spearheaded by the Permanent Secretary, Secretary to the Cabinet and Head of Public Service to coordinate the dispersed initiatives that exist in other agencies including the private sector (Republic of Kenya, 2004).

The functions of e-Government Structure are to develop, co-ordinate and define ways so that electronic and information technology business strategies assist the Government to operate more

effectively and efficiently in delivering services to citizens. The structure is supposed to plan and develop strategies and direct Government wide activities to support other agencies, and participate in the development, analysis and evaluation of Government wide technology issues, policies and legislation (Republic of Kenya, 2004).

The institutional framework for e-Government which has been put in place includes: The Cabinet Committee on ICT (chaired by the Minister of State for Provincial Administration and Internal Security, with members being the Minister of Finance, the Minister for Tourism and Information, the Minister for Higher Education, Science and Technology, the Minister for Transport. This committee will oversee the implementation of the e-Government Strategy (Republic of Kenya, e-Government Strategy, 2004). Bateman T.S. and Zeithaml C.P. (1993) stated that there were different levels of management with Strategic managers being the senior executives of an organization and are responsible for its overall management. Typically, they focus on long term issues and emphasize the survival, growth, and general efficiency and effectiveness of the organization. In the Kenyan situation, these are the Cabinet Committee.

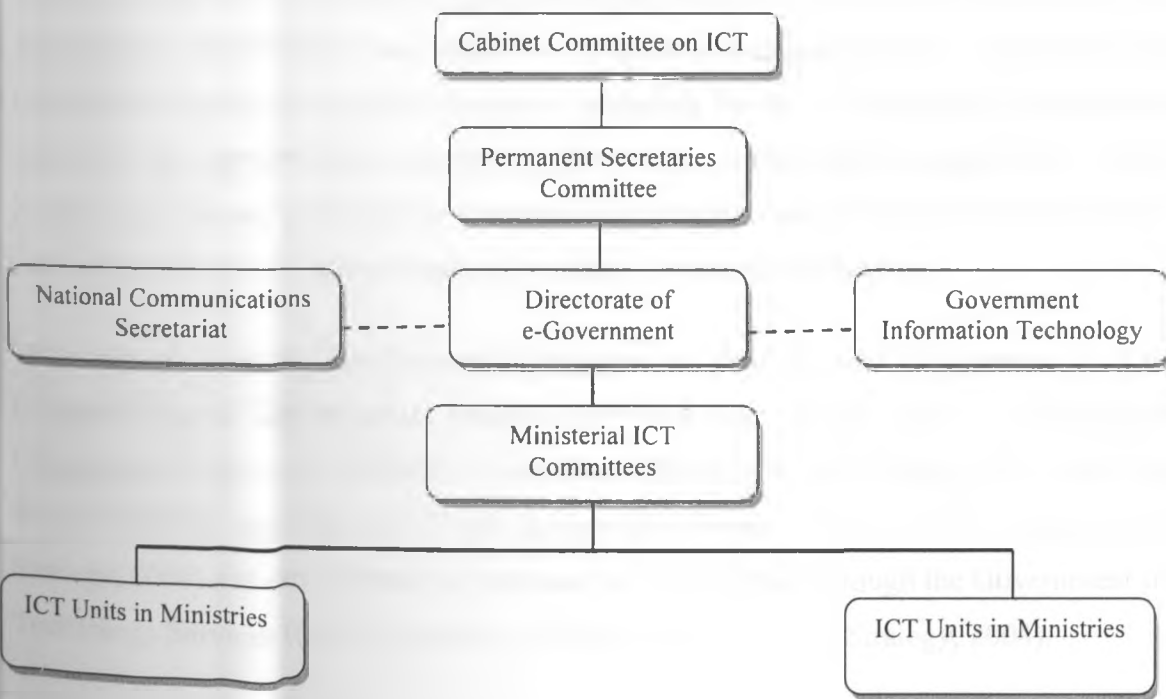
According to Bateman T.S. and Zeithaml C.P. (1993) the second tier of management is the Tactical managers are responsible for translating the general goals and plans developed by strategic managers into more specific objectives and activities and who are in this case is the Permanent Secretaries Committee that consists of Permanent Secretaries and Accounting Officers. These decisions, known as tactics, involve both a shorter time horizon and coordination of resources. The Committee is charged with coordination of implementation of the e-Government initiatives. The Committee is chaired by the Permanent Secretary, Secretary to the Cabinet and Head of Public Service and provides the institutional support and ownership needed to marshal resources and manpower to expedite the implementation of e-Government. The Committee is expected to meet once a month (Republic of Kenya, 2004).

The last management tier is that of Operational managers as per Bateman T.S. and Zeithaml C.P. (1993). These are lower-level managers who supervise the operations of the organization. They are directly involved with non management employees, implementing the specific plans developed with tactical managers. At the level of Ministries, e-Government Committees have been set up to review the various ICT policy initiatives in the Ministries, undertake audit of ICT capacity, and establish

support to Ministerial Policy Mandate, identify technical and institutional gaps and inadequacies, and make recommendations on the way forward. The Ministerial Committee is chaired by the Permanent Secretary in the Ministry and consists of Head of the Central Planning Unit, the Chief Finance Officer, Head of Human Resource Division, Head of Administration Division and Head of ICT unit (Republic of Kenya, 2004).

Finally, is the Directorate of e-Government (currently the Steering Technical Team which serves as e-Government Secretariat) which is under Permanent Secretary, Secretary to the Cabinet and Head of Public Service, is charged with coordination and preparation of e-Government Strategy including implementation plan, and monitoring and evaluation of the process. The core members of the Secretariat consist of the Office of the President (Cabinet Office), Office of the President (Provincial Administration and Internal Security), the Central Bank of Kenya, the Department of Defense, Ministry of Medical Services, Ministry of State for Public Service, the Government Information Technology Service, the Ministry of Roads, the Ministry of Public Works, the Ministry of Housing, the Ministry of Planning, National Development and Vision 2030, and Ministry of Higher Education, Science and Technology (Republic of Kenya, e-Government Strategy, 2004).

Figure 2: The Kenya e-Government Organogram



Source: Republic of Kenya, e-Government Strategy, 2004, Page 15

1.3.2 Phases of e-Government Implementation

In setting priorities and implementation framework in place that will lead to full achievement of e-Government, which is done in recognition of the achievements made to date and the gaps identified, actions were operationalized in three phases, namely short term (by June 2004- the year of e-Government strategy launch), medium term (three years) and long term (over three years). This was done to ensure systematic implementation of e-Government that could easily be evaluated using the target set, the achievements and the variance.

1.3.3 Models of e-Government Implementation

The primary delivery models of e-Government can be divided into four: Government-to-Government communication (abbreviated G2G); Government-to-Citizen (abbreviated G2C); and Government-to-Business (abbreviated G2B).

(a) Government-to-Government Communication (abbreviated G2G)

Government-to-Government communication (abbreviated G2G) is the online non-commercial interaction between Government organizations, departments, and authorities and other Government organizations, departments, and authorities (<http://en.wikipedia.org/wiki>). Communication within Government entails Government agencies conducting business electronically among themselves in electronic management and exchange of Government information through such channels as the internet and intranet. A functional communication within Government service is proof of effective back-office services for achievement of overall e-Government objective.

These activities include development of websites in Ministries and Departments, development of Integrated Payroll and Personnel Database (IPPD) system, implementation of Integrated Financial Management Information (IFMIS), Macro-Fiscal Planning System, Integrated Pension Management System (IPMS) and National Voter Registration System (Republic of Kenya, e-Government Strategy, 2004).and development of information infrastructure through the Government Information Technology Services (GITS) (Republic of Kenya, e-Government Strategy, 2004).

The Government-to-Employees (abbreviated G2E), which is part of intranet communication within the Government, that is Government-to-Government Communication (<http://en.wikipedia.org/wiki>).

(b) Government-to-Government communication (abbreviated G2G)

Communication with Business entails Government providing and receiving services to the corporate world. Communication with Business implementation covers portal and information services, business administration, procurement and financial services, and collaborative services. Example of applications in this category will typically include corporate tax returns by companies to the tax authority and procurement services (Republic of Kenya, e-Government Strategy, 2004).

Notable developments have been achieved mainly in the area of general information publishing with respect to Communication with Business using websites. The short term initiative taken by the Government includes operationalizing and optimizing a single Government portal i.e. www.gov.ke to include but not limited to functions of ministries and government departments; structure and management of the ministries and departments; services offered and requirements on the part of businesses; various policies; announcements, alerts and bulletins; description of information available from government ministries and departments (metadata); available publications; Kenya gazette; legal notices; and budget statements, finance bill, booklet on tariffs and statistical annexes (Republic of Kenya, e-Government Strategy, 2004).

Another Short Term initiative will be Government auctions, by implementing an e-Market for all government ministries to auction assets using a standard format; and make tender documents available electronically. The Government has taken initiative to facilitate Electronic Government Payments and Link to the payments system that entail link to banks for including others, payments of Government services and salaries, and link to the Central Bank of Kenya (Republic of Kenya, e-Government Strategy, 2004). This became operational in the month of September 2009, when Central Bank started implementing the non-acceptance of bank checks with a nominal value of more than one million shillings.

(c) Communication with Citizens (abbreviated G2C)

The focus of present day economy is about the customer on one hand and service provision on the other. Naturally, to provide service efficiently, a good understanding of the customer and service offering entities is critical. In Communication with Citizens, the general approach is to start with simple publishing services, followed by interactivity and finally adding transaction capabilities

based on the principle of “Think big, start small and scale fast”. At the same time, there should be integration of government services to enable a single point of access- government portal. In this regard the Government needs to redesign and deliver services to fit the way citizens want to access and use services. New technology affects all our lives and local government must move with the times (Republic of Kenya, e-Government Strategy, 2004).

The service includes providing citizens with details of public sector activities and information such as the Kenya Gazette, laws and regulations, etc. through websites along dimensions such as quality, convenience and cost. The services include e-policing, which is using the internet to administer the police operations and e-alerts that is security alerts (Republic of Kenya, e-Government Strategy, 2004).

The Government intends to listen to citizens thereby increasing the input of citizens into public sector decisions and actions that could be flagged as either democratization or participation. Secondly, in the area of Elections e-voting that is voting from the computer would ensure that there was no congestion of polling halls and the counting would be done quicker (Republic of Kenya, e-Government Strategy, 2004).

1.3.4 Training and Awareness Creation to Reform and Change

In its commitment to achieve the provision of communication within its agencies, the Government is undertaking to accomplish the Instituting Structure and Operational Reforms. Here it intends to introduce change through training and awareness creation to reform and change approach to communication; undertake organizational re-structuring for enhancement of service delivery and fostering adoption of multi-channel information sharing and communication; Review Government operational and business processes in line with the new tools and technologies; and facilitate and enforce inter-agency cooperation, messaging and collaboration (Republic of Kenya, e-Government Strategy, 2004).

According to Yabs (2007), the subject of e-learning was taught in tertiary institutions and the institutions cashed in on the abrupt demand to learn computer skills by both young and old. Internet serving and corresponding to recipients in as far off lands have gained currency in Kenya. Of late

cyber cafes are jammed with enthusiastic customers wanting to service in the internet. The Government hence is trying to take advantage of this and harness to promote e-Governance.

1.3.5 Regulatory and Legal Framework Reviewing

The Government further aims at accomplishing regulatory and legal framework by reviewing, enacting and enforcing laws related to electronic communication; reviewing, enacting and enforcing laws to establish acceptability of electronic documents and signatures to eliminate legal barriers to electronic services; and Reviewing the Code of Regulations to allow for interagency electronic exchange of files (Republic of Kenya, e-Government Strategy, 2004). There are problems associated with jurisdiction of parties, since determining the law that will be applicable in case of disputes is not easy. According to Korir (2005) the internet allows anyone to set up a website anywhere in the world. Its location could however be interpreted to decide the jurisdiction of disputes, especially in e-Commerce.

1.3.6 Development of Government Secure and Reliable Infrastructure

The Government aims at development of secure and reliable Infrastructure by developing and operationalizing a secure intranet and portal for Government (Republic of Kenya, e-Government Strategy, 2004). According to Steemson (2007) effective recordkeeping systems, by which I mean both manual paper processes and electronic, must integrate with business information systems, thereby cost savings and productivity increases.

1.4 Objectives of e-Government in Kenya

The specific objectives of e-Government are first, to improve collaboration between government agencies through reduction in the duplication of efforts, and enhance efficiency and effectiveness of resource utilization.

Secondly, is to improve Kenya's competitiveness by providing timely information and delivery of government services. Porter (1990) in his national competitive advantage theory stated that countries succeed in trading with others because of natural competitive advantages. He further stated that a countries competitive advantage is influenced by four factors, namely: factor of endowment; demand condition; Relating and supporting industries; and firm's strategy, structure

and rivalry. He said all the four factors support each other and work together to give the necessary effect and influence. Porter adds that the two more important factors, namely circumstantial or chance that happen through nature and cannot be easily controlled, and the influence of Government policies. The former can create conditions that may be either favourable to some firms or detrimental to their chances of success. Government Policies can also either favour certain firms or diminish their chances of success.

Thirdly, is to reduce transaction costs for the government, citizens and the private sector through the provision of products and services electronically. According to Korir (2005), there are a number of ways where such costs can be reduced. The reduction of search costs in terms of efforts, time and money. This is achieved by bringing together large number of buyers and sellers engaged in similar lines of business into single trading community, hence reducing cost and creating economies of scale. It further transforms the traditional supply chain enabling suppliers' interaction with the buyers directly and hence elimination of intermediaries and distributors, reducing transaction costs and increasing market transparency.

Lastly, is to provide a forum for citizens' participation in Government activities (Republic of Kenya, 2004). This is known in other quarters as e-democracy.

1.5 Statement of the Problem

With an aim of having high quality life for its entire citizenry, there is need to analyze the extent at which e-government has been embraced by the Government of Kenya with the aim of having significant improvement in the provision of service delivery to its citizens. Despite colossal amount of money having been spent and continues to be spent on the development and implementation of e-government, there is no credible documentation that this effort has yielded significant improvement on service delivery to its citizenry.

For a long time now, the most frustrating times for many of the Kenyan citizenry has been dealing with Government offices in respect to a service provided by the latter. It has been a nightmare to get anything done promptly by the Government officials because overdependence on manual operational and data storage systems. This has ranged from provision of national identity cards and passports to registration of land ownerships.

Many reasons have been put forward as the reasons behind this inhibition to better service delivery by the Government of Kenya. This has generally been attributed to poor operational and data systems among others.

It is important to note that very few studies have been done on strategic government alignment as compared with the private sector firms. On the same breathe e-Government has been left behind when it comes to studying, making it difficult to assess critically the merits and demerits of e-Government. The Kenyan situation is even more baffling, despite this being a very 'juicy' area of study that can be of great benefit to all the stakeholders.

The researcher failed to locate post-graduate studies done in regard to strategies of e-Government in Kenya. The most notable studies in Kenya on electronic business issues are mainly touching on e-Business and e-Commerce. The most notable of these studies are the ones undertaken by, Muyoyo, J(2004), Ondiko, S.Y. (2004), Korir, D.C. (2005), and Mbuvi, M.M. (2000). It is therefore apparent that the area of e-Governance in Kenya has still a lot of areas to study, thus forming a gap in the electronic way of doing things that the researcher exploited in studying the strategies adapted by the Kenya Government in introducing e-Governance in the country.

This study, therefore, aimed at finding out strategies adopted and those that should be adopted by the Kenya Government to improve its quality of service through the embracing of e-Government, via usage of information communication technology.

1.6 Objectives of the Study

The general objective of this study was to find out strategies and their appropriateness, as used by government to implement e-Government with the aim of significantly improving the provision of service delivery and consequently improving quality life for all its citizens.

1.7 Research Question

Has the Government of Kenya adopted the correct strategies in its pursuit to introduce e-Governance in its service provision?

1.8 Importance of the Study

The study will be of great value to the Government of Kenya in assessing the short-term and long term benefits of e-Government. The Government may, consequently evaluate its e-Government programmes covered by this study in order to assess which areas need improvement on and which ones need to be complemented with manual systems. The study may also benefit the Citizens of Kenya in assessing what advantages they can derive in using e-government. The business community may also gain from checking on the benefits of the same. Public employees likewise may benefit from this study by evaluating the benefits of using the e-government internally, in their capacity as employees. Last but not least is Development partners and Non- Governmental Organizations' benefits from e-Government, in their dealings with Government with the aim of promoting transparency and accountability.

Further, it will open up further strategic studies on e-Governance to students whom studies indicate that are mainly incline towards studying commercial firms and industries and not the government, yet the government is so important because a regulator and facilitator of public service, it a very significant role in the business world. It actually provides platform on which the industries play.

1.9 Scope of the Study

This study which is a survey covered various components of e-Government in Kenya. These included Public University admission and Students' portal online. Secondly, the Public Service jobs online, with special emphasis on Public Service Commission online recruitment process. The Track Status of ID and Passport will be another area the study focused on. In addition, the study focused on Examination Results and Candidate Selection. In addition, the study will focus on Kenya Revenue Authority online activities, including Pin Number registration, Clearing and Forwarding, among others. Finally, the study focused on internal systems namely, Integrated Payroll and Personnel Data System (IPPD) and Integrated Financial Management System (IFMIS).

CHAPTER TWO: LITERATURE REVIEW

2.1 Overview of Major Global and Technology Changes

According to Powell (2003), the last ten years have seen a series of major changes. These changes include the end of the Cold War, with its world political impact; the subsequent, if possibly temporary, supremacy of the neo-liberal ideology associated with organizations like International Monetary Fund, with major consequences for political, economic and social development of the world's poorest communities; and the emergence, of China and other Asian economies to join Japan and create a powerful third focus of the world capitalism.

In addition there has occurred a revolution in business, production and marketing which is compared to the nineteenth-century industrial revolution in terms of its effect on patterns of work, living, and consumption of millions of people. Associated global businesses which, through their control of electronic channels which produce and distribute information and entertainment, promote the concept and values of a global culture which attracts some people but repels or excludes others has emerged. Finally scientific and environmental change, created both by long-term effects of unsustainable forms of agriculture and industry and by advances in new sciences such as biotechnology has added a new dimension to organizations in general (Powell, 2003).

The cumulative effects of these changes are widespread uncertainty and unpredictability about what will happen next. There is extreme volatility in the newly liberalized financial markets. There are many and diverse forms of mass resistance to economic, social, and cultural models. It is seldom that such profound political and economic changes have occurred at the same time- and never on such a global scale as it is now the case. These changes have directly or indirectly affected the lives of everyone (Powell, 2003).

Technology is another emerging and important trend. New information and communication technologies are both cause and effect of these changes. Rapid world-wide communication means that people and organizations can find out what is happening- in politics or in markets or in cultural action- far more quickly than in the past. This means that they can respond to change faster- and their response engenders further change. The cycle of change becomes ever faster (Powell, 2003).

The importance of information and its technology has been shown to be critical for survival of many firms (Johnson, 1992).

Information Communication Technology (ICT) is the key enabling technology of the new global economies, in the way that steam powered the revolution in the west two hundred years ago. Designers in Italy promote new fashions in the United States, monitor what is happening, and electronically submit new designs to textile factories in India for making of new clothes. The payroll administration of a European firm may be carried out in Malaysia. The standard personal computer assembled in Britain, has components from at least three different continents. Given the far-reaching impact of ICT, it is unsurprising that some of faster-growing global industries are the ICT industries. (Powell, 2003)

The continuous and rapid transfer of political and commercial information has further effects. It is rapidly overcoming the ability of nations States to regulate and control information- including the sort of political information about which States have traditionally been sensitive- but also economic transactions. (Powell, 2003)

The industrial revolution of the nineteenth century changed the world- and changed it permanently. It created new economic activities, new relations of production, new political forces, and new opportunities; but also new conflicts and new outlooks in life. If indeed, we are living through in every aspect of life will be taking place. These will inevitably change how development is understood, the context in which it takes place, the strategies needed to pursue it, and the type and structure of organizations which seek to promote it. (Powell, 2003)

Information delivery plays a major task for any country's government as it is the responsibility of the government to keep its citizens informed about government policies and working. Equally important is the timely delivery of information to public as it facilitates democracy (Dixit and Choudhary, 2008).

It is difficult to overstate the importance currently given to information in the north. The European Union and European and North American governments are investing heavily in the technical development of- and social adaptation to- an 'information revolution'. The leaders of USA talk of 'information superhighway', the European Union of an 'information society', and academics talk of a 'network society' and a 'knowledge economy'. Leading business strategists argue that knowledge

is replacing financial capital as a key resource to companies. The companies themselves spend more than half of their capital investment on new information and communication technology. In United States, more than half the workforce are now defined information workers- in that processing information in some way is the main elements of their jobs- and parallel changes in the labour market are taking place (Powell, 2003).

If we are witnessing a revolution, not only in that economic activity but also in the institutions that regulate it, then it becomes essential for those engaged with development to think how developing countries can respond to the opportunities and threats created. (Powell, 2003)

According to Powell (2003), terms like 'the digital divide' have been coined to describe the growing disparity between rich and poor areas of the world in the use of ICT and access to the information that it provides. The G 8 group of countries, the richest and most powerful in the world, identified this divide as the single greatest barrier to more equitable and effective development- allegedly even more so than un-payable levels of debt- and launched the DOT Force initiative, a global multi-sectoral strategic planning exercise, in an attempt to tackle it. Ever more information is available and huge resources are applied to the technology which stores and transmits it.

There is widespread concern that these global economic changes will widen the gap between rich and poor, both within and between countries. It is also feared that the widening poverty gap will reduce both the capacity and the will of poorer countries or communities to participate in institutions of global, regional, or local governance; and that this will promote instability and block development. These concerns prompted discussions of a 'digital divide' by leaders of G8 countries (richest and powerful in the world) at their summit meeting in Okinawa in the year 2000 (Powell, 2003).

This led to a series of global consultations, culminating in the acceptance of a DOT Force report at the G8 Genoa summit in 2001. The report called on a concerted, multi-stakeholders approach to promoting ICT as a key capacity for economic development and participation in its own right, and as an effective tool to support work towards other global development objectives. The report

recognizes need for local solutions and involvement of national governments, communities, and civil society organizations in working together to find them (Powell, 2003).

Management of change can either be reactive, in which case the management is responding to changes in macro environment (external environment), or proactive in which case management is initiating the change in order to achieve a desired goal (internal environment). Whichever the source of change, its management entails thoughtful planning and sensitive implementation and above all, consultation with, and involvement of the people affected by change. When change is forced on people, they will resist change (Gathua, 2006).

Thompson (2003) says that: "It is particularly important for executives to provide a compelling rationale for a new strategic vision. Failure to understand or accept the need for redirecting organizational efforts often produces resistance to change among employees and making it harder to move the organization down a newly chosen path. Kotter (1996) states that "Major change takes time, sometimes lots of time, Zealous believers will often stay the course no matter what happens, Most of the rest of us expect to see convincing evidence that all effort is paying off. Non-believers have even higher standards of proof. They want to see clear data indicating that the changes are working and that the change process is not absorbing so many resources in short term to endanger the organization.

2.2 Relationship between Information, Culture, and Power

If an information society is emerging, it means that every society has its culture- not simply its music, but its ways of thinking and doing. If the information society has a culture then it is important to the ways are its thinking and doing different from those of the societies it is displacing (Powell, 2003).

There is a rather over-used saying in English: 'Information is Power'. It is easy to agree glibly with this general statement without considering it in any depth. Information is closely linked to power. Power and authority can inhibit the flow of information. Governments whose countries are expected to benefit from globalization and information society are concerned that such benefits may be threatened if the new order is based on unsustainable levels of social deprivation and ensuing social conflict. They are particularly concerned about the possibility that large sections of society

will not be equipped to participate in or feel part of 'information society'. These governments actively seek ways to include more people in the process of change. (Powell, 2003)

Information and communication are absolutely central to the processes by which people are included or excluded, whether they choose to participate actively in a course of action or choose to maintain their distance. (Powell, 2003)

People cannot use information unless they have access to it. For such access to be empowering, it must offer people the information that they want (not just what other people want them to have), in form of and language that they can use and in a way which is convenient for them. (Powell, 2003)

Development is largely about empowerment. Two crucial elements of empowerment are that people should have necessary information to make choices, and their views (information) should be valued and listened to. Information is also central to the day-to-day functioning of development organizations (Powell, 2003).

The case that men and women are encouraged to participate equally in the information exchange because information is a resource which enables people make choices, and is key resource for development. Historically, poor access to information and lack of channels through which women are empowered or excluded from development process. Women across cultures, inside or outside elite groups, have found it harder than their male peers to gain skills; to obtain access to resources (the provision of which is not designed with their needs in mind); or, when they have overcome these barriers, to win respect for their work (Powell, 2003).

'Exclusion' means that the ideas which could have been contributed by the excluded group to the enrichment of sum total of knowledge are either missing or accorded less significance than should be the case. Everyone's knowledge and their resulting professional practice suffer as a result. (Powell, 2003)

Development is about women and men becoming empowered to bring about positive changes in their lives; about personal growth together with public action; about both the process and outcome of challenging poverty, oppression and discrimination; and about the realization of human potential

through social and economic justice. Above all, it is about the process of transforming lives, and transforming societies. (Eade and Williams, 1995)

On emerging pattern which may further change the information flows is the growth in development practice of the 'purchaser/provider split'. What this means is that the public body which used to be responsible for providing a public service instead becomes responsible for buying the service from providers, which may be other public bodies, not-for-profit organizations, or private companies. The intention is that the purchasing body can be held to account for the priorities that it has set when buying in the service- for example, the proportion of a health budget spent on chronic or mental illness, as compared with acute surgical services- while it holds the providers to account for actual quality of the service and its value for money (Powell, 2003).

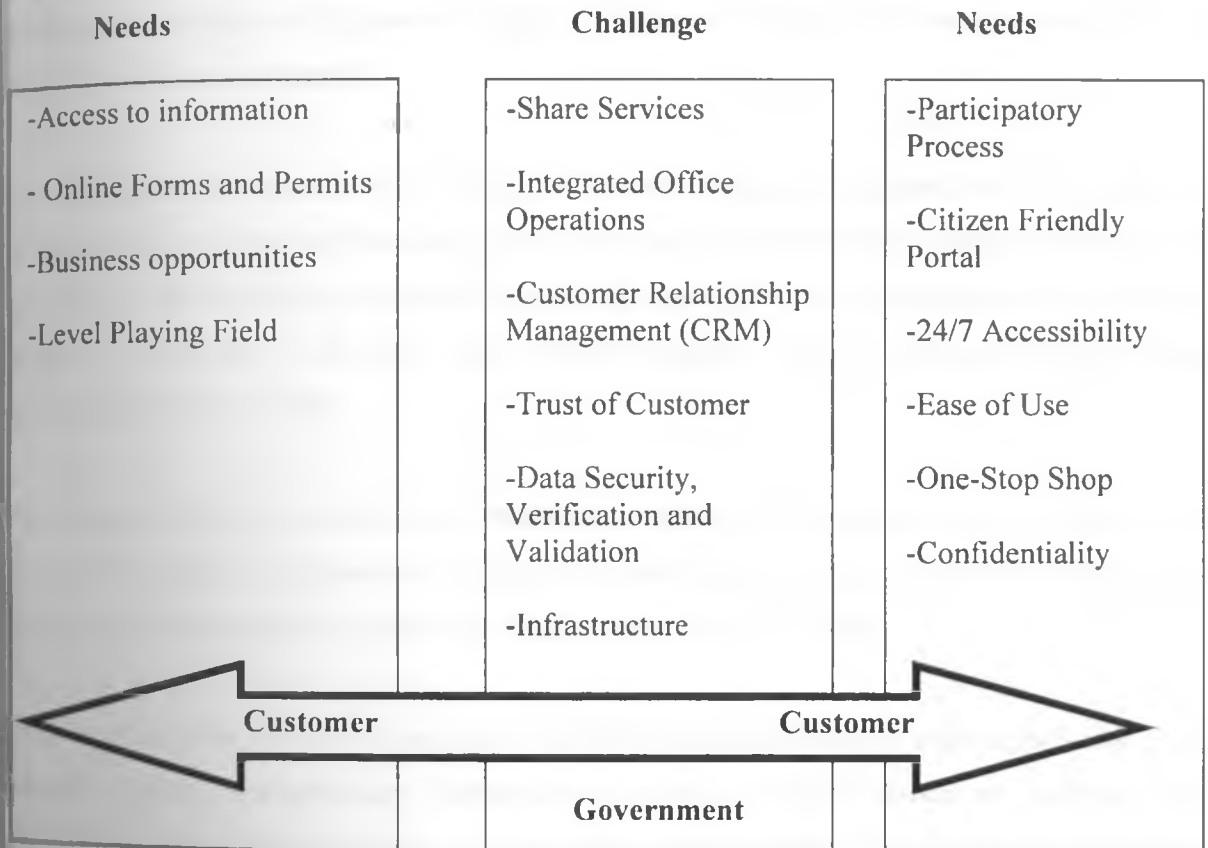
2.3 Overview of e-Government

We work in what is herald as the 'dawn of the information age'. The importance accorded to knowledge and to information and communications technology (ICT) as drivers of the world economy and key factors in development (Powell, 2003). Information communication technology is no longer the preserve of privileged few. The users of ICT are no longer restricted to scientists, corporate executive and the rich. They can be homemakers searching for recipes and furniture designs. They can be poets keying in poems in vernacular languages themselves. They can be religious preachers arranging worship online. They can be petty businesspersons filing tax returns online. They can be plumbers using mobile phones as the most important handheld device. They can be internet game enthusiasts (Sahu, 2008). ICTs are now transforming the governance from being passive and unilateral to interactive and participative (Sahu, 2008).

The emergence of e-Government offers potential to reshape the public sector and build relationships between citizens and the government through provisioning convenient access to government information and services, to improve the quality of services and provide better opportunities to participate in democratic institutions and processes (Dixit and Choudhary, 2008). The e-Government movement is being driven by the need for Government to cut costs and improve efficiency, meet citizen expectations and improve citizen relationship and facilitate economic development (Razik, 2007).

In order to make government more accessible and citizen-centric, efforts have been made to increase the use of ICT which resulted in the evolution of the concept called e-government. The emergence of e-Government offers potential to reshape the public sector and build relationships between citizens and the government through provisioning convenient access to government information and services, to improve the quality of services and provide better opportunities to participate in democratic institutions and processes (Dixit and Choudhary, 2008).

Figure 3: E-Government Model



Source: UN (2008), E-Government Survey, From E-Government to Connected Governance, Page 13

Figure 3 illustrates that the conceptual framework of survey is based on a holistic view of development that incorporates human capacity, infrastructure development, and access to information and knowledge. The Global e-Government survey responds to this situation by looking beyond assessing the available on line services. It looks at the methods of delivery and the capacity to absorb context and services. The Government needs to take into consideration their citizens' level of comfort with various ICTs available in order to deliver effective on line services on regular

basis. For e-Government to be successful, people must be willing and have the confidence to use online services on regular basis.

The notion that ICT can be promoted as a factor of development in its own right may annoy people still struggling to claim or provide the most basic rights to food, clean water and shelter. Promoting the use of ICT is also sometimes interpreted either as a creation of another dependency on goods produced largely by multinational corporations or, more broadly, as yet another imposition of a Northern world view (Powell, 2003). With the country currently suffering from severe draught and having some citizens still displaced by the post-election violence, e-Government may not be seen as a priority in Kenya, presently.

The IT Balance Scorecard and its linkage to Business Balanced Scorecard and in the case of public service is the Performance Scorecard can provide answers to those three fundamental IT governance questions. The Business Scorecard identifies the strategies of the organization and within the IT Balance Scorecards; it is shown how these strategies will be enabled through information technology (Mbithi, 2004).

The internet will not respect many boundaries which are currently taken for granted, and will increase the ability of individuals low down in hierarchy to communicate directly without having to go through the information gatekeepers (Johnson and Scholes, 1997).

In spite of all benefits and advantages of m-Government, there exist challenges which need to be handled, firstly, infrastructure. Infrastructure refers to the existence of hardware (physical equipments, technology and network) and software (institutional arrangements and software for m-Government transactions). The physical infrastructure exists for both wired and wireless networks in the urban areas but not in rural areas (Dixit and Choudhary, 2008).

Privacy and Security, associated with any wireless or mobile technology are the privacy and the security concerns. The citizens want that the government agencies should safeguard their key data from moving into the hands of unauthorized agencies or hackers, thus preventing its misuse. For example, in the online payment infrastructure, involving credit cards for online purchases is still a matter of low trust and prone to misuse of credit card details. Wireless networks use public

airwaves for transportation of secured data, making it vulnerable to hackers who can easily intercept and tamper it. Therefore, the planning stage of m-Government should take special note of selecting appropriate mobile devices, thus ensuring privacy and security (Dixit and Choudhary, 2008).

Regardless of the enterprise's business data resident on the enterprise's computer based information systems are both valuable and vulnerable (Caelli and Shain, 1991). According to Ogeto V (2004), information system security can be defined as the protection afforded to an automated information system in order to attain the applicable objectives of preserving the integrity, availability and confidentiality of information system resources.

There are different forms or measures of information system security today, and these could be grouped into five general categories. The first is access control mechanisms which include firewalls, intrusion detection systems, malicious code detection systems and virus detection systems. The second is authentication mechanisms which include biometrics, smart cards and passwords. The third is confidentiality mechanisms which include Virtual Private Networks (VPNs), encryption and cryptography. The fourth is integrity and non-repudiation mechanisms which include logging and auditing, data mining for intrusion detection and Public Key Infrastructure (PKI). The fifth is availability mechanisms which include Denial of Service (DoS) defence, disaster recovery and contingency planning vulnerability assessment (Dykaman and Davis, 1992)

In the process of implementing e-Governance, the Government is further faced with the morals problem. Morals are traditions of belief about right and wrong conduct (Basandra, 1999). Morals are social institutions with a history and a list of rules, that help the maintenance of a society's functionalities. ICT Communications, especially the internet may lead to immoral behaviour from the youth who access pornographic sites or be recruited into externally-based terrorist activities.

Ethics is another challenge faced by the Government. Ethics is a branch of philosophy that deals with the determination of what is right or wrong, good or bad. We are also guided in our actions by ethics. Unlike morals, ethics can vary considerably from one community to another. We see this variability in the computer field in form of pirated soft-ware- software that is illegally copied and then used or sold. In 1994, it was estimated that 35 percent of software in the United States had been and 92 percent in Japan and 99 percent in Thailand. Implication of these figures does not

necessarily mean that Japanese and Thai users are less ethical than those of United States. Some cultures, especially oriental countries encourage sharing (Basandra, 1999).

In the Kenyan situation, this is so prevalent that artists are losing a lot due to the infringement of their copy rights by 'pirates'. Plagiarism is also an ethical problem, and this is where one uses another person's original words or ideas without permission. Some people have been known to plagiarize by copying others writings from a book or a term paper (Basandra, 1999).

People readiness is one of the pre-requisite for m-Government is citizens' acceptability and attitude towards it. For instance in the developing countries, a large percentage of population is not aware of the meaning and impact of e-Government and m-Government, thus stressing training and education requirement of people to carry out mobile devices, thus ensuring privacy and security (Dixit and Choudhary, 2008).

Laws are formal rules of conduct that a sovereign authority such as a Government imposes on its citizens to maintain Law and Order that leads to smooth governance. Due to the fact computer is a relatively new innovation and the ICT field is evolving fast, the legal system has had a hard time keeping up (Basandra, 1999). Legal Issues, where Governments need to consult the public regarding the implementation of m-Government practices.

Many countries around the world have not yet adopted the Law of Fair Information practices, which spells out the rights of data subjects (citizens) and the responsibilities of the data holders (government). In some cases the law does not recognize mobile document and transactions. Clear legal status for the government functioning, regulations, laws for online signing and online taxable transaction need to be formulated (Dixit and Choudhary, 2008).

The first case of computer crime occurred in 1966, when a programmer for a bank put a patch in a programme so that it would not flag his account as being overdrawn. The ruse worked until the computer broke down and manual processing revealed the anomaly. The programmer could not be charged with committing a computer crime because of lack of Laws in this regard (Basandra, 1999).

Compatibility of mobile services is another challenge. Mobile services as communication channel between the authority and citizen requires global standardization of context, semantics and interoperability across agencies and networks. The large array of new communication technology opportunities, the rapid emergence and change of standards as well as the variety of mobile devices offering different technical capabilities call for sustainable architecture and technology frameworks in order to meet critical interoperability and scalability requirements (Dixit and Choudhary, 2008).

2.3.1 Localization

For e-inclusion, and reaching to the doorsteps of the people, the e-Governance initiatives must have localization as very central to its architecture. Localization is not confined to translation of contents from one language to another, but includes customization of content and presentation of the content to appeal to the community. The need for participation of people in governance will increasingly be felt as governments use ICTs to transform themselves and delivery of public services. (Sahu, 2008)

Advancements in communication technology have facilitated easy and inexpensive interaction among the people and the communities across the territorial boundaries. It is not surprising that the growth and development of information technology has been characterized by internationalization and localization the world over (Sahu, 2008).

Localization is one of the most important facilitators of e-governance. It has facilitated and accelerated the pace of globalization. Interestingly, the same information technology is also facilitating localization. Localization is often seen in conjunction with internationalization. Internationalization is the process of creating an application so that it can be adapted to different languages, cultures and religions with minimum or no coding changes. It is a practice of designing and developing applications, products and documents in a way that makes it easily localizable for target audience that vary in culture, religion, language or technology (Sahu, 2008).

Localization is the reverse process of adapting applications, products and documents to specific locales (language, religion etc) by adding locale-specific components and text translations. It is the actual adaptation to meet the linguistic, cultural and other requirements of specific target user groups. Locale is a set of parameters that defines the user's language, country or region and any

specific variant preferences that the user wants to see in his user interface. Usually, a locale identifier consists of at least a language identifier and a region identifier (Sahu, 2008).

Internationalization and Localization may appear contradictory efforts, but they are actually complementary efforts. Internationalization is the adaptation of products for potential use virtually everywhere, while localization is the addition of special features for use in a specific locale. The processes must be combined to realize the objective of a system that works globally. Localization refers to customization so that the end user feels comfortable with the attached content, and feels that the contents have been made especially for him. (Sahu, 2008)

Localization aims at achieving equal opportunity to access in this information age irrespective of native language, culture and religion. Recognizing that genuine multilingualism promotes unity in diversity and international understanding, the United Nations proclaimed 2008 as the International Year of Languages. It aims to bridge the digital divide and promotes inclusive information society (Sahu, 2008).

Public authorities are at all levels are increasingly turning to ICTs to organize and deliver services. It is vital that e-Governance meets the aspiration of all its citizens, including those from vulnerable and disadvantaged groups such as disabled people, the elderly and those who live in economically deprived and remote areas. (Sahu, 2008).

India is a vast country, both in area and population, and plurality is its hallmark. It has enormous linguistic, cultural, religious and geographical diversities. The constitution of India recognizes twenty-two languages, beside English. Certain other languages are recognized at the state level. Besides, there are hundreds of other languages and dialects spoken all over the country (Sahu, 2008). This should be of great benefit to the Government of Kenya after the country was faced by the post-election violence that was mainly ethnic based. The Kenyans should learn that there can be equal opportunities to access information and promote unity in diversity, if national resources are equitably distributed, good strategies followed and priorities set right.

2.4 The UN Global e-Government Readiness Index 2008

The e-Government Readiness Index is a composite index comprising the Web Measure Index, the Telecommunication Infrastructure Index and Human Capital Index. All of the 192 UN Member States were assessed in October and November of 2007. The survey assessed the same number of functionalities of similar sites in each country to ensure consistency. In keeping with its conceptual framework of human development, these are the Ministries/Departments of Health, Education, Social Welfare, Labour and Finance, which are representative of government services citizens require most.

According to the UN (2008), the world average of the global e-Government index continues to increase as more countries invest resources in developing web sites that are informative. Most countries have e-information on policies, laws and achieve section on their portals/web sites. The gap between e-information and e-consultation and e-decision making is still wide for developing and developed countries.

For the first time since this survey has been produced, there is a new leader. In 2008 survey, Sweden (0.9157) took the number one spot from the United States. The Scandinavian countries took the top three spots in the 2008 survey, with Denmark (0.9134) and Norway (0.8921) in the second and the third place respectively. The United States (0.8644) came in fourth (UN, 2008).

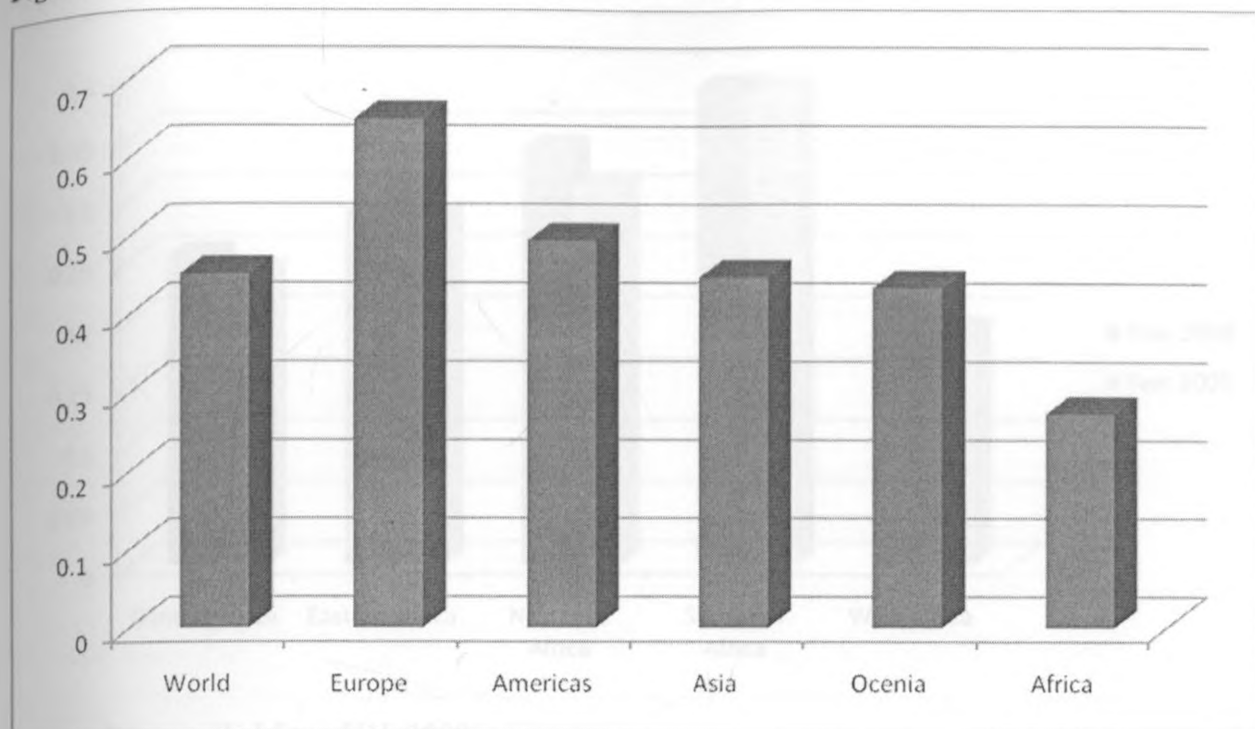
In this year's global e-Government readiness rankings, the European countries make up 70 percent of the top 35 countries. The Asian countries make up 20 percent of the top 35 and Northern American and Oceania region 5 percent (UN, 2008).

Table 1: Regional Average of e-Government Readiness

Region	Average Readiness
World	0.4514
Europe	0.6490
Americas	0.4936
Asia	0.4470
Ocenia	0.4338
Africa	0.2739

Source: UN, 2008

Figure 4: Regional Average of e-Government Readiness



Source: UN, 2008

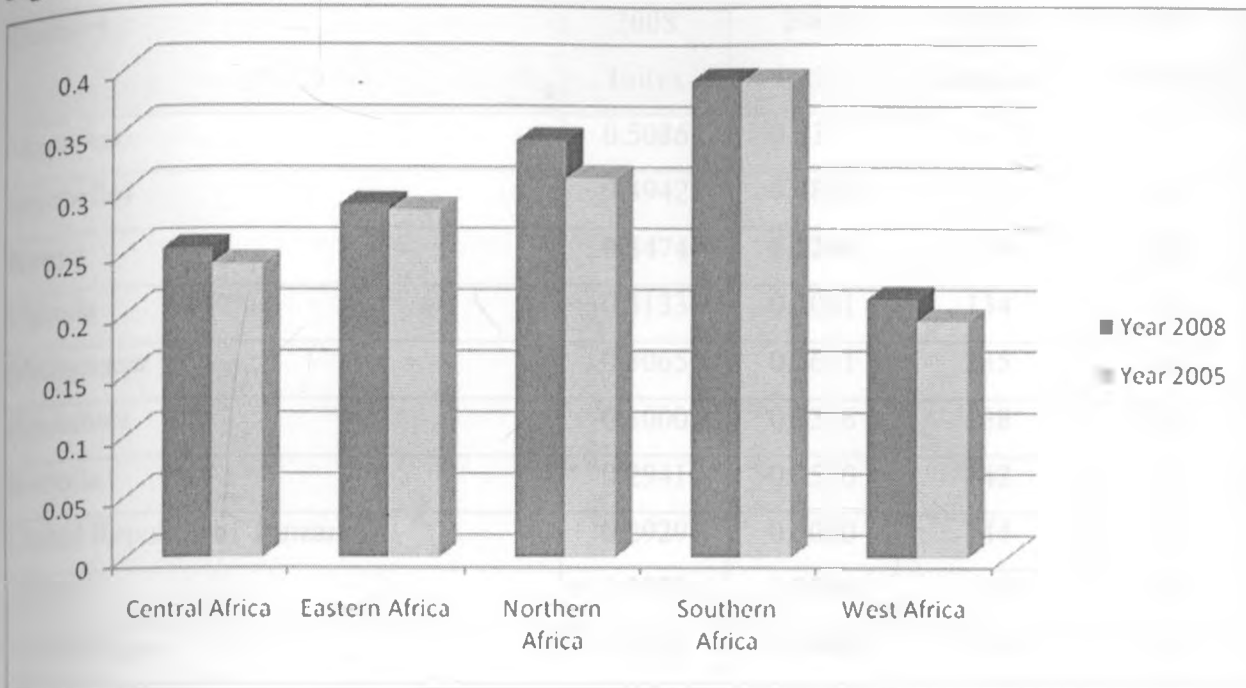
Table 2, shows a further breakdown by sub-regions for Africa region, there is a big gap between the West African region and the Northern and Southern African regions. The Central and Eastern Africa regions are close in ranking, with Eastern Africa ranking slightly ahead.

Table 2: African Regional e-Government Readiness Ranking

Region	2008	2005
Central Africa	0.2525	0.2397
Eastern Africa	0.2879	0.2836
Northern Africa	0.3403	0.3098
Southern Africa	0.3893	0.3886
West Africa	0.2110	0.1930
World Average	0.4514	0.4267

Source: UN, 2008

Figure 5: e-Government Readiness of Africa



Source: Data availed from UN, 2008

The Eastern African region showed little improvement in this year's e-Government readiness index. Its e-Government readiness ranking in 2005 was 0.2836, compared with 0.2879 in 2008. It should be noted that the majority of the countries surveyed had a lower ranking in 2008 compared with 2005. Furthermore, with the exception of Mauritius and Seychelles, all the other countries in this region had low infrastructure scores, which reduced their overall e-Government index (UN, 2008).

The Kenyan Government enhanced its online presence for the benefit of visitors and citizens. The Government welcome web page is well laid out and easy to navigate, as a step towards a "Crime and Justice", "Education and Learning", "Health and Wellbeing" and other thematic issues. Kenya is also continuing to work towards realizing its commitment to online service through its dedicated "Directorate of e-Government" web site that can be found within the Office of the President. The Directorate highlights e-Government resources can make solid progress in e-Government.

The Ministry of Finance in Rwanda improved its web site by enhancing its feature to download statistics and to access the Ministry's database. It is also available in two languages, namely English and French. The Ministry of Education of Mauritius allows citizens to register online and download forms and has a business section for the online application of tenders, permits, and clearances.

Table 3: e-Government Readiness for Eastern Africa

Country	2008 Index	2005 Index	2008 Ranking	2008 Ranking
Mauritius	0.5086	0.5317	64	52
Seychelles	0.4942	0.4884	70	63
Kenya	0.3474	0.3298	124	122
Uganda	0.3133	0.3081	134	125
Madagascar	0.3065	0.2641	135	141
Zimbabwe	0.3000	0.3316	138	120
Rwanda	0.2941	0.2530	142	143
United Republic of Tanzania	0.2929	0.3020	144	127
Malawi	0.2878	0.2794	147	137
Mozambique	0.2559	0.2448	152	146
Djibouti	0.2279	0.2381	157	149
Zambia	0.2266	158
Eritrea	0.1965	0.1849	169	157
Comoros	0.1896	0.1974	170	155
Ethiopia	0.1857	0.1360	172	170
Burundi	0.1788	0.1643	174	166
Somalia
Region	0.2879	0.2836		
World	0.4514	0.4267		

2.5 Best e-Government Practices

By world estimation, the leading nation in the e-Government stakes is Canada. By one survey's judgment, it has reached over 70 percent of its potential use of electronic government to the point that its services to citizens are outperforming traditional processes, the first country to achieve this (Steemson, 2007).

Launched in March 2006, Debate Europe allows European citizens to share their thoughts, concerns and ideas on the future of the European Union. Discussions on the forum focus on three topics: Europe's economic and social development; feelings towards Europe and the Union's tasks; and the

Europe's borders and its role in the world. Citizens can either participate in these debates or view the thoughts of other citizens on the website. Debate Europe is available in the 21 languages of the European Union. In addition, citizens can participate in national debates concerning their country in their local language (http://europa.eu/debateurope/index_en.htm).

The Brazilian House of Representatives web site allows citizens to talk to their representatives and to participate in debates directly through the internet. The Government of Brazil also provides an e-participation platform that permits Members of Parliament and citizens to communicate through chat rooms, discussion forums and the service "Fale com Deputado" or "Talk to the MP". In a country as vast as Brazil and with a geographically dispersed population, online participation has provided citizens with a greater voice in the creation of policies and Laws (UN, 2008).

In the city of Chuncheon, the Republic of Korea, citizens have direct access to the Mayor through the Chuncheon City web site. Suggestions are then reviewed by the Mayor's Office and feedback is provided to the Citizen. In addition, citizen groups and local residents participate in compilation of the city's budget to ensure transparent process (UN, 2008).

The Government of Singapore implemented SingPass in March 2003. SingPass is the common password for the public to access the Government e-services. With SingPass, citizens and foreigners working in Singapore only need to remember one unique ID and password assigned to them to enjoy citizen-centric government e-services. To ensure privacy of user information, SingPass data is encrypted which denies unauthorized personnel direct access to it. In addition, agencies using SingPass authentication for their e-services do not have direct access to database (UN, 2008).

Ireland has implemented a single portal to centralize Government procurement. As a one-stop shop for business to work together with the Irish Government, this portal handles tender submissions and vendor registration (UN, 2008).

The Malta Health Ministry is an excellent example of providing customer service online. The portal allows citizens to apply for the European Health Insurance Card online. It has an electronic patient library provided through a partnership with a private firm, which provides citizens with

medical encyclopedia, information on surgeries and procedures, and has animated lessons. The portal also provides its citizens with a list of local pharmacies (UN, 2008).

The successes of Singapore, Malaysia, New Zealand, Australia, South Africa and United Kingdom are expected to be used as benchmarks in Kenya. (Republic of Kenya, e-Government Strategy, 2004). This is debatable because other scholars dispute this notion of success in the countries chosen by the e-Government of Kenya to benchmark. According to Steemson, (2007) in his country of birth, Great Britain, early promise has faltered. Britain up stake has risen to only 20% of users and the rate of increase is low. British rush to get everything on line has been precipitous, resulting in Government departments hastening to the World Wide Web with a random, ill thought-out jumble of low value information rather than making efforts to build useful, useable services.

The central government and the state governments in India have embarked on an ambitious National e-Governance Plan (NeGP) and several Mission Mode Projects (MMPs) have been identified under NeGP. Besides MMPs, there are several other e-Governance initiatives. More and more public services are offered online. Ministry of Communications and Information Technology and the Department of Official Language in Government of India have been advocating and spearheading localization efforts within the government and outside the government. There are several community and private initiatives also (Sahu, 2008).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Research Design

This study was conducted through a survey study design. It involved an in-depth investigation of the phenomenon of strategies adopted by Government in implementation of e-Government. This research design has been successfully used by similar studies (Mbithi P.K., 2004 and Muindi P, 2006).

3.2 Population of the Study

The population of interest in this study consisted first the general public (citizens and residents) and the Government Officers/ Government Agencies Officers. These populations were selected due to the fact that the first group uses Government services externally, while the latter group uses the same internally.

3.3 Sample and Sampling Technique

This type of sampling that was used in data collection is purposeful or judgmental sampling due to the nature of the study which is descriptive in nature. This is because the population of the study is quite expansive, with every one residing in the country being a potential respondent to the instrument of data collection.

3.4 Data Collection

The study will use primary data that will be collected by way of personal interview (face to face and telephone) guided by an interview guide consisting of both open-ended and closed questions. The guide is developed in line with the objective of the study. The first category of the respondents will be the Secretary to e-Government, Director of Government Information Technology Services, or any other top officers in these two units, being some of the top officers dealing directly with e-Governance infrastructure and architecture. They are expected to give an insight of the targeted goal, actual implementation and the variance. Other respondents of this study will be drawn from Ministries, Government Departmental, State Corporations and the general citizenry/public. At Ministries, Government Departmental, State Corporations level, the data collected will be important in giving the inside Government-to-Government and Government-to-Employees Communication.

The general citizenry/ public respondents, however, are considered to be better placed in providing required data on Government-to-Citizen communication. The managers/supervisors and other employees of private firms, and business men will give an insight of Government-to-Business Communication. The study is a survey based and aims at establishing whether the Government of Kenya has adopted the strategy that will successfully lead to implementation of e-Governance in its quest to provide service to the stakeholders effectively and at lower cost.

3.4 Data Analysis

The data collected were analyzed by use of content analysis due to the fact that the data was qualitative in nature. According to Nachmias and Nachmias (1996), content analysis is a technique for making inferences by systematically and objectively identifying specified characteristics of messages and using the same to relate trends. This type of analysis does not restrict respondents on answers and has potential of generating more information with much detail. The data was analyzed using Statistical Package for Social Sciences (SPSS) to determine descriptive statistics by way of percentages and frequency distributions. The information of the study was presented using tables, histograms and pie charts.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND FINDINGS

4.0 Introduction

This chapter presents the findings from data collected through the use of questionnaire, interviews and of the observations of activities taking place in different forms of governance and government service provision in Kenya, with special emphasis in the electronic mode of provision of services. Specifically, the data was collected in Ministries, State Corporations, Local Government, private companies, business premises, non- governmental Organizations (NGOs) and the general public. The information has been analyzed using the statistical package for social science (SPSS), and presented as per the objectives of the study.

An interview was conducted by the researcher on the Secretary of e-Government at the Directorate of e-Government, Office of the President, Mr. John Serگون, in order to get the insight from the architects and directors of the e-Government process/movement in Kenya. In addition, interviews were conducted on Heads of IPPD System, and technical staff of IFMIS and IPPD.

4.1 Sample Demographics

A sample of fourteen (14) Ministries out of a population forty (40) Ministries, one (1) Local government, four (4) State Corporations, and the general public in four out Administrative Provinces (Nairobi, Central, Nyanza, and Western) were targeted for the study. In total eighty seven (87) filled questionnaires were returned and used in preparation of this report.

Table 4: Respondents by Sector

Sector	Respondents' Frequency	Percent	Valid Percent	Cumulative Percent
Government and its Agencies	28	28.7	28.7	28.7
Unemployed, Students, peasant farmers and others	20	23	23	55.2
Private Organizations	30	34.5	34.5	89.7
Small and Medium Enterprises	9	10.3	10.3	100
Total	87	100.0	100.0	

Source: Research data 2009

From Table 4, most of the respondents were from the Private Organizations at 34.5%, followed closely by Government and its Agencies at 28.7%, and then by category of Unemployed, Students, peasant farmers and others at 23%. Small and Medium Entreprises provided the least at 10.3%.

The respondents were Classified into various five (5) classes of the respondents are as shown in the Table 5.

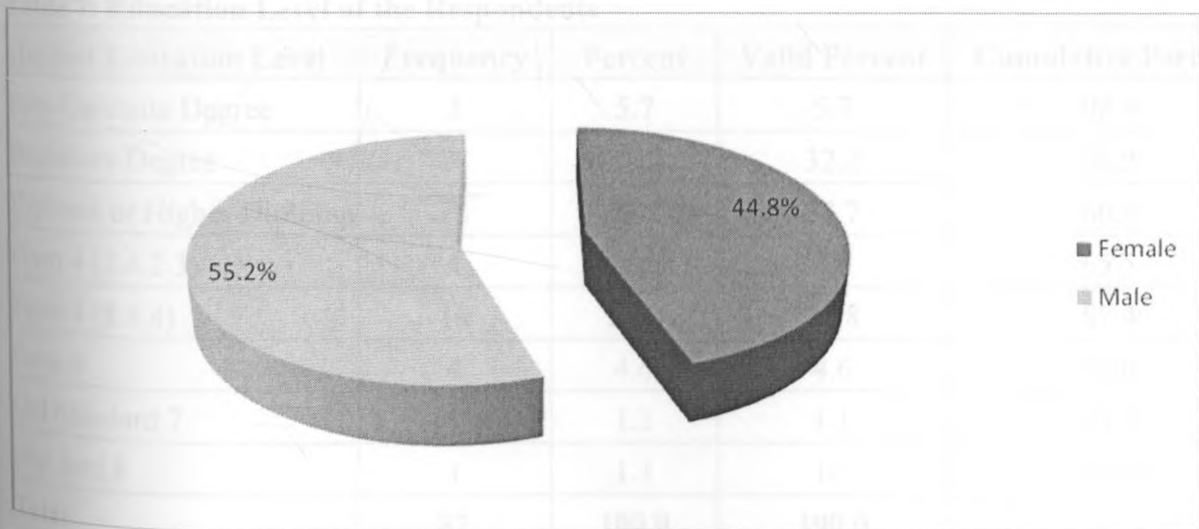
Table 5: The Age Classification of the respondents

Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-25 years	24	27.6	27.6	27.6
26-33 years	24	27.6	27.6	55.2
34-43 years	28	32.2	32.2	87.4
44-51 years	6	6.9	6.9	94.3
52 years a	5	5.7	5.7	100.0
Total	87	100.0	100.0	

Source: Research data 2009

Figure 6 Appended below is the respondents' analysis based on gender. The nominal difference in regard to the gender of the respondents was a mere 5% as tabulated and depicted in the pie chart below. Approximately 45% of the respondents were female and 55% were male.

Figure 6: Respondents by Gender



Source: Research data 2009

The study as depicted in Table 6, covered four (4) Administrative Provinces, namely Nairobi, Central (Kiambu District), Western (Kakamega District) and Nyanza (Nyando District). The respondents were divided into two classifications of areas of residence, namely urban and rural areas. The urban sample was based in Nairobi and had approximately 76%. While the rural sample was based on the other areas mentioned above had 24%. The sample looks a bit skewed, however, this is as a result of the sample that was selected for offices in the Private Sector, the Government, and Business was based mainly in Nairobi. It is only in the general public that the rural population considered, but the latter sample does not necessarily mean that the respondents in these sectors were left out.

Table 6: Respondents by Geographical Location

Geographical Location	Frequency	Percent	Valid Percent	Cumulative Percent
Rural Area	21	24.1	24.1	24.1
Urban Area	66	75.9	75.9	100.0
Total	87	100.0	100.0	

Source: Research data 2009

The study categorized the respondents into Highest Educational Levels they attained as depicted in Table 7. It therefore follows that the highest number of respondents had attained Bachelors Degree (32%), followed by Diploma/ Higher Diploma (28%) and Form 4 (8.4.4. System). While those of Primary level (both the 8.4.4 and 7.4.2.3) and below, were a paltry 2%.

Table 7: Education Level of the Respondents

Highest Education Level	Frequency	Percent	Valid Percent	Cumulative Percent
Post-Garduate Degree	5	5.7	5.7	98.9
Bachelors Degree	28	32.2	32.2	32.2
Diploma or Higher Diploma	25	28.7	28.7	60.9
Form 4 (7.4.2.3)	4	4.6	4.6	65.5
Form 4 (8.4.4)	19	21.8	21.8	87.4
Form 6	4	4.6	4.6	92.0
Old Standard 7	1	1.1	1.1	93.1
Standard 8	1	1.1	1.1	100.0
Total	87	100.0	100.0	

Source: Research data 2009

In the Table 8, the respondents have further been categorized into Occupational Level. The Middle Management Level at 37.5% of the respondents was the most, while the least was Top Management at 4.5%.

Table 8: Occupational Level of the Respondents

Occupational Level	Frequency	Percentage	Cumulative Percent
Directors	7	8.0	8.0
Top Management	4	4.6	100.0
Middle Management	34	39.1	47.1
Not Applicable	19	21.8	69.0
Other Level	23	26.4	95.4
Total	87	100.0	

Source: Research data 2009

4.2 Analysis of Variables

4.2.1 Familiarity with e-Government by Age

The study as depicted in Table 9, revealed that there was a significant relationship between age of people and their familiarity with the term “e-Government”. It is apparent that the middle age classification of 34-43 years and 44-51 years were the familiar groups with the term e-Government, while the older generation of 52 years and above had the least familiarity with the mentioned term, although very close to the first classification of 18-25 years.

Table 9: Familiarity with e-Government by Age

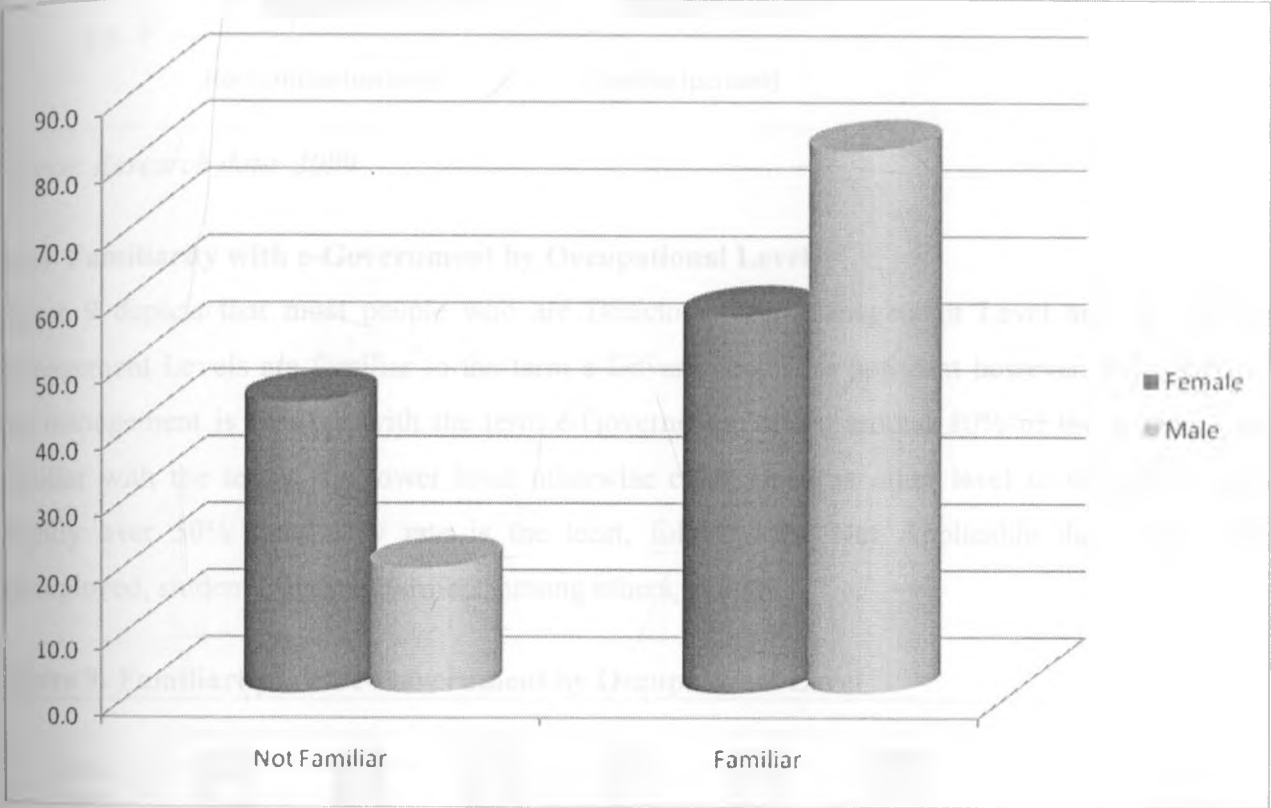
Age	Familiar (Nominal Figure)	Familiar (Percentage Figure)	Not Familiar (Nominal Figure)	Not Familiar (Percentage Figure)	Total (Nominal Figure)	Total (Percentage Figure)
18-25 years	15	62.5	9	37.5	24	100
26-33 years	15	62.5	9	37.5	24	100
34-43 years	23	82.1	5	17.9	28	100
44-51 years	5	83.3	1	16.7	6	100
52 years a	3	60	2	40	5	100
Total	61		26		87	

Source: Research data 2009

4.2.2 Familiarity with e-Government by Gender

An analysis as depicted in Figure 7, reveals that the number of women who are familiar with e-Government at approximately 56% visa-a- vis that of their male counterparts at 81% is significantly lower. Hence female are the least between the gender to have knowledge of e-Government.

Figure 7: e-Government Familiarity by Gender

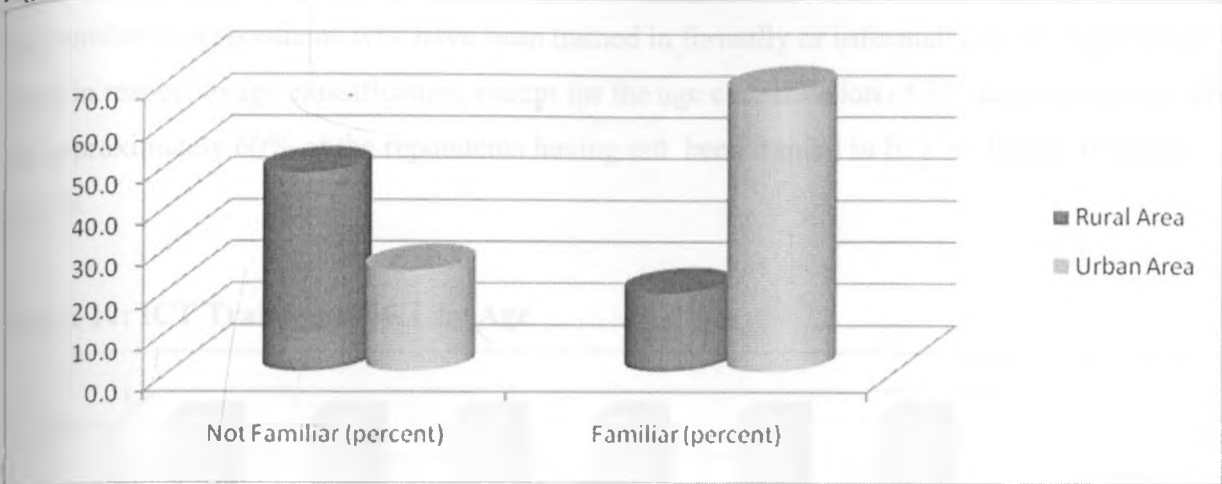


Source: Research data 2009

4.2.3 Familiarity with e-Government by Geographical Location

The Study shows that Geographical Location of the respondents has a significant relationship with familiarity with e-Government. The people residing in urban areas are more familiar with the term e-Government than their rural counterparts. The analysis of Figure 8 below shows that approximately 48% of respondents in the rural area were not familiar with the term “e-Government” compared to 24% in the urban areas.

Figure 8: Familiarity with e-Government by Geographical Location

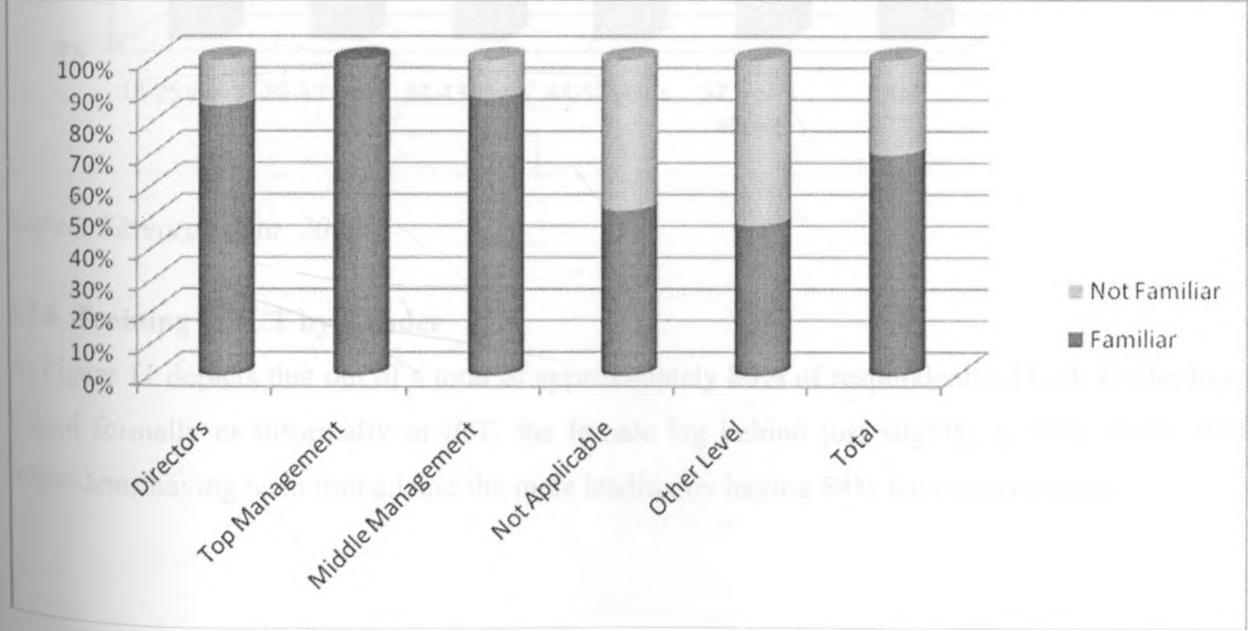


Source: Research data 2009

4.2.4 Familiarity with e-Government by Occupational Level

Figure 9 depicts that most people who are Directors, Top Management Level and the Middle Management Levels are familiar to the term e-Government. It is apparent however, that 100% of top management is familiar with the term e-Government, while around 80% of the directors are familiar with the term. The lower level otherwise categorized as other level in this study, with slightly over 50% familiarity rate is the least, followed by Not Applicable that include the unemployed, students, peasant farmers, among others, at 65%.

Figure 9: Familiarity with e-Government by Occupational Level

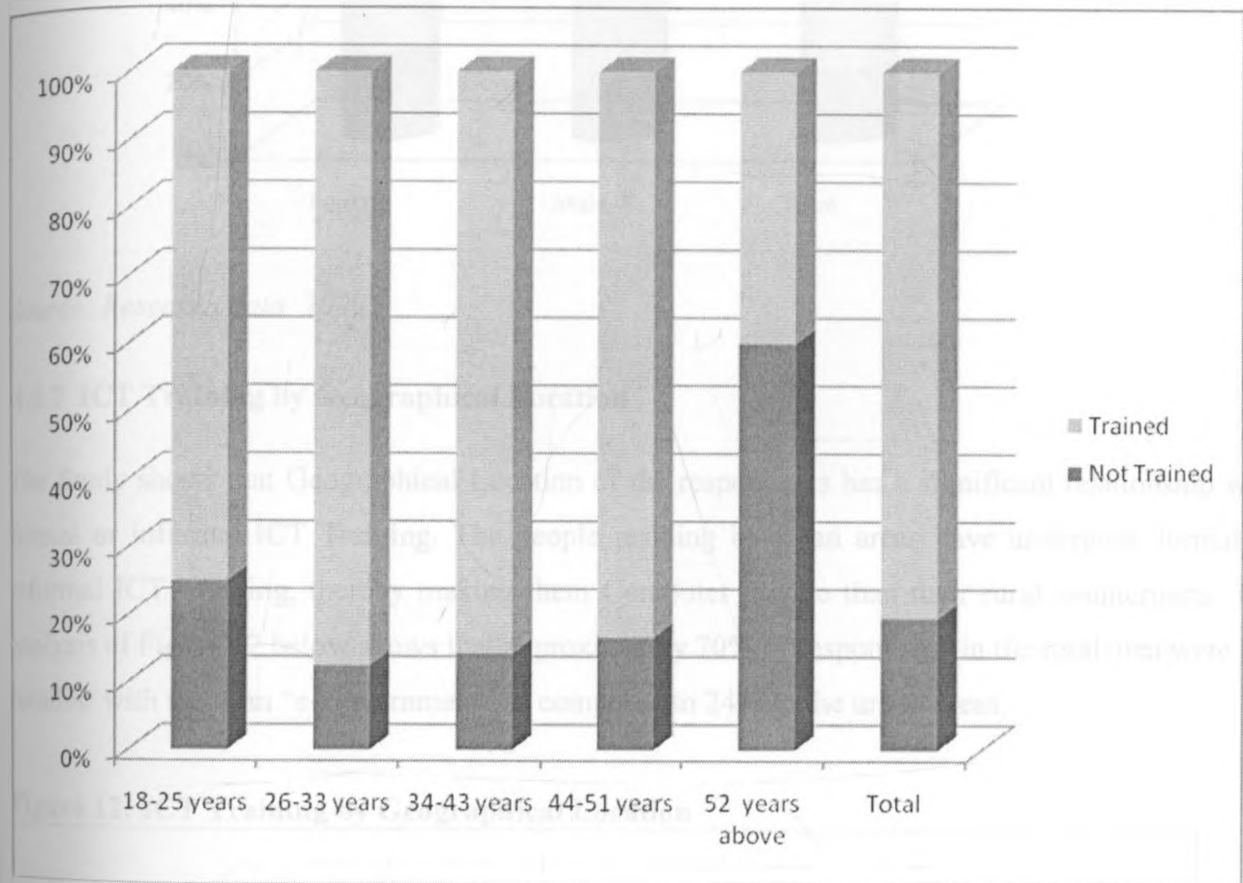


Source: Research data 2009

4.2.5 Training in ICT by Age

The number of respondents who have been trained in formally or informally ICT is high across the board in respect to age classification, except for the age classification of 52 years and above, which has approximately 60% of the respondents having not been trained in ICT as Figure 10 below depicts.

Figure 10: ICT Training in ICT by Age

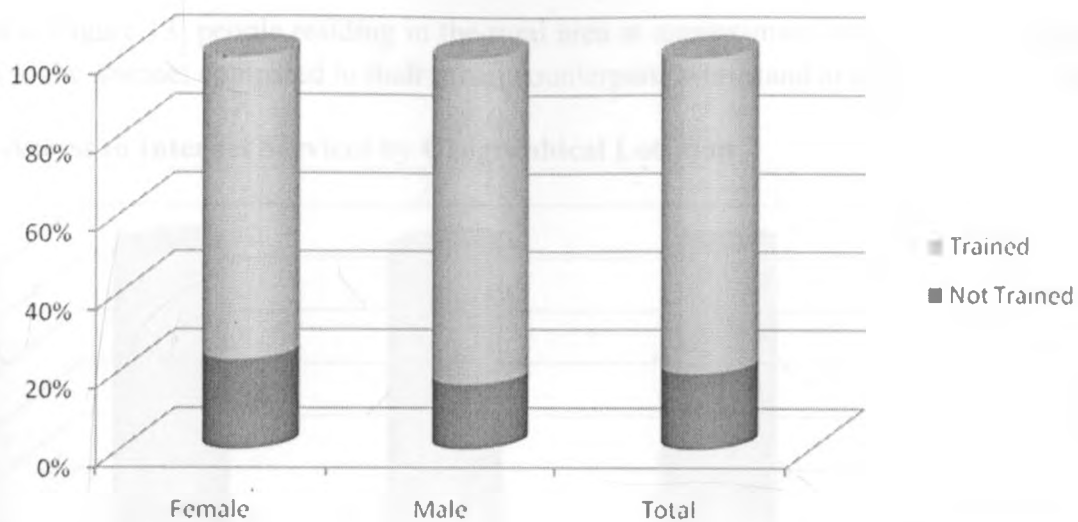


Source: Research data 2009

4.2.6 Training in ICT by Gender

As Figure 11 depicts that out of a total of approximately 80% of respondents of both gender having trained formally or informally in ICT, the female lag behind just slightly at 77% of the female respondents having been trained and the male leading by having 84% have been trained.

Figure 11: Training in ICT by Gender

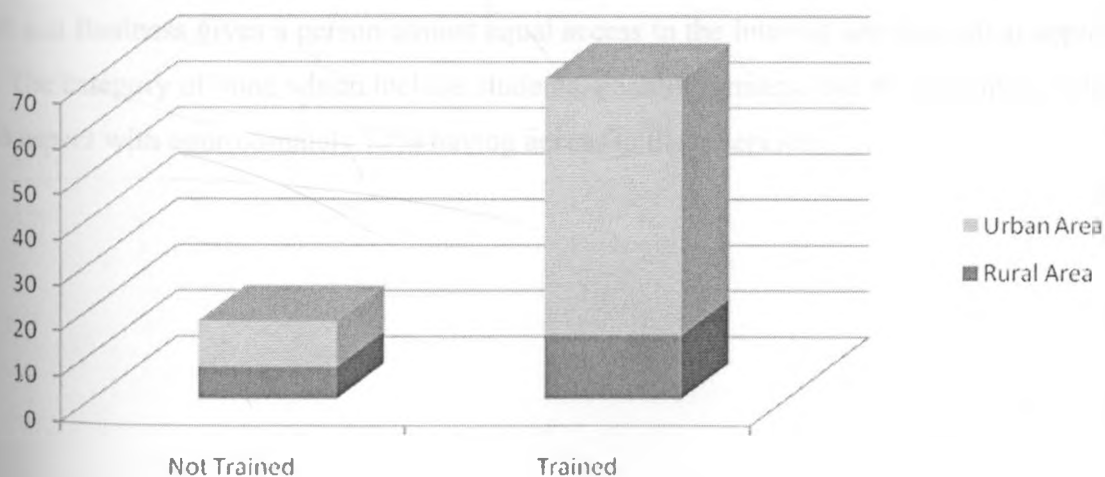


Source: Research data 2009

4.2.7 ICT Training by Geographical Location

The Study shows that Geographical Location of the respondents has a significant relationship with formal or informal ICT Training. The people residing in urban areas have undergone formal or informal ICT Training, thereby making them Computer literate than their rural counterparts. The analysis of Figure 12 below shows that approximately 70% of respondents in the rural area were not familiar with the term “e-Government” as compared to 24% in the urban areas.

Figure 12: ICT Training by Geographical Location

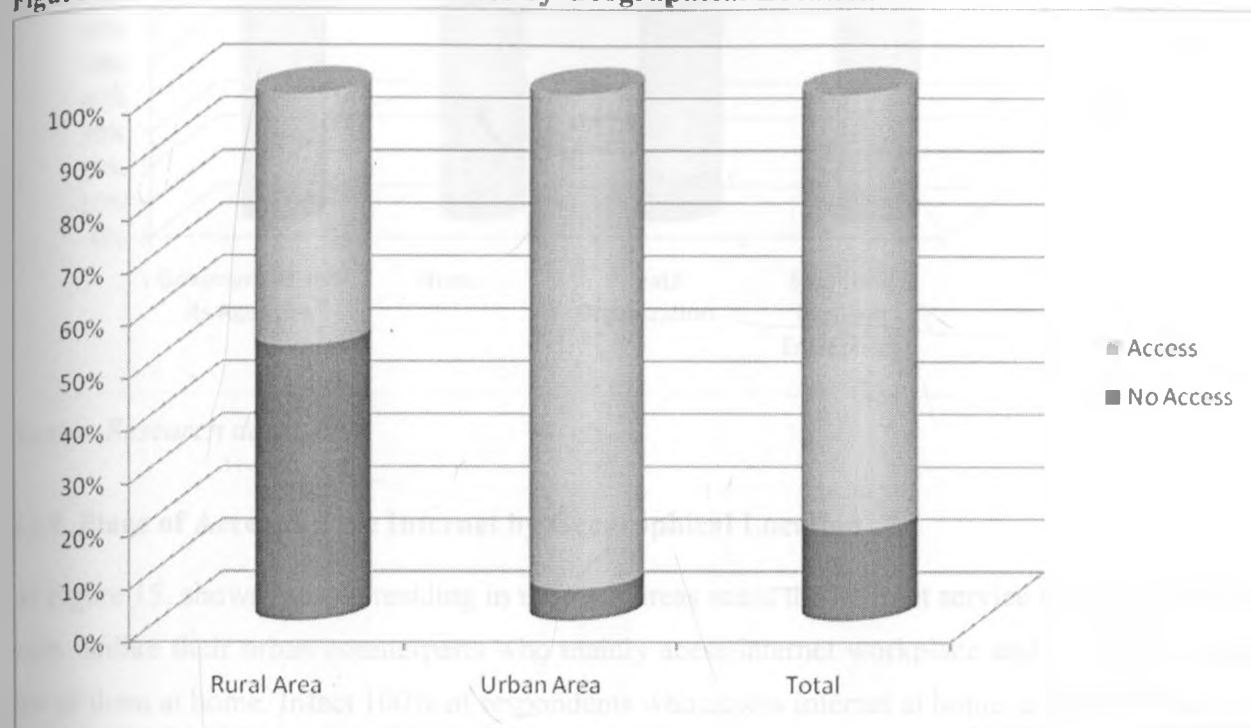


Source: Research data 2009

4.2.8 Access to Internet Services by Geographical Location

As depicted in Figure 13, people residing in the rural area at approximate access rate of 45%, have little access to the internet compared to their urban counterparts who stand at approximately 95%.

Figure 13: Access to Internet Services by Geographical Location

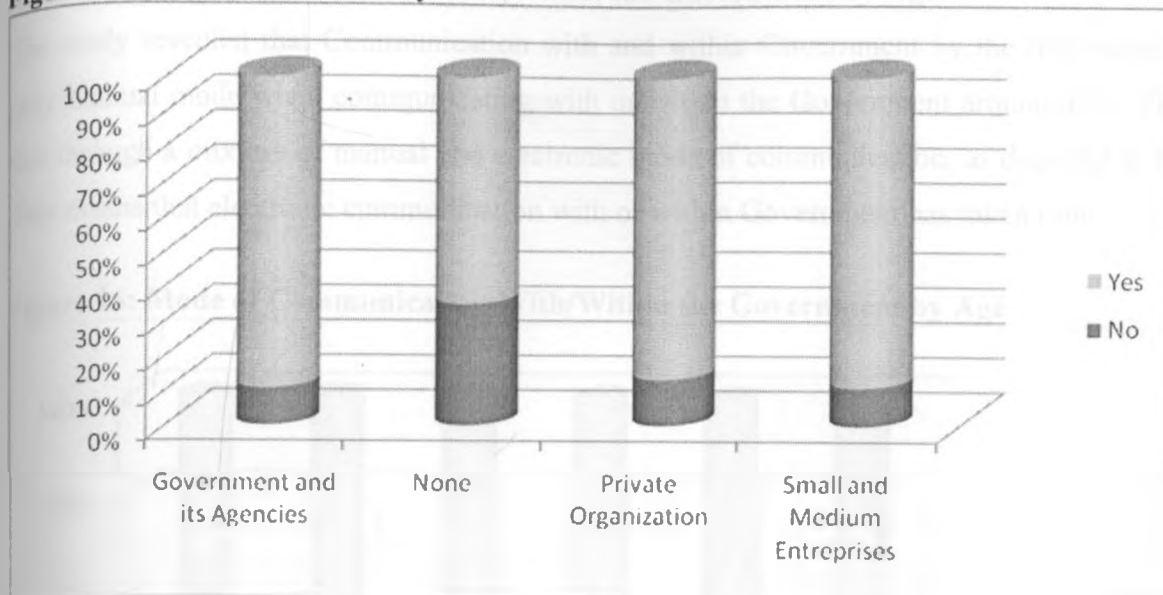


Source: Research data 2009

4.2.8 Access to Internet Services by Sector

Table 20 and Figure 16 below depicts that working with Government and its Agencies, Private Sector and Business gives a person almost equal access to the internet services, all at approximately 95%. The category of none which include students, peasant farmers, and the unemployed lag behind in this aspect with approximately 72% having access to these services.

Figure 14: Access to Internet by Sector

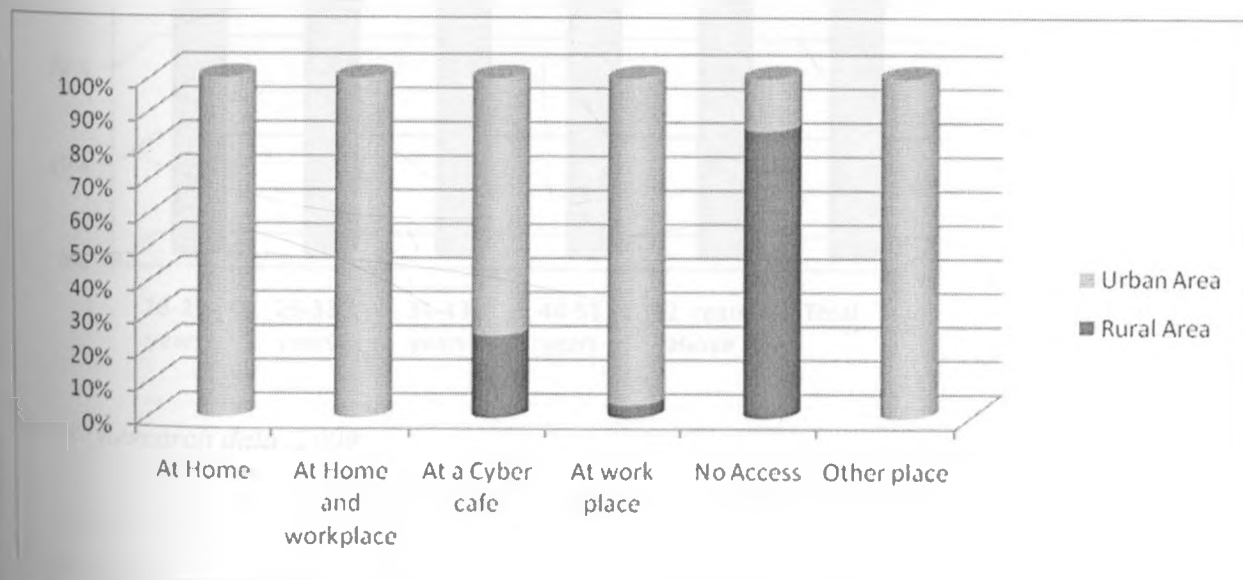


Source: Research data 2009

4.2.9 Place of Accessing the Internet by Geographical Location

As Figure 15, shows, people residing in the rural areas access the internet service mainly in the cyber cafes, unlike their urban counterparts who mainly access internet workplace and cyber cafes and a few of them at home. Infact 100% of respondents who access internet at home reside in Urban Area. Only, the unemployed, farmers and students who are categorized in this analysis as None, have a great number not having access to the internet at all.

Figure 15: Place of Accessing the Internet

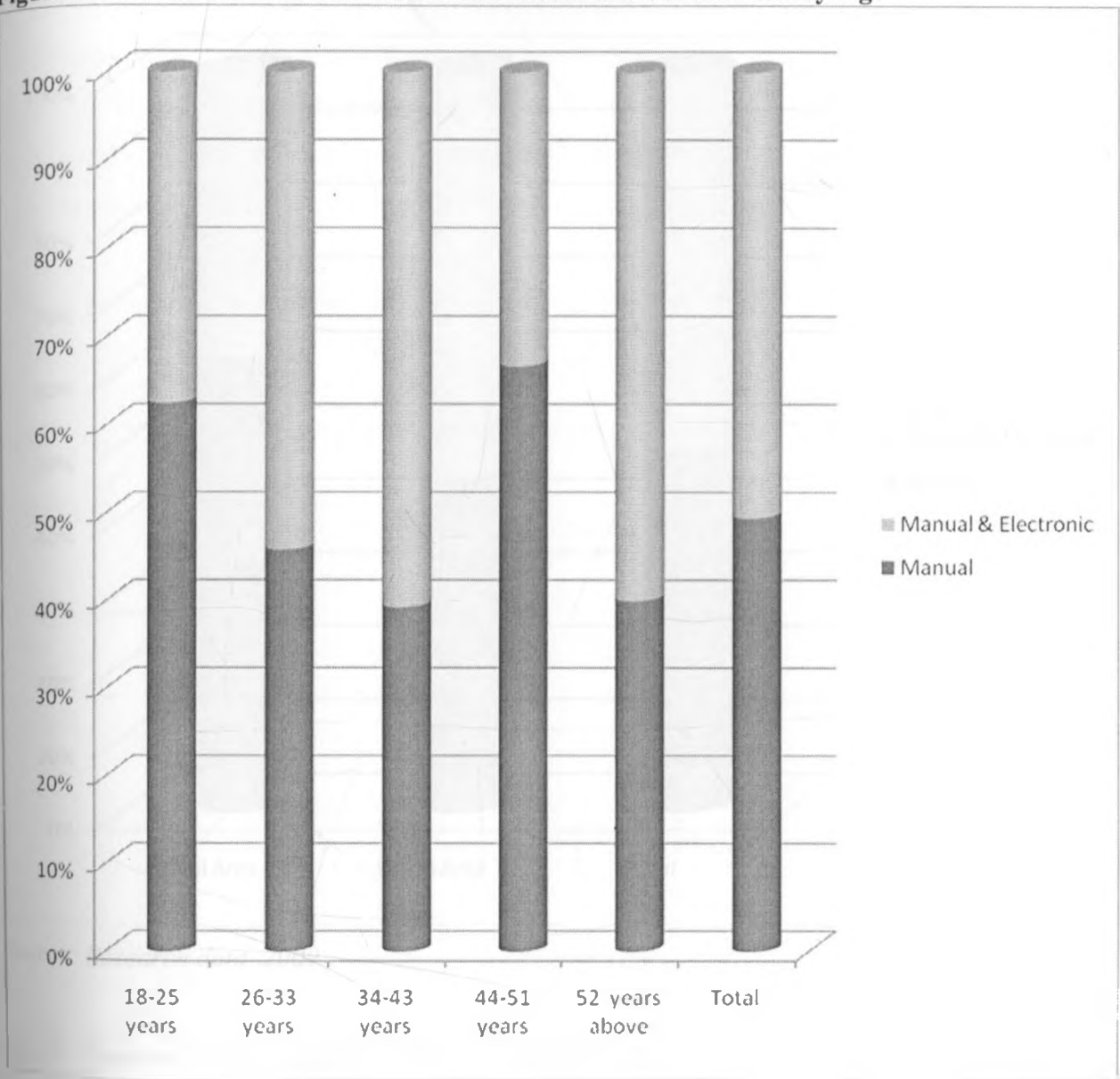


Source: Research data 2009

4.2.10 Mode of Communication with/within the Government by Age

The study revealed that Communication with and within Government by the respondent who use only manual mode when communicating with or within the Government around 46%. The rest do this through a mixture of manual and electronic mode of communication, as depicted in Figure 16. This means that electronic communication with or within Government has taken root.

Figure 16: Mode of Communication With/Within the Government by Age

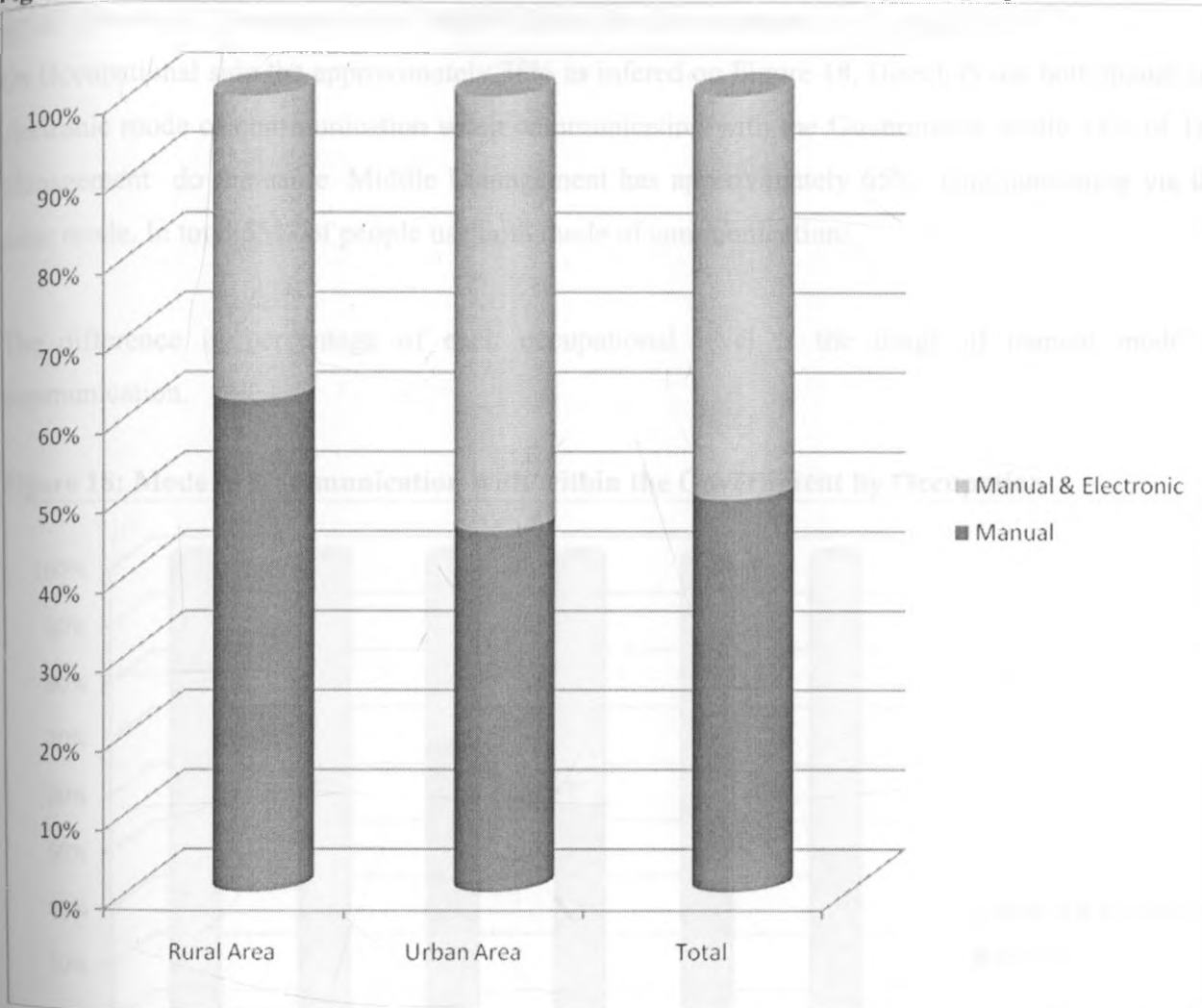


Source: Research data 2009

4.2.11 Mode of Communication With/Within the Government by Geographical Location

As depicted in Figure 17, there is no significant relationship between the mode of communication people choose to communicate with Government and the Geographical Location they are residing. There are those who entirely transact Government service on manual mode.

Figure 17: Mode of Communication With/Within the Government by Geographical Location



Source: Research data 2009

4.2.12 Mode of Communication With/Within the Government by Sector

In total there are around 55% people whose usual mode of communication with/within the Government is both manual and electronic, while approximately 45% purely use manual systems to do the same. Of these only 35% of government respondents use manual system alone as compared

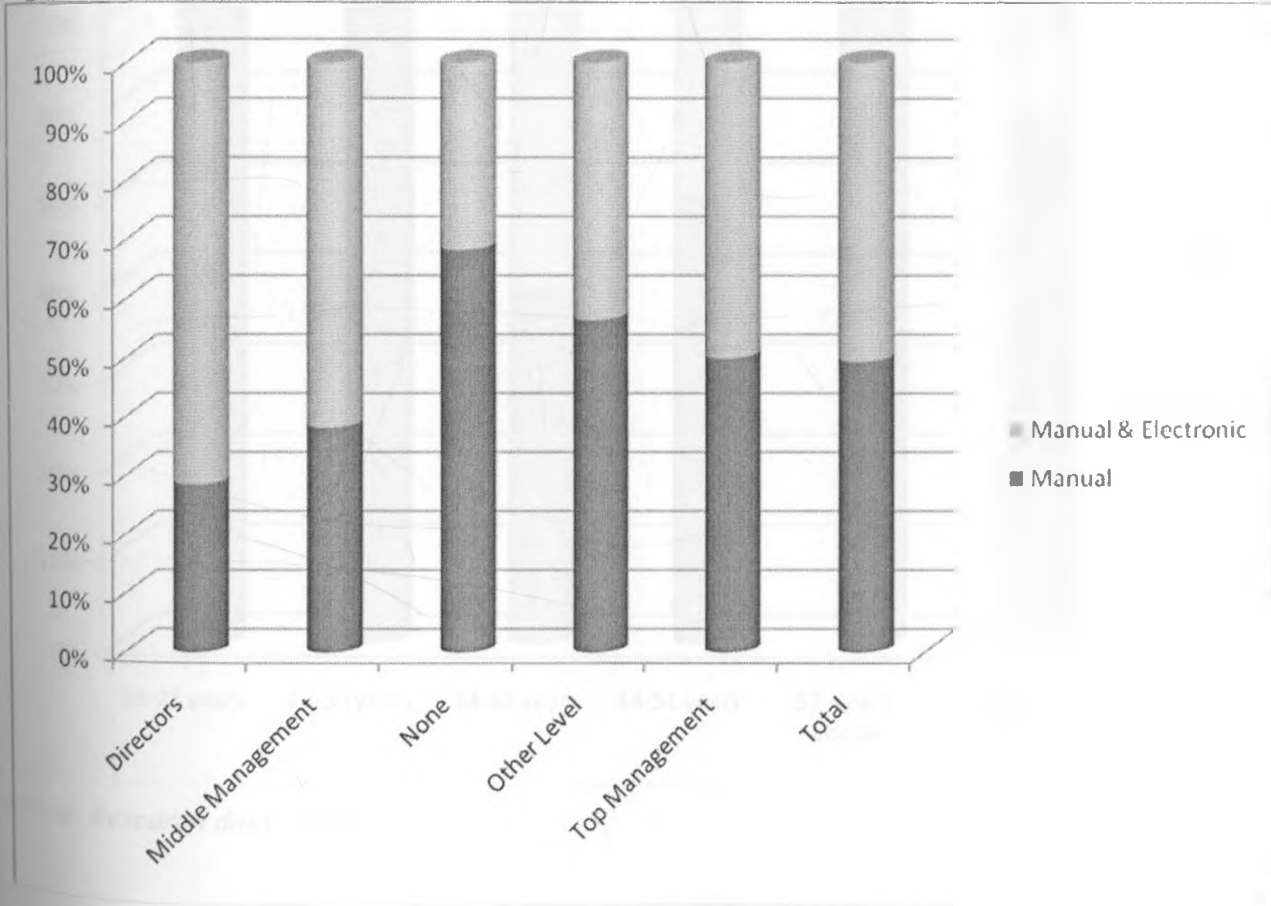
to 42% in Private Sector when communicating within and without Government. Small and Medium Enterprises, and None (a grouping of students, unemployed, and peasant farmers) communicate with Government manually more than any other sector at around 67%. The differences of the mentioned percentage usage on mode of communication are taken by people in the respective sectors, who communicate using both manual and electronic communication modes.

4.2.13 Mode of Communication With/Within the Government by Occupation

On Occupational side the approximately 75% as inferred on Figure 18, Directors use both manual and electronic mode of communication when communicating with the Government, while 55% of Top Management do the same. Middle Management has approximately 65% communicating via the same mode. In total 55% of people use both mode of communication.

The difference in percentage of each occupational level is the usage of manual mode of communication.

Figure 18: Mode of Communication with/within the Government by Occupation

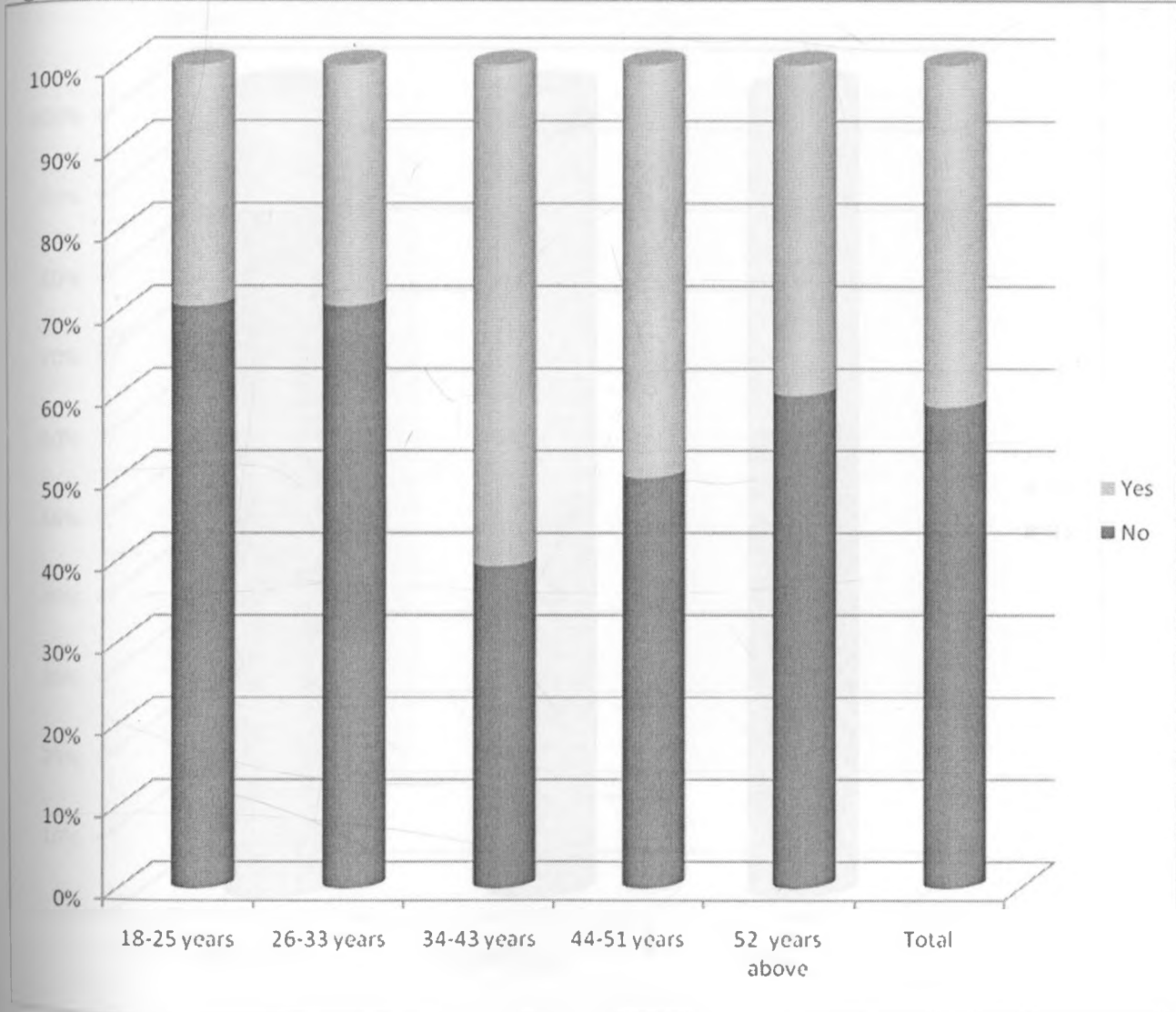


Source: Research data 2009

4.2.14 Satisfaction with Government Service by Age

Figure 19 shows that among the age classification, the two age sets that represent the youth (18-25 and 26-33 years) at approximately 68% dissatisfaction rate are the least satisfied with the services provided by the Government, while the most satisfied group are the 34-43 years class at 35% rate. The 44-51, and 52 and above years dissatisfaction rate is at around 45% and 55%, respectively. In total the Government services average satisfaction rate by age is a poor 45%.

Figure 19: Satisfaction with Government Service by Age

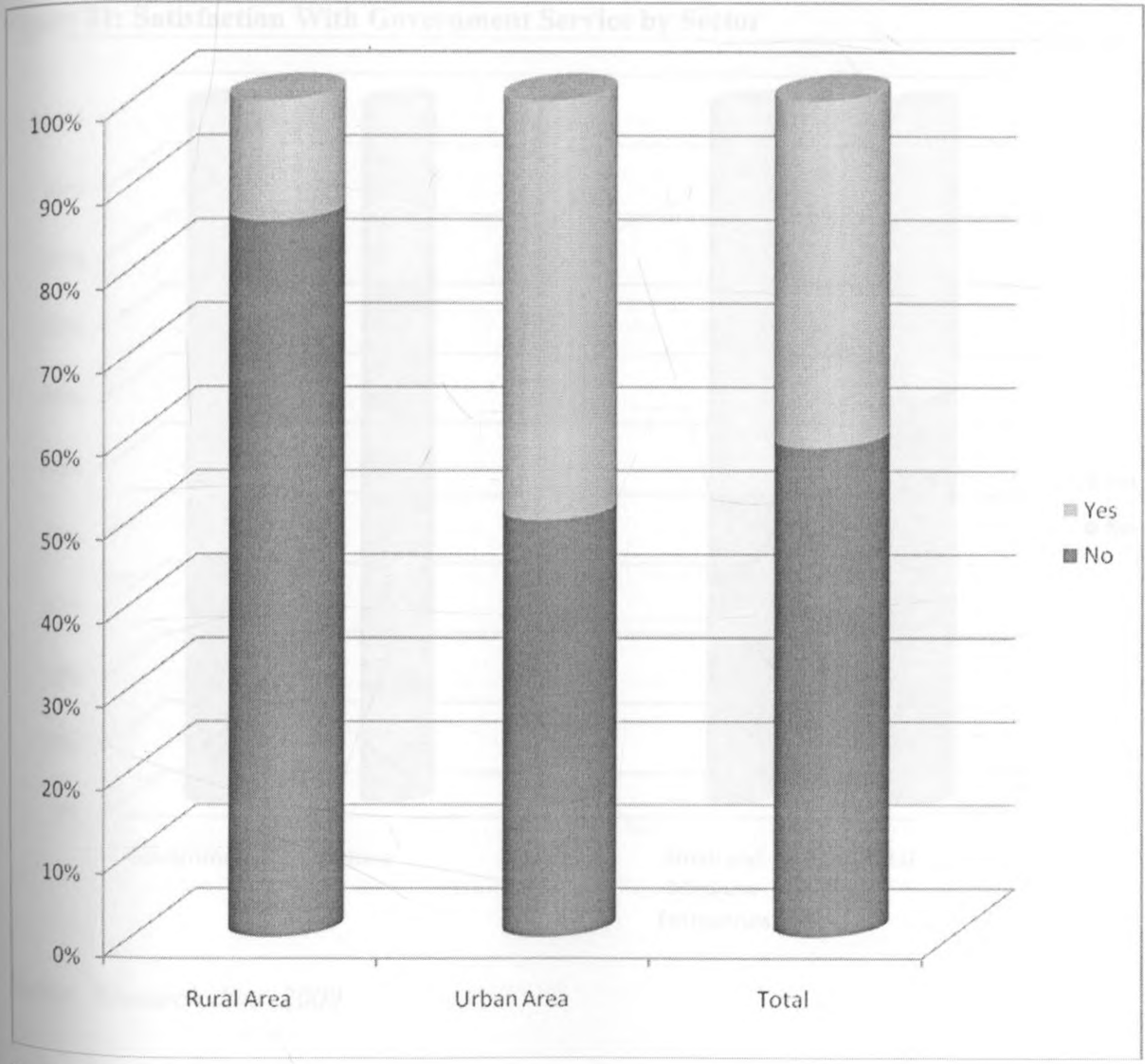


Source: Research data 2009

4.2.15 Satisfaction with Government Service by Geographical Location

Figure 20 indicates that the rural area with around 78% dissatisfaction rate are the least satisfied group of people in regard to Government services, as compared to their urban counterparts at around 43%. This is a significant difference, showing it is hard to get good Government services in the rural areas.

Figure 20: Satisfaction With Government Service by Geographical Location

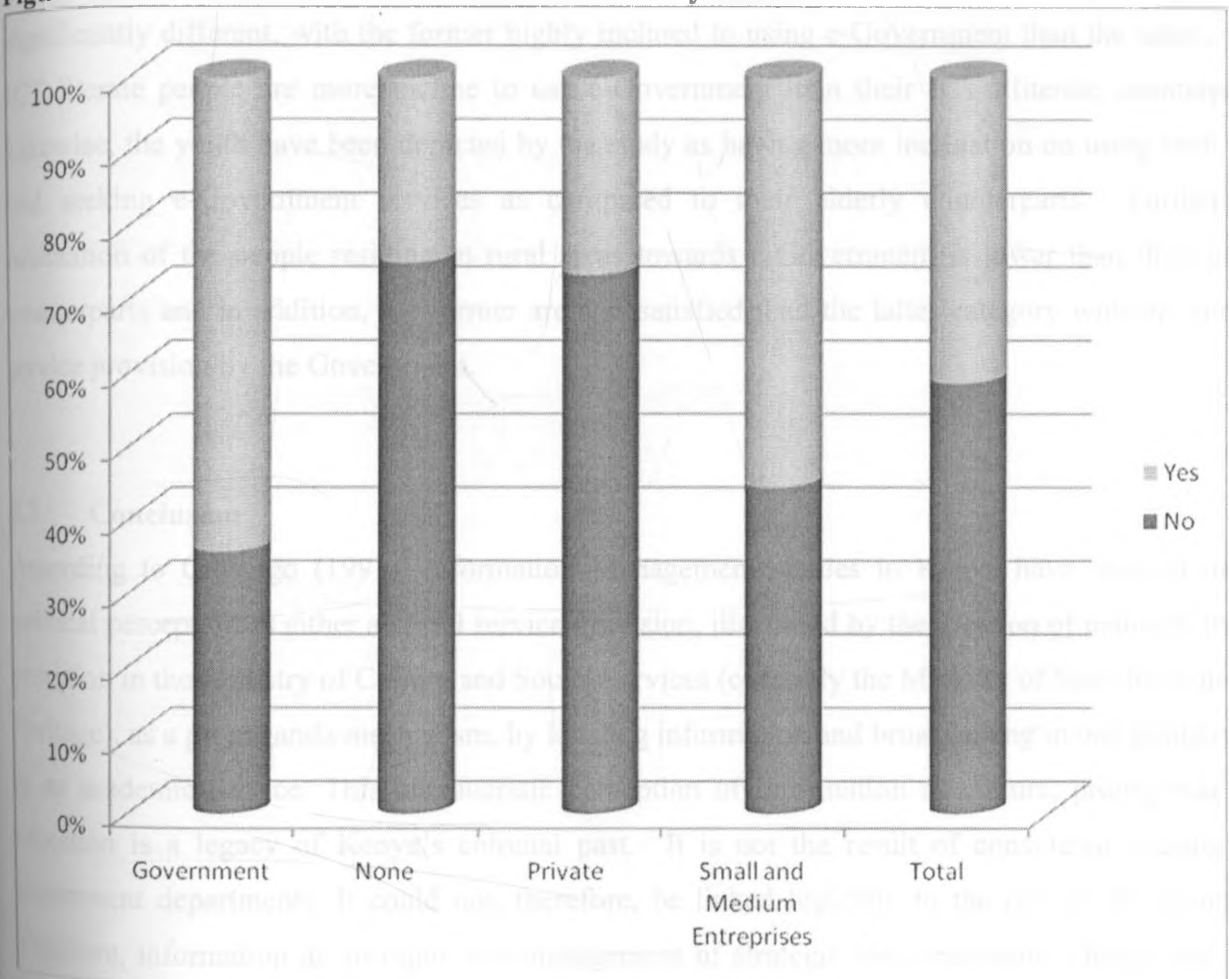


Source: Research data 2009

4.2.16 Satisfaction With Government Service by Sector

As indicated in Figure 21, Government employees (Public Servants) were the most satisfied with the services offered by the Government at an approval rate of approximately 70%, while employees in Private Sector and None (students, unemployed, peasant farmers and retirees) were least satisfied at 30% approval rate each. The Small and Medium Enterprises had the approval rate of around 60%.

Figure 21: Satisfaction With Government Service by Sector



Source: Research data 2009

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The research findings revealed that there is a relationship between various demographical characteristics and the knowledge of e-Government and ICT literacy. In order to be effective in implementation of e-Governance, the Kenyan Government has adopted different modes of reaching different classes of its citizens and other stakeholders on e-Government process. In some of these have been successful but others have not been.

The orientation of men towards e-Government and that of women have been proved to be significantly different, with the former highly inclined to using e-Government than the latter. The ICT literate people are more inclined to use e-Government than their ICT illiterate counterparts. Likewise, the youth have been depicted by the study as having more inclination on using both ICT and seeking e-Government services as compared to their elderly counterparts. Further the orientation of the people residing in rural areas towards e-Government is lower than their urban counterparts and in addition, the former are less satisfied than the latter category with the current service provision by the Government.

5.2 Conclusion

According to Onyango (1991), Information Management studies in Kenya have focused on its political perception as either a social service provision, illustrated by the location of national library provision in the Ministry of Culture and Social Services (currently the Ministry of State for National Heritage), as a propaganda mechanism, by locating information and broadcasting in one ministry, or as an academic service. This bureaucratic perception of information as culture, propaganda and education is a legacy of Kenya's colonial past. It is not the result of considered decision by government departments. It could not, therefore, be linked logically to the rest of the economy. Therefore, information as an input into management of strategic socio-economic change and as a competitive resource with actual and potential advantages has not been recognized or provided for institutionally. This situation has not changed much almost two decades from the time Onyango made these comments. A lot still needs to be done in linking the information to the rest of the economy.

5.3 Recommendations

The Government should work extra-hard and provide all the necessary resources to put fully in operation e-Government. Once the e-Government is fully implemented, then you and I will stop talking about “e-Government” and call it simply “Government”. That irritating little initial “e” will fade away as digital service becomes more and more accepted as the way governments work and the record keepers, gain strength and surety through standards and policies to abandon those annoying website disclaimers that attempt to dodge legal responsibility for misinformation (Steemson, 2007).

According to e-Government senior technical staff, it has emerged that the current Directorate of e-Government strategy was developed based on benchmarks from other countries considered to have best practices in this field. A revised strategy is in the offing that will be based on business case that has mostly taken stock of the misgivings in the previous strategy.

Implementation of the new strategy should be planned and systematic, with action plans to implement the process.

Further, encouraging entrepreneurs especially the women and youth, to set up cyber cafes and ICT training institutions in rural areas by setting up incentives like tax heavens and reduction of registration fees.

The Government should build up more libraries especially in the rural areas with complete electronic facilitation through the Kenya National Library Services and other agencies, to increase facilitation of e-Government and ICT in these disadvantaged areas of the country.

Rural electrification is the key to electronic communications. The Government should pursue vigorously, the plan to electrify rural areas through Rural Electrification project. By doing this, the rural areas will open up to digitalization, leading to access to internet in this areas as it is in the urban areas.

Encouragement for inter-Ministerial/Departmental communications should be conducted online and encourage paperless environment. Unless it is required by regulation and law to use paper, most of the inter-Ministerial/Departmental communication should be done online or on soft copy. This can be done through laying down an appropriate infrastructure both in terms of hardware and software.

In addition, the Government should facilitate training both its workers and the citizens on ICT skills.

The Government should hire more competent technical ICT staff and put them in a continuous development programmes, owing to the dynamic nature of ICT. This, apart from addressing address the current apparent shortage in this field in the Public Sector, it will so as to assist in driving forward e-Government.

The Directorate of e-Government should ensure continuous ICT training for the Top managers to make them appreciate and support ICT and e-Government movement, by allocating resources and directing the processes and ensure their commitment to the course. Further, it should also penetrate the political class of the country to benefit from the political goodwill that is very crucial, when it comes to strategies of e-Government implementation and passing the budget in respect to this process.

In addition, the Government should facilitate ICT courses in the school syllabus to make students get ICT knowledge from early stages of their lives, so that they start appreciating ICT and e-Government at early stages.

With the change of operations steadily moving towards electronic from manual, there needs to be Business Process Re-engineering within the Government Ministries and agencies to be in tandem with the electronic change. Automatic offices and yet the process remaining constant, does not usually lead to improved services.

The Government should ensure to unfreeze its employees' overreliance on manual systems of operation, impart ICT knowledge and refreeze, in order to ensure continuity and appreciation of new skills in ICT by public servants.

The Government can even begin advertising its web-site and that of its agencies on internet service providers like Google, Face book, and Yahoo, among others to get the interest of people who access internet for fun and other similar activities, especially among the youth.

Further, the Government should put strategies of reaching different classification of people using different modes of communication, for example the youth, through internet, SMS, radio, and

televisions. For mature people through radio, newspapers and fliers can be targeted. In regard to women, shopping and supermarkets might be ideal.

The researcher expects the Government of Kenya officials, especially those in the Directorate of e-Government and ICT Units to study the report and objectively try to borrow on some of the recommendations and findings to streamline their activities in respect to e-Government.

Empowerment of women through Affirmative Action by the Government and its Agencies will go a long way in making them participate in every fabric of the society including e-Government. As deduced from the study women make the majority of the ICT illiterate people, people who are not familiar with the term e-Government and many other disadvantages in the society, yet they play a great role in the society, including, but not limited to socialization of the children and the youth. Therefore by empowering women they will pass the knowledge both to the girl and boy child. In order to create wealth and reduce poverty in accordance with Vision 2030, women empowerment is important.

A properly financed study should be commissioned by the Government of Kenya to evaluate the best way of having a centralized implementation of e-Government movement, to avoid duplications and move in tandem in many aspects of infrastructure.

5.4 Limitations of the Study

The study encountered various limitations which inhibited it to fully take the direction it was meant to take. The first limitation was time. The one semester taken in the study was not enough to capture all the data the researcher would have wanted, like covering more Provinces, more Government Ministries and agencies, more private companies, more small and medium businesses, and more public.

In addition, if time had allowed, the researcher would have localized the questionnaire by translating it into local languages to supplement the English questionnaires that were used in data collection. Swahili, Luhya, Luo, Kikuyu should have been used in the provinces covered to have effective communication with the respondents.

Further, financial constraints could only allowed the researcher to engage five data collectors across the country, and hence could not cover the country as the researcher would have wanted if he had enough financial resources, as would have been the case if he was not a privately sponsored student and had received sponsorship for the study.

5.5 Suggestion for Further Research

The study is among the first ones touching on e-Government at the MBA level in the University of Nairobi, School of Business. Most of the studies previously undertaken were more on e-Commerce/Trading that were touching on various industries, especially the Banking industry. Most students as usual are more inclined to study business entities as compared to public entities.

The study is expected to open up new line of study to students, both at post and under graduate levels, to do case studies within the e-Government movement or study as a survey in line with this study to get further insights of this important movement.

Further detailed and focused empirical studies are expected to be conducted by other students, in regard to several sectors of e-Government movement, as a result of this study.

REFERENCES

- Ansoff I. and Mcdonell E. (1990) *Implanting Strategic Management* 2nd Ed, New York: Prentice Hall
- Basandra, S.K., (1999), *Management Information Systems*, New Delhi: Wheeler Publishing
- Bateman T.S. and Zeithaml C.P. (1993), *Management: Function and Strategy* 2nd Ed., Sydney: Irwin
- Cabinet Office, Office of the President, (2004), *e-Government Strategy: The Strategic Framework, Administrative Structure, Training Requirements and Standardization Framework*, Nairobi: Government Printers
- Conner, D R (1998) *Managing at the Speed of Change: How Resilient Managers Succeed and Prosper Where Others Fail*, Chichester: John Wiley
- Dykman, CA (ed) and Davis, KC (asc. ed.) (1992), *Control Objectives- Controls in an Information Systems Environment: Objectives, Guidelines, and Audit Procedures*, 4th Edition, Carol Stream, IL: The EDP Auditors Foundation, Inc.
- Gathua J.W., 2006, *Strategic Change Management and Impact on Performance of Unga Group Ltd.*, Unpublished MBA Project, University of Nairobi
- Government of the Republic of Kenya, *The National Economic and Social Council of Kenya (NEESC)*, Office of the President and Ministry of Planning, National Development and Vision 2030, (2007), Kenya Vision 2030, Nairobi
- Gupta R, (2008) e- Gov magazine, *The Government Magazine for Asia and the Middle East*, Vol. 4, Issue 9, September 2008, Noida: R P Printers,
- Imanela P., Fuentesm (2003), *Resistance to Change: A Literature Review and Empirical Study*, Valencia: Universitat de Valencia

Johnson G and Scholes K, (1997) *Exploring Corporate Strategy* 4th Edition by, New Delhi: Prentice-Hall

Johnson, G. and Scholes K. (2002), *Exploring Corporate Strategy, Text and Cases* (6th Ed.), New Delhi: Prentice-Hall

Kamar N. and Ongo'ndo M. (2007), *Impact of e-Government on Management and use of Government Information in Kenya*, Unpublished Egerton University

Keen, P., (1988) *The Business internet and intranets*, Boston: Harvard Business School Press

Kotter, John, P. (1996), *Leading Change*, Boston: Harvard Business School Press

Korir, D.C., (2005), *The Impact of E-Commerce as a facilitating tool for business: The case of Tour Operators in Nairobi*, Unpublished MBA project, University of Nairobi

Mberia J.W., (2006) *A Survey of Resistance to Change in Commercial Banks in Kenya*, Unpublished MBA project, University of Nairobi

Mbithi, P.K., (2004) *Service Delivery Approaches and the Strategic Positioning of "Information Technology Management Consultancy Firms in Kenya*, Unpublished MBA Project, University of Nairobi

Mbuvi, M.M., (2000) *A Survey of Potential for Adoption of E-Commerce by Tour Operators in Nairobi: The case of Kenya Association of Tour Operators (KATO) members*, Unpublished MBA Project, University of Nairobi

Muyoyo, J.L., (2004) *Factors Influencing the Adoption and Implementation of E-Business Technologies in Companies Quoted in Stock Exchange*, Unpublished MBA project, University of Nairobi

Mbuvi, M.M., (2000) *A Survey of Potential for Adoption of E-Commerce by Tour Operators in Nairobi: The case of Kenya Association of Tour Operators (KATO) members*, Unpublished MBA Project, University of Nairobi

Ogeto V, (2004), *A Survey of Computer-Based Information Systems Security Implemented by Large Private Manufacturing Companies in Kenya*, Unpublished MBA project, University of Nairobi

Ondiko, S.Y., (2004) *E-Business as a mode of International Business Engagement: The Case of Kenyan National Hand weavers Association*, Unpublished MBA Project, University of Nairobi

Onyango, R.A.O. (1991), *Strategic National Information Management and Technology Transfer: The case of Kenya*, PhD Thesis, Department of Information Science, Scotland, University of Strathclyde,

Powell M., (2000) *Information Management for Development Organizations*, 2nd Edition, Bournemouth: Oxfarm,

Ronga, C, (2007), *Challenges of Strategy Implementation at Madison Insurance Company (K) Limited*, Unpublished MBA Project, University of Nairobi

Sieff G (2003), *Good Governance and the Primary Management Challenges*, Unpublished Management Programme- Kenya, Johannesburg: Wits Business School,

Stemson M (2007), *Challenges of e-Government and Strategies for Records and Archives Management Services*

UN (2008), *E-Government Survey, From E-Government to Connected Governance*, New York: United Nations Publication

Wanjala, E.W (2006), *A survey of client-consultant Relationship: The perception of Management Consultancy Firms in Kenya*, Unpublished MBA Project, University of Nairobi

APPENDICES

Appendix 1: Letter to Respondents

September, 2009

PHILIP WERE AGWELI
D61/P/8630/2005
MBA Student, School Of Business
University Of Nairobi

Dear Sir/ Madam,

RE: REQUEST FOR RESEARCH DATA

I am a post graduate student in the in the School of Business, University of Nairobi pursuing Master Business Administration in Strategic Management.

In partial fulfillment of the course, I am conducting a research project titled **“Strategies Adopted by the Kenya Government in introducing e- Governance”**

This is to kindly request you to assist me accomplish this project by responding to the attached Questionnaire. The information you provide will be used exclusively for academic purposes.

My supervisor and I assure you that the information you will give will be treated with strict confidence and at no time will your name appear in my report. A copy of the final paper will be availed to you upon request. Your co-operation will be highly appreciated.

Sincerely,

Philip Were Agweli

MBA Student

Dr. John Yabs

Supervisor

Appendix 2: Questionnaire

STRATEGIES ADOPTED BY THE KENYAN GOVERNMENT IN INTRODUCING e-GOVERNANCE

SECTION A:

1. What is your age group? (Tick one)
 - 18-25 years
 - 26-33 years
 - 34-43 years
 - 44-51 years
 - 52 and above
2. What is your gender?
 - Male
 - Female
3. What is the highest level of your education?
 - Post-Graduate Degree
 - Bachelors Degree
 - Diploma and Higher Diploma
 - Form Six (6)
 - Form Four (4) of 8.4.4 System
 - Form Four (4) of 7.4.2.3 System
 - Standard Seven old (7) and new Standard Eight (8)
 - Never been to formal school or dropped out in before completing primary school
4. Have ever been trained either formally or informally in Information Communication Technology (ICT) even at basic level?
 - Yes
 - No
5. If yes at which level of ICT have you trained? (Tick one)
 - Post-Graduate Degree
 - Bachelors Degree
 - Diploma and Higher Diploma
 - Certificate
6. What is your occupation? _____
7. If are engaged in a formal organization, what is name of the organization you are working for?

8. In which industry does your organization belong to? (Tick one)
 - Central Government
 - Local Government
 - Private Company
 - Business (including Jua Kali)
9. At what level are you working for your organization? (Tick one)
 - Director (owner or Part Owner, for private organizations only)
 - Top Management Level
 - Middle Management Level (including supervisory levels)
 - Other levels
10. Are you familiar with the word "e-Government"?
 - Yes
 - No
11. Under what capacity do you interact with the Government for Service?
 - Capacity as organization/company official
 - Capacity as citizen
 - Businessman/lady
 - Private Capacity (non-Kenya citizen currently residing in Kenya)
 - Other

11. In your capacity as Organization/Company Official, which areas of Government do you seek for service?
 a) _____
 b) _____
 c) _____
12. In your capacity as a citizen, which areas of Government do you seek for service?
 a) _____
 b) _____
 c) _____
13. In your capacity as a businessman/lady, which areas of Government do you seek for service?
 a) _____
 b) _____
 c) _____
14. In your private/non-citizen capacity, which areas of Government do you seek for service?
 a) _____
 b) _____
 c) _____
15. In your any other capacity apart from the ones specified, which areas of Government do you seek for service?
 a) _____
 b) _____
 c) _____
16. a) In your seeking for service from the Government, in your capacity as an Organization/Company Official do you generally interact with the Government manually (filling of physical forms, face to face interaction with Government Officers) or do you do it electronically (internet, mobile phone etc)
 Manually
 Electronically
 Both Manually and Electronically
 Others
- b) What percentage (%) will you give the interaction between you and the Government/Government Agencies (including local Governments and State Corporation)?
 Manual
 Electronic
 Others
- c) Do you get satisfaction with the services you get?
 Yes
 No
- d) What between Manual, Electronic or any other mode of service delivery do you find to be effective means of service delivery by the Government and its agencies?
 Manual
 Electronic
 Both Manual and Electronic
 Others
17. a) In your seeking for service the Government, in your capacity as an a Citizen of Kenya do you generally interact with the Government manually (filling of physical forms, face to face interaction with Government Officers) or do you do it electronically (internet, mobile phone etc)
 Manually
 Electronically
 Both Manually and Electronically
 Others
- b) What percentage will you give the interaction between you and the Government/Government Agencies (including local Governments and State Corporation)?
 Manual
 Electronic
 Others

c) Do you get satisfaction with the services you get?

- Yes
 No

d) Which between Manual, Electronic or any other mode of service delivery do you find to be effective means of service delivery by the Government and its agencies?

- Manual
 Electronic
 Both Manual and Electronic
 Others

18.

a) In your seeking for service from the Government, in your capacity as Businessman/lady do you generally interact with the Government manually (filling of physical forms, face to face interaction with Government Officers) or do you do it electronically (internet, mobile phone etc)

- Manually
 Electronically
 Both Manually and Electronically
 Others

b) What percentage will you give the interaction between you and the Government/Government Agencies (including local Governments and State Corporation)?

- Manual
 Electronic
 Others

c) Do you get satisfaction with the services you get?

- Yes
 No

d) What between Manual, Electronic or any other mode of service delivery do you find to be effective means of service delivery by the Government and its agencies?

- Manual
 Electronic
 Both Manually and Electronic
 Others

19.

a) In your seeking for service from the Government, in your capacity as a Private or non-citizen residing in Kenya do you generally interact with the Government manually (filling of physical forms, face to face interaction with Government Officers) or do you do it electronically (internet, mobile phone etc)

- Manually
 Electronically
 Both Manually and Electronically
 Others

b) What percentage will you give the interaction between you and the Government/Government Agencies (including local Governments and State Corporation)?

- Manual
 Electronic
 Others

c) Do you get satisfaction with the services you get?

- Yes
 No

20.

a) In your seeking for service from the Government, in your any other capacity not specified in this questionnaire do you generally interact with the Government manually (filling of physical forms, face to face interaction with Government Officers) or do you do it electronically (internet, mobile phone etc)

- Manually
 Electronically
 Both Manually and Electronically
 Others

b) What percentage (%) will you give the interaction between you and the Government/Government Agencies (including local Governments and State Corporation)?

- Manual
- Electronic
- Others

c) Do you get satisfaction with the services you get?

- Yes
- No

d) Which between Manual, Electronic or any other mode of service delivery do you find to be effective means of service delivery by the Government and its agencies?

- Manual
- Electronic
- Both Manual and Electronic
- Others

21. Do you believe that Electronic Government will in near future replace the traditional manual ways of transacting business of service delivery or the two will complement each other (i.e. work side by side)?

- Yes
- No
- Traditional manual and Electronic ways will complement

SECTION B

This is to be administered to staff in the Directorate of e-Government, or the areas concerned with ICT in Ministries/Departments and other Government Agencies.

1. In which Ministry/Organization do you work?
2. Division/Department /Region/Branch.....
3. What is your position in the organization.....
4. What is the Length of service you have served in the Division/Department/Region/Branch.....
5. Do you have a strategy in using ICT in your organization to provide service to both internal and external customer?
6. If yes above, have you started the implementation of your strategy above?.....
7. In percentage, how complete is the implementation of the strategy?.....
8. What is the variance in percentage terms regarding the set strategy and the implementation done?
.....
9. What in your opinion is/are the cause(s) of the variance?
.....
.....
.....
.....
10. What should be done reduce the variance?
.....
.....
.....

I sincerely thank you for taking your valuable time to assist me with this research project

Appendix 3: SPSS Output

Crosstabs

[DataSet1] C:\Users\user\Desktop\MBA PROJECT MATERIALS\PROJECT\FINAL MBA PROJECT\MBA Project SPSS_P WERE.sav

Age * ICTTraining Crosstabulation

Count		ICTTraining		
		No	Yes	Total
Age	18-25 years	6	18	24
	26-33 years	3	21	24
	34-43 years	4	24	28
	44-51 years	1	5	6
	52 years a	3	2	5
	Total	17	70	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.941 ^a	4	.139
Likelihood Ratio	5.769	4	.217
N of Valid Cases	87		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .98.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * ICTTraining	87	100.0%	0	.0%	87	100.0%

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * InternetAccessPlace * PurposeForInternetAccess	87	100.0%	0	.0%	87	100.0%

Age * InternetAccessPlace * PurposeForInternetAccess Crosstabulation

Count

PurposeForInternetAccess			InternetAccessPlace					Total	
			At Home	At Home and	At a Cyber	At work place	Not Applica		Other place
Fun-Friends	Age	18-25 years	0	1	15	0		2	18
		26-33 years	0	0	10	4		0	14
		34-43 years	1	1	4	3		0	9
		44-51 years	0	0	1	0		0	1
		52 years a	1	0	2	0		0	3
		Total	2	2	32	7		2	45
Interaction	Age	18-25 years		1	0				1
		26-33 years		0	1				1
		Total		1	1				2
Not Applica	Age	18-25 years					4		4
		26-33 years					1		1
		34-43 years					4		4
		44-51 years					2		2
		52 years a					2		2
		Total					13		13
Official Wo	Age	26-33 years		2	0	6			8
		34-43 years		2	0	11			13
		44-51 years		0	1	2			3
		Total		4	1	19			24
Others	Age	34-43 years			1				1
		Total			1				1
School/Coll	Age	18-25 years			1				1
		34-43 years			1				1
		Total			2				2

Chi-Square Tests

PurposeForInternetAccess		Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Fun-Friends	Pearson Chi-Square	20.930 ^a	16	.181		
	Likelihood Ratio	22.754	16	.120		
	N of Valid Cases	45				
Interaction	Pearson Chi-Square	2.000 ^b	1	.157		
	Continuity Correction ^c	.000	1	1.000		
	Likelihood Ratio	2.773	1	.096		
	Fisher's Exact Test				1.000	.500
	N of Valid Cases	2				
Not Applica	Pearson Chi-Square	^d				
	N of Valid Cases	13				
Official Wo	Pearson Chi-Square	7.972 ^e	4	.093		
	Likelihood Ratio	5.589	4	.232		
	N of Valid Cases	24				
Others	Pearson Chi-Square	^f				
	N of Valid Cases	1				
School/Coll	Pearson Chi-Square	^d				
	N of Valid Cases	2				

a. 22 cells (88.0%) have expected count less than 5. The minimum expected count is .04.

b. 4 cells (100.0%) have expected count less than 5. The minimum expected count is .50.

c. Computed only for a 2x2 table

d. No statistics are computed because InternetAccessPlace is a constant.

e. 7 cells (77.8%) have expected count less than 5. The minimum expected count is .13.

f. No statistics are computed because Age and InternetAccessPlace are constants.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
sender * eGovernmentFamiliarity	87	100.0%	0	.0%	87	100.0%

Gender * eGovernmentFamiliarity Crosstabulation

Count		eGovernmentFamiliarity		
		No	Yes	Total
Gender	Female	17	22	39
	Male	9	39	48
	Total	26	61	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.336 ^a	1	.012		
Continuity Correction ^b	5.206	1	.023		
Likelihood Ratio	6.370	1	.012		
Fisher's Exact Test				.018	.011
N of Valid Cases	87				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.66.

b. Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * ICTTraining	87	100.0%	0	.0%	87	100.0%

Gender * ICTTraining Crosstabulation

Count		ICTTraining		
		No	Yes	Total
Gender	Female	9	30	39
	Male	8	40	48
	Total	17	70	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.562 ^a	1	.453		
Continuity Correction ^b	.229	1	.633		
Likelihood Ratio	.560	1	.454		
Fisher's Exact Test				.588	.315
N of Valid Cases	87				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.62.

b. Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * eGovernmentFamiliarity	87	100.0%	0	.0%	87	100.0%

Gender * eGovernmentFamiliarity Crosstabulation

Count		eGovernmentFamiliarity		
		No	Yes	Total
		Gender	Female	17
	Male	9	39	48
	Total	26	61	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	6.336 ^a	1	.012		
Continuity Correction ^b	5.206	1	.023		
Likelihood Ratio	6.370	1	.012		
Fisher's Exact Test				.018	.011
N of Valid Cases	87				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.66.

b. Computed only for a 2x2 table

Case Processing Summary

Gender * eGovernmentFamiliarity Crosstabulation

Count	eGovernmentFamiliarity		
	No	Yes	Total
	Female	17	22
Male	9	39	48

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
ResidenceClassification * eGovernmentFamiliarity	87	100.0%	0	.0%	87	100.0%

ResidenceClassification * eGovernmentFamiliarity Crosstabulation

Count	eGovernmentFamiliarity		
	No	Yes	Total
	ResidenceClassification Rural Area	10	11
Urban Area	16	50	66
Total	26	61	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.155 ^a	1	.042		
Continuity Correction ^b	3.114	1	.078		
Likelihood Ratio	3.947	1	.047		
Fisher's Exact Test				.056	.041
N of Valid Cases	87				

a 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.28.

b Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
ResidenceClassification * ICTTraining	87	100.0%	0	.0%	87	100.0%

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

ResidenceClassification * ICTTraining Crosstabulation

Count		ICTTraining		
		No	Yes	Total
		ResidenceClassification	Rural Area	7
	Urban Area	10	56	66
	Total	17	70	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.350 ^a	1	.067		
Continuity Correction ^b	2.293	1	.130		
Likelihood Ratio	3.072	1	.080		
Fisher's Exact Test				.110	.069
N of Valid Cases	87				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.10.

b. Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
ResidenceClassification * InternetAccess	87	100.0%	0	.0%	87	100.0%

ResidenceClassification * InternetAccess Crosstabulation

Count		InternetAccess		
		No	Yes	Total
		ResidenceClassification	Rural Area	11
	Urban Area	4	62	66

ResidenceClassification * InternetAccess Crosstabulation

Count		InternetAccess		
		No	Yes	Total
		Rural Area	11	10
Urban Area	4	62	66	
Total		15	72	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	23.955 ^a	1	.000		
Continuity Correction ^b	20.819	1	.000		
Likelihood Ratio	20.743	1	.000		
Fisher's Exact Test				.000	.000
N of Valid Cases	87				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.62.

b. Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
ResidenceClassification * InternetAccessPlace	87	100.0%	0	.0%	87	100.0%

ResidenceClassification * InternetAccessPlace Crosstabulation

Count		InternetAccessPlace						Total
		At Home	At Home and	At a Cyber	At work pla	Not Applica	Other place	
		Rural Area	0	0	9	1	11	
Urban Area	2	7	28	25	2	2	66	
Total		2	7	37	26	13	2	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.313 ^a	5	.000
Likelihood Ratio	35.470	5	.000
N of Valid Cases	87		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is .48.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * InternetAccessPlace	87	100.0%	0	.0%	87	100.0%

Age * InternetAccessPlace Crosstabulation

Count		InternetAccessPlace						
		At Home	At Home and	At a Cyber	At work pla	Not Applica	Other place	Total
Age	18-25 years	0	2	16	0	4	2	24
	26-33 years	0	2	11	10	1	0	24
	34-43 years	1	3	6	14	4	0	28
	44-51 years	0	0	2	2	2	0	6
	52 years a	1	0	2	0	2	0	5
	Total	2	7	37	26	13	2	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	40.025 ^a	20	.005
Likelihood Ratio	45.546	20	.001
N of Valid Cases	87		

a. 24 cells (80.0%) have expected count less than 5. The minimum expected count is .11.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * MobilePhoneOwnership	87	100.0%	0	.0%	87	100.0%

Age * MobilePhoneOwnership Crosstabulation

Count		MobilePhoneOwnership		
		No	Yes	Total
Age	18-25 years	2	22	24
	26-33 years	0	24	24
	34-43 years	0	28	28
	44-51 years	1	5	6
	52 years a	0	5	5
	Total	3	84	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.905 ^a	4	.141
Likelihood Ratio	6.924	4	.140
N of Valid Cases	87		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .17.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
ResidenceClassification * MobilePhoneOwnership	87	100.0%	0	.0%	87	100.0%

ResidenceClassification * MobilePhoneOwnership Crosstabulation

Count		MobilePhoneOwnership		
		No	Yes	Total
ResidenceClassification	Rural Area	3	18	21
	Urban Area	0	66	66
	Total	3	84	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.765 ^a	1	.002		
Continuity Correction ^b	5.946	1	.015		
Likelihood Ratio	8.874	1	.003		
Fisher's Exact Test				.013	.013
N of Valid Cases	87				

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .72.

b. Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * eGovernmentFamiliarity	87	100.0%	0	.0%	87	100.0%

Age * eGovernmentFamiliarity Crosstabulation

Count		eGovernmentFamiliarity		
		Familiar	Not Familia	Total
Age	18-25 years	15	9	24
	26-33 years	15	9	24
	34-43 years	23	5	28
	44-51 years	5	1	6
	52 years a	3	2	5
	Total	61	26	87

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sector * InternetAccess * InternetAccessPlace	87	100.0%	0	.0%	87	100.0%

Sector * InternetAccess * InternetAccessPlace Crosstabulation

Count

InternetAccessPlace			InternetAccess		
			No	Yes	Total
At Home	Sector	Private Org		1	1
		Small and M		1	1
		Total		2	2
At Home and	Sector	Central Gov		3	3
		None		2	2
		Private Org		1	1
		Small and M		1	1
		Total		7	7
At a Cyber	Sector	Central Gov	1	7	8
		Local Gover	0	1	1
		None	0	7	7
		Private Org	2	15	17
		Small and M	0	4	4
		Total	3	34	37
At work pla	Sector	Central Gov		13	13
		Local Gover		1	1
		None		2	2
		Private Org		8	8
		Small and M		2	2
		Total		26	26
Not Applica	Sector	Central Gov	1	0	1

	Local Gover	1	0	1
	None	7	0	7
	Private Org	2	1	3
	Small and M	1	0	1
	Total	12	1	13
Other place	Sector		2	2
	Total		2	2

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sector * InternetAccess	87	100.0%	0	.0%	87	100.0%

Sector * InternetAccess Crosstabulation

Count		InternetAccess		
		No	Yes	Total
		Sector	Central Gov	2
	Local Gover	1	2	3
	None	7	13	20
	Private Org	4	26	30
	Small and M	1	8	9
	Total	15	72	87

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * InternetAccessPlace	87	100.0%	0	.0%	87	100.0%

Age * InternetAccessPlace Crosstabulation

Count		InternetAccessPlace						Total
		At Home	At Home and	At a Cyber	At work pla	Not Applica	Other place	Total
Age	18-25 years	0	2	16	0	4	2	24
	26-33 years	0	2	11	10	1	0	24
	34-43 years	1	3	6	14	4	0	28
	44-51 years	0	0	2	2	2	0	6
	52 years a	1	0	2	0	2	0	5
	Total	2	7	37	26	13	2	87

ResidenceClassification * InternetAccessPlace Crosstabulation

Count		InternetAccessPlace						Total
		At Home	At Home and	At a Cyber	At work pla	Not Applica	Other place	Total
ResidenceClassification	Rural Area	0	0	9	1	11	0	21
	Urban Area	2	7	28	25	2	2	66
	Total	2	7	37	26	13	2	87

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * InternetAccessPlace	87	100.0%	0	.0%	87	100.0%

Age * InternetAccessPlace Crosstabulation

Count		InternetAccessPlace						Total
		At Home	At Home and	At a Cyber	At work pla	Not Applica	Other place	Total
Age	18-25 years	0	2	16	0	4	2	24
	26-33 years	0	2	11	10	1	0	24
	34-43 years	1	3	6	14	4	0	28
	44-51 years	0	0	2	2	2	0	6
	52 years a	1	0	2	0	2	0	5
	Total	2	7	37	26	13	2	87

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
ICTTraining * eGovernmentFamiliarity	87	100.0%	0	.0%	87	100.0%

ICTTraining * eGovernmentFamiliarity Crosstabulation

Count		eGovernmentFamiliarity		
		Familiar	Not Familia	Total
ICTTraining	No	7	10	17
	Yes	54	16	70
	Total	61	26	87

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
OccupationLevel * eGovernmentFamiliarity	87	100.0%	0	.0%	87	100.0%

OccupationLevel * eGovernmentFamiliarity Crosstabulation

Count		eGovernmentFamiliarity		
		Familiar	Not Familia	Total
OccupationLevel	Directors	6	1	7
	Middle Mana	30	4	34
	Not Applica	10	9	19
	Other Level	11	12	23
	Top Managem	4	0	4
	Total	61	26	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.070 ^a	4	.003
Likelihood Ratio	17.620	4	.001
N of Valid Cases	87		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.20.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sector * ServiceSatisfaction	87	100.0%	0	.0%	87	100.0%

Sector * ServiceSatisfaction Crosstabulation

Count		ServiceSatisfaction		
		No	Yes	Total
		Sector	Central Gov	8
	Local Gover	2	1	3
	None	15	5	20
	Private Org	22	8	30
	Small and M	4	5	9
	Total	51	36	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.019 ^a	4	.011
Likelihood Ratio	13.192	4	.010
N of Valid Cases	87		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.24.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GeographicalLocation * CommunicationModeWithGovernment	87	100.0%	0	.0%	87	100.0%

GeographicalLocation * CommunicationModeWithGovernment Crosstabulation

Count		CommunicationModeWithGovernment		
		Manual	Manual&Elec	Total
		GeographicalLocation	Rural Area	13
	Urban Area	30	36	66
	Total	43	44	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.725 ^a	1	.189		
Continuity Correction ^b	1.129	1	.288		
Likelihood Ratio	1.737	1	.188		
Fisher's Exact Test				.218	.144
N of Valid Cases	87				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.38.

b. Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sector * CommunicationModeWithGovernment	87	100.0%	0	.0%	87	100.0%

Sector * CommunicationModeWithGovernment Crosstabulation

Count				
		CommunicationModeWithGovernment		
		Manual	Manual&Elec	Total
Sector	Central Gov	8	17	25
	Local Gover	2	1	3
	None	14	6	20
	Private Org	15	15	30
	Small and M	4	5	9
	Total	43	44	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.874 ^a	4	.143
Likelihood Ratio	7.045	4	.134
N of Valid Cases	87		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.48.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sector *						
CommunicationModeWithGovernment	87	100.0%	0	.0%	87	100.0%

ector * CommunicationModeWithGovernment Crosstabulation

Count				
		CommunicationModeWithGovernment		
		Manual	Manual&Elec	Total
Sector	Central Gov	8	17	25
	Local Gover	2	1	3
	None	14	6	20
	Private Org	15	15	30
	Small and M	4	5	9
	Total	43	44	87

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Occupation *						
CommunicationModeWithGovernment	87	100.0%	0	.0%	87	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	52.462 ^a	49	.341
Likelihood Ratio	70.242	49	.025
N of Valid Cases	87		

a. 99 cells (99.0%) have expected count less than 5. The minimum expected count is .49.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
OccupationLevel *						
CommunicationModeWithGovernment	87	100.0%	0	.0%	87	100.0%

OccupationLevel * CommunicationModeWithGovernment Crosstabulation

Count		CommunicationModeWithGovernment		
		Manual	Manual&Elec	Total
		OccupationLevel	Directors	2
	Middle Mana	13	21	34
	Not Applica	13	6	19
	Other Level	13	10	23
	Top Managem	2	2	4
	Total	43	44	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.128 ^a	4	.190
Likelihood Ratio	6.250	4	.181
N of Valid Cases	87		

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 1.98.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * ServiceSatisfaction	87	100.0%	0	.0%	87	100.0%

Age * ServiceSatisfaction Crosstabulation

Count		ServiceSatisfaction		
		No	Yes	Total
Age	18-25 years	17	7	24
	26-33 years	17	7	24
	34-43 years	11	17	28
	44-51 years	3	3	6
	52 years a	3	2	5
	Total	51	36	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.454 ^a	4	.114
Likelihood Ratio	7.491	4	.112
N of Valid Cases	87		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is 2.07.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
GeographicalLocation * ServiceSatisfaction	87	100.0%	0	.0%	87	100.0%

GeographicalLocation * ServiceSatisfaction Crosstabulation

Count		ServiceSatisfaction		
		No	Yes	Total
		GeographicalLocation	Rural Area	18
	Urban Area	33	33	66
	Total	51	36	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.377 ^a	1	.004		
Continuity Correction ^b	6.969	1	.008		
Likelihood Ratio	9.288	1	.002		
Fisher's Exact Test				.005	.003
N of Valid Cases	87				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.69.

b. Computed only for a 2x2 table

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Sector * ServiceSatisfaction	87	100.0%	0	.0%	87	100.0%

Sector * ServiceSatisfaction Crosstabulation

Count		ServiceSatisfaction		
		No	Yes	Total
		Sector	Central Gov	8
	Local Gover	2	1	3
	None	15	5	20
	Private Org	22	8	30
	Small and M	4	5	9
	Total	51	36	87

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.019 ^a	4	.011
Likelihood Ratio	13.192	4	.010
N of Valid Cases	87		

a. 3 cells (30.0%) have expected count less than 5. The minimum expected count is 1.24.