

**STRATEGIES FOR EFFECTIVE IMPLEMENTATION OF INFORMATION AND
COMMUNICATION TECHNOLOGY AMONG HUMAN RIGHTS NGOs IN NAIROBI**

BY

ALEX YATOR

REG. NO: D61/73191/2012

SUPERVISOR: PROF. BITANGE NDEMO

**A RESEARCH PROJECT PROPOSAL SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF MASTERS OF BUSINESS
ADMINISTRATION, UNIVERSITY OF NAIROBI.**

2015

DECLARATION

Student's Declaration

This research project is my own original work and has never been presented to any other university for the award of a degree.

Signature:

Date.....

NAME: ALEX YATOR

REG. No: D61/73191/2012

Supervisor's Declaration

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

Signature:

Date.....

NAME: PROF. BITANGE NDEMO

DEDICATION

This study is dedicated to my mother Miriam Yator and Dad Philip Kibungei for their generous sacrifice of their family time during the research and my study.

I also dedicate this work and give special thanks to my workmates, brothers and my lovely sister Joy for being there for me throughout the entire Thesis. All of you have been my best cheerleaders.

ACKNOWLEDGEMENT

My first debt of gratitude goes to my family who stood with me throughout my studies and particularly for their unending support. I deeply appreciate them.

The next large debt is owed to my study colleagues who have been there for me throughout the study duration and selflessly accorded me their support when I needed it, may God bless all.

My supervisor, I owe you this gratitude for your guidance in the course work. Thank you for your support, your patience with me throughout and your understanding is greatly appreciated.

For all those lecturers at the School of Business, University of Nairobi, I take this chance to recognize you all.

To all I say, may God Bless you in a mighty way.

TABLE OF CONTENTS

DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
LIST OF TABLES	vii
LIST OF ABBREVIATIONS	viii
ABSTRACT.....	ix
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.1.1 Strategy	2
1.1.2 Concept of Strategy Implementation	3
1.1.3 NGOs and ICT Use in Kenya	3
1.2 Research Problem	4
1.3 Research Objective.....	7
1.4 Value of the Study	7
CHAPTER TWO	8
LITERATURE REVIEW	8
2.1 Introduction.....	8
2.2 Theoretical Framework.....	8
2.2.1 Open System Systems Theory	8
2.2.2 Theory of Reasoned Action (TRA).....	9
2.2.3 Technology Acceptance Model Theory	10
2.3 ICT Implementation Strategies	11
2.3.1 Strategic Leadership and Management.....	11
2.3.2 Availability of Requisite Equipment and Infrastructure.....	12
2.3.3 Organizational Core Competencies and Staff Training.....	13
2.3.4 Strategic Financial Resource Allocation.....	14
2.4 Empirical Review.....	15
2.5 Conceptual Framework.....	17
CHAPTER THREE	18
RESEARCH METHODOLOGY	18
3.1 Introduction.....	18
3.2 Research Design.....	18
3.3 Target Population.....	18
3.5 Data Collection Method.....	18
3.6 Pre-Testing the Instrument.....	19
3.6.1 Validity of the Instrument.....	19
3.6.2 Reliability of the Instruments.....	19
3.7 Data Analysis	20
CHAPTER FOUR.....	21

DATA ANALYSIS, FINDINGS AND DISCUSSIONS	21
4.1 Introduction.....	21
4.1.1 Response Rate	21
4.1.2 Reliability Analysis.....	21
4.2 Background Information.....	22
4.4.1 Gender of the Respondents	22
4.4.2 Age of the Respondents	23
4.4.3 Level of Education of the Respondents	23
4.4.4 Designation of the Respondents.....	24
4.2.5 Length of Experience.....	24
4.3 Strategic Leadership and Management.....	25
4.4 Availability of Requisite Equipment and Infrastructure.....	28
4.5 Organizational Core Competences	29
4.6 Resource Allocation.....	32
CHAPTER FIVE	35
SUMMARY, CONCLUSION AND RECOMMENDATIONS	35
5.1 Introduction.....	35
5.2 Summary of the Findings.....	35
5.2.1 Strategic Leadership and Management.....	35
5.2.2 Availability of Requisite Equipment and Infrastructure.....	36
5.2.3 Organizational Core Competences	36
5.2.4 Resource Allocation.....	37
5.3 Conclusion	37
5.4 Recommendations.....	38
5.5 Suggestions for Further Research	38
REFERENCES.....	39
APPENDICES.....	44
Appendix I: Questionnaire	44
Appendix II: List of Human Rights NGOs in Nairobi City County.....	50

LIST OF TABLES

Table 4.1: Response Rate.....	21
Table 4.2: Reliability Coefficients	22
Table 4.3: Gender of the Respondents	22
Table 4.4: Age of the Respondents	23
Table 4.5: Level of Education of the Respondents	23
Table 4.6: Designation	24
Table 4.7: Length of Experience.....	24
Table 4.8: Leadership and Management Understanding of ICT Strategy Implementation	25
Table 4.9: Management Activities and ICT Strategy Implementation	25
Table 4.10: Parties Involved Guiding ICT Strategy Implementation Process.....	26
Table 4.11: Management Styles.....	26
Table 4.12: Top Management Commitment and Support for ICT Implementation	27
Table 4.13: NGOs have Reasonable Measure of E-Readiness Status	28
Table 4.14: Extent to which New ICT System and Infrastructure Needs to be acquired	299
Table 4.15: Aspects Relating to IT Infrastructure for ICT Implementation	29
Table 4.16: Staff Have Required Skills, Abilities and Experience for ICT Implementation .	30
Table 4.17: Employees' Empowerment Programs in ICT Implementation	30
Table 4.18: NGOs Support for Skills Development in ICT Implementation	31
Table 4.19: Trainings and Increase in ICT implementation	31
Table 4.20: Extent to Employee Learning and Skills Development Affect ICT Implementation.....	32
Table 4.21: Adequacy of Resources for ICT Implementation	33
Table 4.22: Suitability of Resources for ICT Implementation	33
Table 4.23: Extent to Which Resource Allocation Affect ICT implementation.....	34

LIST OF ABBREVIATIONS AND ACRONYMS

CBK	Central Bank of Kenya
CBN	Central Bank of Nigeria
CEO	Chief Executive Officer
COTS	commercial off the shelf
ERP	Enterprise Resource Planning
FCB	First Community Bank
GAB	Gulf African Bank
ICT	Information and Communication Technologies.
NBK	National Bank of Kenya
PEOU	Perceived Ease of Use
PLS	Profit and Loss Sharing
PU	Perceived Usefulness
SME	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
SSA	Sub-Saharan
SSA	Sub-Saharan African
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
UK	United Kingdom
US	United States

ABSTRACT

This study sought to establish strategies for effective implementation of information and communication technology among human rights NGOs in Nairobi. Specifically, the study sought to establish the influence of strategic leadership and management; availability of requisite equipment and infrastructure; organizational core competences and staff training and strategic financial resources allocation while dependent variable is effective ICT implementation. The underpinning theories of the study included; the Open System Systems, Technology Acceptance Model and the Theory of Planned Behavior. The study used a descriptive research design and the target population comprised of all the 141 human rights NGOs in Nairobi County. The findings show that leadership and management has facilitated a working environment that promotes the effective ICT implementation particularly in today's globalized world where NGOs have to cope with rapidly changing environments. Second, human rights NGOs were found to have the required and reliable infrastructure for ICT implementation process even though not all NGOs have achieved a reasonable measure of e-readiness status to fully implement ICT in their operations. Third, staff in NGOs have the required skills, abilities and experience for ICT implementation and the NGOs are forging forward to ensure that ICT implementation procedures and measures are in place by training its employees through well-defined programs. Fourth, the study established that that differences in ICT implementation occur due to adequacy of resources possessed by organizations which can improve or reduce the effect of particular goals in the organization if well utilized or underutilized respectively. The study recommends that NGOs should focus on taking the right measure in ICT implementation. The leadership and management should take appropriate measures at the rightful time to ensure set goals are achieved and energies are channeled towards enhancing strategies that propel ICT implementation. In regard to requisite equipment, NGOs' key decision makers need to invest more on IT as enshrined in Kenya's Vision 2030 which incorporates IT infrastructure in its plan with Konza city being its blue print. The study recommends that employees should be trained appropriately on new processes, technologies and systems in ICT implementation. The management should clearly communicate to employees what has to be done and employees should be involved in setting the standards under which their performance in ICT implementation will be evaluated.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In many developing countries, non-governmental organizations (NGOs) account for a significant share of activities geared towards relieving suffering, promoting the interests of the less privileged, protecting the environment, providing basic social services and undertaking community development (Abbey, 2008). In the past three decades, NGOs have become major players in the field of development by promoting democracy, advocating for human rights, promoting sustainable socio-economic development, providing humanitarian relief, and supporting educational and cultural renewal (Rice and Ritchie, 2009). In their implementation of their strategies, especially in developing countries, NGOs are constantly challenged by the globalization as they strive to support the lawfulness and acceptability of states in the present times (Robina and Nawaz, 2014). Naidu (2009) noted that one of the aspects of globalization experienced in the operations of NGOs is the rapid and radical innovation, development, adoption and diffusion of Information and Communication Technologies (ICT).

The rapid spread of ICT and ever decreasing costs for communication, NGOs in different parts of the world become more integrated. However, one basic question is whether there are appropriate strategies for the implementation of ICT in NGOs. The spread of ICT has led several commentators to argue that these technologies are creating a new channel in which communication of information is the critical resource and basis for the performance of NGOs (Robina and Nawaz, 2014). In remote regions, the disadvantages that arise with isolation can be significantly lessened through access to rapid and inexpensive communication (Torero, 2008). However, it is also perceived that the digital divide is bound to increase and therefore NGOs in some countries, especially in the third world, may face even greater disadvantages (Lawson et al., 2005).

There is empirical evidence that the diffusion and application of ICTs can be a catalyst for the growth of NGOs especially the in the developing countries. In Uganda, the uptake of ICT by NGOs through the provision of computers and accessories, training, technical support and maintenance by the Computers-for-Development Programme has resulted in increased use of

modern ICTs and contributed to reduction of digital divide between the NGOs in Uganda and the global community (Ocen, 2013). In Kenya, despite mounting evidence from an array of studies that have highlight the necessity for ICT adoption and implementation, limited NGOs have made the paradigm shift to fully adopt and implement ICT completely with only 13% NGOs in Kenya are actually successful (Harrison, 2010). A report by the Standish Group (2005) added that notable causes of NGO failure in their projects failure included failure to utilize appropriate technology. This study will explore the various strategies that Kenyan NGOs can for successful ICT implementation to enhance success in their projects and operations.

1.1.1 Strategy

Porter (2004) defines strategy as the goals and practices an organizations adopt to stay afloat amidst turbulence in their areas of operation. David (2010) defines a strategy is the pattern or plan that integrates an organization's major goals, policies and action sequences to a comprehensive whole. One of the hallmarks of a well-managed organization is the ability to optimally reposition itself in the ever-changing environment (Prugsamatz, 2010). According to Grant (2010), a strategy has a variety of views; as a plan, ploy, pattern, position and finally a perspective. As a plan, a strategy deals with how organizational leaders try to establish direction for organizations; while as a ploy it takes one to the realm of direct competition. As a pattern, a strategy focuses on action that is consistent in behavior and is key to achieving organizational goals and as a position, it encourages organizations in their changing environments in order to protect, avoid or subvert any threat to organizational survival. Finally, as a perspective, a strategy is an ingrained way of perceiving the world.

Kim and Mauborgne (2007) pose another perspective of strategy where value information is seen as a cornerstone of strategy through the pursuit of differentiation and low cost. Ansoff (2010) describes strategy as a rule for making decisions. He highlights a strategy as an application of similar principles but at the same time allowing different decisions as the circumstances differ. This definition stands out as it captures and takes cognizance of the changing business environment. Jaunch and Gueck (2008) view strategy as the framework of choices that helps an organization to respond appropriately to environmental requirements to achieve success. Blahova and Knapkova (2011) argue that strategy defines an organization, in

terms of its future, nature and direction. It's thus seen to be concerned with the purpose and scope of an organization as a whole.

1.1.2 Concept of Strategy Implementation

Hill and Jones (2012) define strategy implementation as the process of allocating resources to support the chosen strategies in a given organization. This process includes management activities required to put strategy in motion, institute strategic controls that monitor progress, and ultimately achieve organizational goals. Pearce and Robinson (2005) add that implementation process covers the entire managerial activities including matters related to motivation, compensation, management appraisal, and control processes which entail cascading strategy to all functional areas in such a way as to achieve both vertical and horizontal logic and enhance implementation of policies. These processes suggest that strategies must first be institutionalized before operationalization for successful implementation.

Noble and Mokwa (2009) and (Ramesh, 2011) note that strategy implementation is a complex phenomenon as it involves putting into action a formulated strategy through aligning the organization's resources and motivation of the staff to achieve set goals. Even though strategy formulation is a difficult task for any organization, implementing it throughout the organization is even more difficult (Hrebiniak, 2006). Countless factors may potentially affect the process of implementation. The process of strategy implementation may be faced by a set of challenges which may emanate from the leadership and the management, the resources, the organization structure and culture, the organization politics, the motivation of staff, the involvement and participation of staff, the perception and resistance emanating from staff and other stakeholders (Okumus, 2003; Porter, 2004, Awino *et al.*, 2012, Machuki and Aosa, 2011).

1.1.3 NGOs and ICT Use in Kenya

The Non-Governmental Organizations (NGO) Co-ordination Act, 1990 defines an NGO as a private voluntary grouping of individuals or associations, not operated for profit or for other commercial purposes but which have organized themselves nationally or internationally for the benefit of the public at large and for the promotion of social welfare, development, charity or research in the areas inclusive of, but not restricted to, health, relief, agriculture, education,

industry, and the supply of amenities and services (GoK, 1990). Conventionally, NGOs depend on donors for funding although, overtime, the increased numbers of NGOs competing for donor funding has constrained the amount and level of funding available for each NGO (The Economist, 2000).

According to the NGO Coordinating Board, the growth of the number of NGOs in Kenya has been phenomenon growing at the rate of 400 organizations per year since 2001. By August 2009, the board had cumulatively registered 6,0750organizations (NGO Coordinating Board, 2009). This has been attributed to improvement of democratic space in Kenya and generally improved enabling environment mainly by the government of Kenya. For example the role of NGOs has been recognized as playing a complementary role in the realization of the social and economic pillar of the Vision 2030 (NGO Coordinating Board, 2009).

The increased number of NGOs has resulted in a competitive situation that has compelled NGOs to adopt best practice of governance, accountability, efficiency, effectiveness, timeliness, sustainability. In addition, as they seek to be effective players in the society, NGOs are also facing challenges of adopting to the changing environment so as to survive in the turbulent environment especially with ICT development. ICT development in NGOs has been enhanced by the need for NGOs to run in a more efficient operation.

1.2 Research Problem

Currently, non-governmental organizations operate in an environment that has shifted from an isolated localized village to a wider and far reaching global platform. One of the significant driving force behind this trend is the fast growing sector of Information Communication Technology that is widely adopted across the world. It is imperative for any NGO seriously intending to achieve its goals to embrace ICT. NGOs operating in a dynamic environment are constantly faced with pressure to cut operational cost, become more efficient in running their projects while also remaining socially relevant.

Human rights-focused NGOs are turning to ICT to improve the efficiency of their operations in response to pressure from their stakeholders as well as opportunities offered by ICT in

improving business processes. The process of ICT adoption and implementation has been found to face various challenges including resistance to ICT adoption by staff, lack of appropriate ICT application to suit organizational activities, lack of technical skills, lack of ICT infrastructure maturity in the organization and lack of support by top management (Abdullabhai and Acosta, 2012). In developing countries, the main issue with ICT use in human rights based NGOs is on harnessing the potential of ICTs to address locally relevant concerns (Sahay and Avgerou, 2002).

One of the key failures of many past ICT policy implementation programs in NGOs Africa and the rest of the world is that NGOs are provided with equipment but with little or no support for staff's professional development, national and local ICT policies, and community involvement (Agyei and Voogt, 2011). In addition, while ICT continues to advance in western and Asian countries, African countries still experience a lag in its implementation, and that continues to widen the digital and knowledge divides (Kiptalam and Rodrigues, 2010).

It is important to examine the strategies for ICT implementation in human rights-focused NGOs given their contribution towards creating a culture in the country where human rights and democratic culture are entrenched through monitoring, documenting and publicizing rights violations (Ssewanyana, 2009). Several studies have been carried out on strategy implementation among organizations. Machuki (2005) looked at the challenges to strategy implementation at CMC Motors Group. Koske (2003) studied strategy implementation and its challenges in public corporations using the case of Telkom Kenya Ltd. Awino (2000) looked at the effectiveness and problems of strategy implementation of financing higher education in Kenya by the HELB. Muthuiya (2004) studied strategy implementation and its challenges in nonprofit organizations in Kenya using the case of AMREF. Njagi (2010) investigated the challenges of strategy implementation at Equity Bank Limited.

To the best knowledge of the researcher and from the above studies, no study has been undertaken on strategies for effective implementation of ICT in NGOs in the Kenyan context. Based on this background, there's very limited empirical evidence in the area and this study seeks to bridge the knowledge gap while focusing human rights-based NGOs in Kenya. The

overall objective of this study will be to investigate strategies for effective implementation of ICT in human rights based NGOs in Kenya.

1.3 Research Objective

To investigate strategies for effective implementation of ICT in human rights based NGOs in Kenya.

1.4 Value of the Study

On the practical side, it is anticipated that this study will help the management of human rights based NGOs and other NGOs in appreciating the importance of full ICT implementation and the strategies to achieve that for their organizations' overall performance. It is expected that the findings will guide the management of NGOs can use this information for benchmarking the ICT implementation of their organizations against that of their peers.

It was expected that the findings will guide the management of NGOs in formulating and implementing ICT strategies and policies. This would help in designing implementation frameworks for output.

The findings were anticipated to be of immense significance to the NGO sector in Kenya. It will provide the appropriate models for ICT adoption and inform donors and NGO management in policy formulation as regards strategies for ICT implementation to enhance planning their activities in the developing world.

Theoretically, the study was expected to fill a gap in the literature which is the exploration of the future ICT adoption and diffusion within NGOs and other organizations in Kenya in regard to strategy formulation and implementation. Moreover, strategy scholars and commentators suggest that strategy formulation and implementation is especially critical in NGOs especially for survival. The findings of this research will be useful in enhancing the existing body of knowledge as it will help researchers and academicians to expand their research in Kenya as literature review and contribute to the existing knowledge, address and provide the background information to research organizations, individual researchers and scholars who will want to carry out further research in this area.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a broader context of the study subject in terms of past scholarly works and what other author have written about ICT implementation. This section reviews the correlation between strategies and effective ICT implementation by particularly focusing on training, availability of requisite equipment and infrastructure, organizational leadership and strategic resource allocation as the main strategies. The review also examine theories related to ICT implementation, the conceptual framework and past studies.

2.2 Theoretical Framework

The use of ICT has the potential to enhance and improve the efficiency of operations in NGOS as it facilitates their response to pressure from their stakeholders as exploitation of opportunities offered by ICT in improving business processes. The study on ICT implementation in NGOS cannot not be exhausted without considering the underpinning theories and models of ICT innovation, adoption and diffusion. Numerous theories have been proposed regarding ICT implementation with the aim of providing guidance in identifying the key tenets of ICT use in institutions globally. In this study, the underpinning theories reviewed included; the Open System Systems, Technology Acceptance Model and the Theory of Planned Behavior.

2.2.1 Open System Systems Theory

In the Open System Systems Theory, NGOs are viewed as open socio-technical systems composed of five (5) major, partly overlapping and interdependent sub-systems namely: managerial, structural, psychosocial, goals and values, and technical (Webster, 2006). The human subsystem is composed of project managers, officers, administrators and support staff. The theory that recognizes there is interaction between people and technology in NGO work stations. In order to perform their tasks, people require some defined structure while the NGOs must have technological resources in order to complete tasks.

According to Boudreau and Robey (2005), the subsystem in NGOs interact with the external environment in such a way that bringing change in one would necessarily lead to changes in all the others. Therefore when considering the introduction of innovations in NGOs, Weber (2004) advises that NGOs should take cognizance of the inter-dependencies and interactive first between the subsystems and secondly with the external environment. The subsystems are thus critical elements to be dealt with when attempting to initiate effective ICT implementation. Von Hippel (2005) argues that the open system systems theory can guide ICT implementation study due to its all-encompassing nature to get the total picture of the factors that influence ICT implementation in organizations, as this avoids an overemphasis of some elements over others.

2.2.2 Theory of Reasoned Action (TRA)

According to Theory of Reasoned Action (TRA), behaviour is driven by the behavioral intention, which is one of the functions of individual attitudes and subjective norms of the behaviour in question (Jeyaraj et al., 2006). Rogers (1995) stated that attitude is an individual's positive or negative feelings (evaluative affect) about performing the target behaviour while subjective norm is the person's perception that most people who are important to him think he should or should not perform the behaviour in question. TRA suggests that intention is the main determinant of an individual's behaviour, whereas intention to behave is determined by subjective norms and an individual's attitude towards the behaviour and their perception of it (Ajzen and Fishbein, 2005).

TRA posits that individual behaviour is driven by behavioral intentions where behavioral intentions are a function of an individual's attitude toward the behaviour and subjective norms surrounding the performance of the behaviour (Armitage, 2001). Abdulrahman et al. (2012) advise that since the similarities between people across the organization are not easy to measure, it is also not easy to recommend and create rules that explain how all people make information system use decisions. Still, experienced scholars who analyze employee behavior have presented a useful outline and guidelines of acceptable procedure regarding how employees decide to make use of technology (Ajzen et al., 2007; Jeyaraj et al., 2006; Ramayah and Mohd-Suki, 2006). Bang et al. (2000) contend that the TRA model contains Western cultural biases and other researchers agree and state that the model should be revised or extended (Javalgi et

al., 2005). This sentiment has also been expressed by Ticehurst and Veal (2000) who state culture can also influence the outcomes of the research. Hui (1982) agrees by stating the validity of the TRA theory challenge exists.

Further, Sentosa and Nik (2012) account for certain exceptions to the theory by stating that the aim of the TRA is to explain volitional behaviors. TRA's explanatory scope excludes a wide range of behaviors such as those that are spontaneous, impulsive, habitual, the result of cravings, or simply scripted or mindless because their performance might not be voluntary or because engaging in the behaviors might not involve a conscious decision on the part of the actor. Ajzen (2006) adds that the two constructs are control and guided human action in TRA. These are based on certain outcomes of behavior, appraisal of these outcomes (Ab - Attitude), beliefs about the normative anticipation of others and motivation to comply with this anticipation (SN- Subjective norm). Thus, behavioral beliefs and normative beliefs can be the foundation on which to build any further explanation for certain actions toward a certain target, in this case, towards information systems and their usage.

2.2.3 Technology Acceptance Model Theory

The Technology Acceptance Model (TAM) theory has been used for decades to guide studies aimed at explaining ICT usage behavior (Bagozzi, 2007). The theory delves on analysing what causes potential adopters to accept or reject the use of information technology and predicts attitudes toward the use of the system that is the user's willingness to use the system (Davis, 1989). Under TAM, focus is put on the perceived usefulness or the degree to which a person believes that using a particular system would enhance performance and the perceived ease of use.

Park (2009) and Davis et al. (1989) add that TAM is an adaptation of Theory of Reasoned Action (TRA) specifically tailored for modelling user acceptance of information systems. TAM is therefore considered as one of the well-known models related to technology acceptance and use. It has been found to show great potential in predicting user behaviour of information technology (Park, 2009). According to (Chuttur, 2009), TAM is built on two fundamental elements - perceived ease of use (PEOU) and perceived usefulness (PU). The main mechanisms underlying

perceived ease of use are system design and features whereas the core mean underlying perceived usefulness is effort decreasing (Sentosa and Nik, 2012).

It is empirically evident that TAM has been applied into many contexts and fields investigating user acceptance of information technology among them World Wide Web (Lederer et al., 2000), mobile banking (Lule et al., 2012), multimedia (Lau and Woods, 2008) and healthcare (Chau and Hu, 2002). At the same time, many researchers have also applied TAM to examine the antecedents of both perceived ease of use and perceived usefulness (Porter and Dnthu, 2006; Yu et al., 2003). Saade et al. (2007) add that information systems research reveals that there are different technology adoption and usage patterns when perceived usefulness is taken into account. The determinants of different patterns of user perception and acceptance of information systems across cultures is still unclear.

2.3 ICT Implementation Strategies

The strategies for effective ICT implementation in organizations are many but for the purposes of the study only four relevant factors will be looked into with regard to NGOs. They include leadership and management; availability of requisite equipment and infrastructure; training and development; and strategic resource allocation.

2.3.1 Strategic Leadership and Management

The overall leadership is an important factor in the effective implementation of ICT in NGOs. ICT will be integrated and implemented effectively in NGOs if the leaders and managers in these organizations support them; learn and use them in their administrative tasks; support the rest of the staff in the process of change; and provide sufficient development opportunities for themselves and their staff (Al-Jaghoub and Westrup, 2010). As the core change facilitators, leaders and managers in NGOs carry the responsibility of initiating and implementing ICT use and can facilitate complex decisions to integrate it into the activities and processes in the organizations (Kabbar and Crump, 2006).

Al-Harbi (2014) and Ghamrawi (2013) found that the NGO managers play a major role in ICT implementation. They add that if the managers do not provide adequate support and

encouragement to the employees, a good working environment cannot be created to motivate the rest of organizational employees to experiment with ICT in their operations. In addition, Levin and Wadmany (2005) confirm if the management's attitudes and beliefs are not constructive with regard to ICT implementation, it is likely that ICT will not be accepted or applied fully in NGOs. McChesney (2007) noted that ICT implementation is far from being just a software project: it is a serious organisational change project. The projects requires co-operation, teamwork, and planning for organisational change and are difficult to implement when senior management is too busy to give the project adequate attention. The projects involve major organisational changes as they consist of many functional modules that can span the whole organisation and yet use the same database.

According to Vlach (2008), strategic and transformational leadership behaviours of NGO leadership and management play an essential role in the implementation of large-scale innovation NGOs. Such form of leadership is one of the best styles of leadership that can significantly determine the extent to which technology becomes integrated in organizations (McChesney, 2007). It is also important to identify the factors that impact the strategic and transformational leadership role of NGOs leaders in implementing ICT in their organizations. As leaders of NGOs development, including integrated use of ICT, the management need to have a personal proficiency in computer use (Tusubira and Mulira, 2004). Stensaker et al. (2007) summarizes that organizational management and leadership are crucial in building the ICT infrastructure through finding necessary resources, determining technological structures, and establishing partnerships with other institutions.

2.3.2 Availability of Requisite Equipment and Infrastructure

In ICT implementation, infrastructure means more than computer network capacity (Mitchell, 2009). The increased growth of NGOs has resulted into the need to initiatives to upgrade Internet access for several African countries to speed-up access and lower costs of connecting to high-speed internet backbones. However, the infrastructural readiness for this shift remains a challenge and a constraint impacting the progress among the steepest challenges in ICT implementation (Aczel, 2008). The availability of requisite equipment and well-connected infrastructure appears to be inadequate at organizational level as well as in the higher reaches

of policy-making in most of the developing countries (Soule, 2008). It is noted that ICT infrastructure is essential to develop and implement all projects of which NGOs form an indispensable part (Reilly et al., 2003; GoK, 2006; GoK, 2007). NGOs must therefore step up and join the country in setting out infrastructural development in terms of power, internet, telecommunications installations among others across all towns and. The availability of ICT infrastructure is key to accelerated run towards the achievement of an information society status (ITU-WTD, 2003).

In India and Namibia, literature indicates inequitable distribution of ICT resources within nations and ICT implementation suffers from relatively low attention accorded by government, private sector and the general public (Rumble, 2007). Momanyi (2006) adds that the network computing lag behind in developing countries in comparison to the developed world. African NGOs must adopt strategies that show intent to invest in ICT and contribute to nationally-coordinated initiatives to plan, set policy and develop collective purchasing strategies for ICT equipment and infrastructure. Ameil (2006) and Davis (2007) warns that NGOs should not view "digital divide" in simple terms of computers and software but rather consider the full scope of infrastructural resources necessary for effective ICT implementation. According to Ryle (2008), cultural values and existing infrastructural constraints can inhibit the ICT implementation.

2.3.3 Organizational Core Competencies and Staff Training

According to Badii (2003), most end-users from a non-technical background and particularly those from developing countries to a large extent do not know what technology can do for them. This according to him is a direct result of the lack of exposure while in 'school. Students who did not get hands on training in technology while in school were noted to have a different orientation to how they accomplish tasks and often tend to shy away from using technology in favour of manual methods even once they enter the workforce (Mansel, 2006).

Most of NGOs have been found not to be in the financial position to hire the best technical experts and thus adaptation of technology is often slow (Chacha, 2004). Chacha (2004), while contributing on ICT training in institutions in Africa, noted that there has been insufficient training and re-skilling of end users as well as technical staff that support the systems in

institutions. This is coupled with the inability of many institutions to recruit and retain qualified ICT staff. Stehr (2000) add that small organizations and particularly those run by the community are often challenged when it comes to attracting and retaining skilled staff compared to large for-profit firms.

Amoako-Gyampah and Salam (2003) evaluated the impact of training on perceived usefulness and perceived ease of use during technology implementation in Enterprise Resource Planning (ERP). They found that training and building of core competences have direct influence on the shared beliefs that users form about the benefits of ICT in organizations. It is recommended that NGOs should arrange training sessions, in accordance with the current technological change so that employees acquire the requisite skills that enhances voluntarily acceptance of new ways of official working (Amoako-Gyampah and Salam, 2003).

Repkine (2008) recognizes that people skills are as important as technology and listening to workers' views about how ICT implementation could improve the efficiency and effectiveness of services delivery. The absence of maintenance and technical assistance skills as a hindrance and has a direct impact on employees' confidence because of their constant fear of technical breakdowns or failures (Kozma, 2008). Employees may have no interest in using ICT if they feel they will face technical problems that require a long time to fix (Jones, 2004). Ensminger (2004) stresses the significance of developing technical and support skills in ICT to aid in the process of ICT implementation.

2.3.4 Strategic Financial Resource Allocation

The scarcity of financial resources is one of the issues that almost all developing countries face in ICT implementation (Lim and Khine, 2006). The available resources are spent mostly on basic office supplies and overhead organizational expenses. In a sense, investing in ICT is often regarded as a long term issue which means ICT implementation is relatively not an urgent issue resulting into a vicious circle between scarcity of funds and underdevelopment of ICT in organizations. In addition, although the cost of hardware (PCs and peripherals) is decreasing rapidly, the cost of the IT professionals who can teach the new technology remains to be the biggest burden followed by software related costs (Kariuki, 2009).

Mintzberg and Quinn (1992) found that successful implementation of ICT requires the necessary financial resources associated with acquiring and implementing the new technologies, innovation accompanied by the development of best practices in organizational policies. Newhouse (2002) argues that financial resource availability or lack thereof has a strong relation to the ICT implementation. Lim and Khine (2006) pointed out that the availability of technical support without the financial resources makes ICT implementation and use hard to integrate at organization level.

Corder (2000) identified funding as an essential condition (and major limitation) in many studies of NGOs technology adoption. Corder (2000) added that getting more money does not necessarily imply means successful ICT implementation because funding donors are often moved by the social issues at the heart of a NGOs' vision and mission statement. It is therefore evident that funding somehow needs to be flexible to allow for spending across mission objectives, administration and ICT needs. A study by Standish Group (2005) shows that budget is an issue identified by both ICT vendors and end-users as a factor that limits the implementation of ICT.

2.4 Empirical Review

A study by Kinuthia (2012) provides evidence of the use of IT investments by Kenyan NGOs and the relationship of this investment on their performance. The study targeted all the NGOs operating within Nairobi County and utilized stratified sampling technique in coming up with a sample for the study. The study found computers (desktop, laptops, Ipad), telecommunication (Phones, Fax, Radios), network (Internet, E-mail, Intranet), business applications (Accounting Packages, Project management packages) as the main IT tools used by NGOs. Particular to the current study, it was established that only 10% of the NGOs' investment is geared towards IT compared to the overall organization total assets. This depicts that a substantial amount of investment needs to be added into NGOs' IT investment given that the adoption of IT for organizational sustainability attracts donor funding and collaboration with other development partners.

A study carried out by Underwood (2004) on the adoption of ICT within Indonesian Small and Medium Enterprises (SMEs) with the assessing the actual factors influencing Indonesian

ICT adoption and implementation decisions. The apparent factors were two fold; social and economic. A social factor highlighted was in the attitudes, awareness and comfort level of ICT adoption and implementation. Most of the staff in the SMEs were found to be apprehensive and exhibiting low acceptance of ICT solutions. From the economic perspective, the cost of computers and software were relatively high and therefore an inhibitive factor in the adoption and implementation of ICT solutions.

Ghobakhloo et al. (2011) investigated information technology implementation success within SMEs in developing countries. They conceptually developed an interactive model of IT implementation success and test it empirically in Iran as an example of a developing country. Their study proposed research model and hypotheses were tested using survey data from a sample of 121 Iranian manufacturing SMEs. The study found that IT adoption and implementation success is affected by all IT users' knowledge and involvement, CEO support and external assistance. The study provided significant support for the arguments made in prior IT literature by testing some determinants of IT implementation success in the prior models (Delone and McLean 2003) and also contributed to the research on resource-based theory of the firm (Caldeira and Ward 2003).

Jeyaraj et al. (2006) found that an ICT system implementation always entails both organizational and individual changes and therefore user adoption and establishing the use of ICT systems have proven challenging in organizations. The challenges and problems associated with the implementation and adoption of ICT systems have led scholars and practitioners to seek to understand and manage the processes and phenomena related to the topic, spawning an extensive literature on the field. According to Wong (2006), NGOs managers need better to inform themselves of their employees' perceptions and they are significantly more sanguine about the success of ICT implementation than the employees working under their supervision. NGOs leaders should take this divergence of view into account when developing and resourcing NGO projects. This is consistent with the findings in Brazil where de Fatima (2007) suggests that creative ICT implementation has been hampered by poor decisions by organizational managers about the local deployment of ICT resources. She worries about insufficient attention

to measures, such as ongoing professional development, that would sustain the beneficial effects of initial technology investments.

Nyaga (2014) investigated challenges facing effective ICT implementation in selected Public Secondary Schools in Nakuru North District Nakuru County. The research design used was a descriptive survey design. Research instruments employed were questionnaires with open-ended and structured questions. The study found few computers and computer labs, insufficient internet connectivity, power unreliability and lack of sufficient equipment such as LCD projectors, speakers among others as the main inhibitors of effective ICT implementation. The study also concluded that efforts by the ministry to sustain ICT implementation projects in schools are very minimal especially in the rural districts. In addition the study also concluded that even though there are few ICT specialists the specialists are there as there a number of people who are computer literate.

2.5 Conceptual Framework

The conceptual framework depicted in Figure 2.1 aims at identifying strategies for effective ICT implementation in NGOs in Kenya. The independent variables were: strategic leadership and management; availability of requisite equipment and infrastructure; organizational core competences and staff training and strategic financial resources allocation while dependent variable was effective ICT implementation.

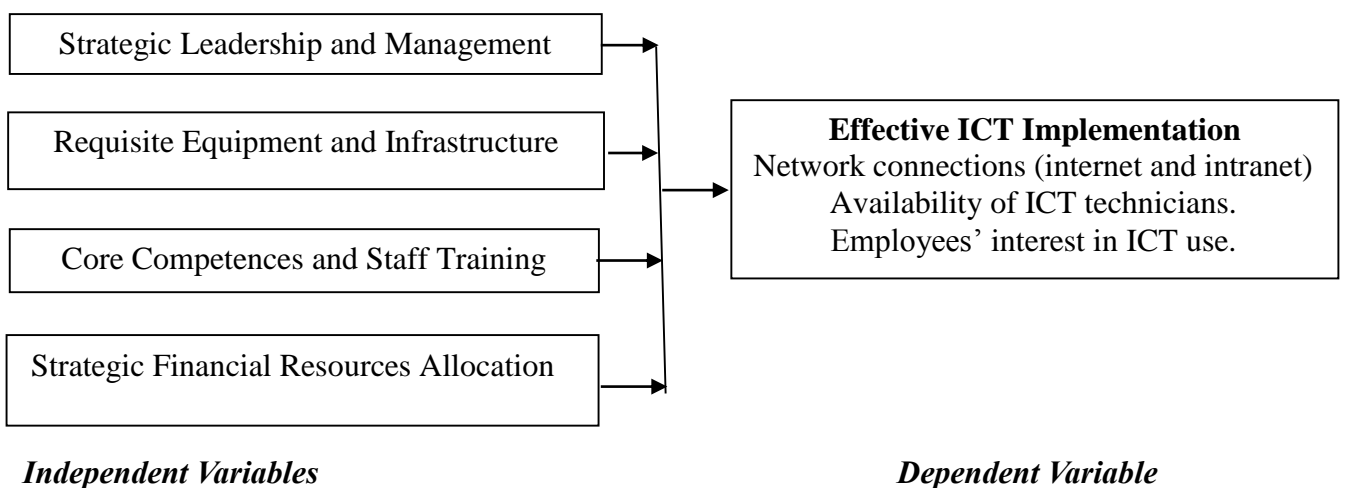


Figure 2.1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents information on the methods adopted for the study. It describes the procedural plan that will be used by the researcher to validly, objectively, economically and accurately answer the research questions. This section of the study therefore described the research design, target population, sample size and procedure, data collection method, pre-test of the instrument, data collection and analysis technique and data presentation.

3.2 Research Design

Research design refers to the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in the procedure (Babbie, 2008). The research design that was used in the study was descriptive in nature. This is most appropriate since the researcher aimed to only gather information about the variables as they occur within the sample population without manipulating them (Cooper and Schindler, 2006). A census was attempted since the sample was of manageable size.

3.3 Target Population

A study population encompasses the entire groups of individuals, objects, items, cases, articles, or things with common characteristics existing in space at a particular point of time (Kothari, 2008). The researcher targeted all the human rights NGOs in Nairobi County that are active and have been in operation for the last two years. At the time of the study, there were a total of 141 human rights NGOs that are registered and have been active for over 2 years (Appendix I).

3.5 Data Collection Method

Data was collected using a semi-structured questionnaire which had both open and close ended questions to avoid being too rigid and quantify data especially where structured items were used while gathering information from the 141 respondents in the human rights NGOs in Nairobi City County (Kothari, 2008). The questionnaire was used because of its economy, also to ensure anonymity, permit use of the standardized questions and has uniform procedures, provide time for subjects to think about responses and it is easy to score (Singh, 2006). This method helped the researcher in collecting adequate enough information, which would have otherwise been

impossible using interviews and observations. The questionnaires were self-administered where the instruments will be dropped and picked later on.

3.6 Pre-Testing the Instrument

The instrument was pre-tested on four human rights NGOs outside Nairobi City County. Three respondents of differing ranking from each NGOs were selected giving a total of twelve instruments. According to Odindo (2008) the pretest sample is between 1% and 10% depending on the sample size. The pre-tested instruments were analyzed to determine their validity and reliability and revised accordingly.

3.6.1 Validity of the Instrument

Mugenda and Mugenda (1999), defines validity as the accuracy and meaningfulness of inferences which are based on the research results. Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under the study. It is the correctness and reasonability of data. Validity was ensured by passing the research instrument questions through a panel of experts and revised accordingly. The accuracy of data to be collected largely depends on the data collection instruments in terms of validity. Validity as noted by Robinson (2002) is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study.

3.6.2 Reliability of the Instruments

Mugenda and Mugenda (1999), defines reliability as a measure of the degree to which a research instrument yields consistent result or data after repeated trials. Berg (1998) explains that the use of consistent and systematic line of questions for even unanticipated areas is particularly important for reliability and for possible replication of a study. The researcher used the consistent and systematic questionnaires. The questions were related to the subject of the study and organized into the themes of the study. The reliability of the research instrument was tested using Cronbach's alpha value. The higher the value of the coefficients, the better the measuring instrument in terms of reliability. Cronbach's Alpha will be used to measure internal consistency by determining the reliability of the questionnaire that covers every objective of the study. All the four scales were evaluated to ensure they attain the prescribed threshold of 0.7 and therefore reliable (Mugenda and Mugenda, 2003).

3.7 Data Analysis

The data collected was both quantitative and qualitative data. Quantitative data was analyzed using descriptive statistics and also factor analysis. Factor analysis is a collection of methods used to examine how underlying constructs influence the responses on a number of measured variables (Babie, 2008). Factor analyses was performed by examining the pattern of correlations between the observed measures. Measures that are highly correlated (either positively or negatively) are likely influenced by the same factors, while those that are relatively uncorrelated are likely influenced by different factors. The qualitative results was be presented using tables and figures for easy understanding and interpretation.

Qualitative data was analyzed using content analysis. This included analyzing words or pictures by collecting data, recording people experiences not selecting and pre-chosen aspect. The Statistical Package for Social Sciences (SPSS) aided the analysis. The results were presented and organized in tables for easy understanding and this was in consistent with the specific objectives.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.1 Introduction

The study sought to investigate the strategies for effective implementation of information and communication technology among human rights NGOs in Nairobi, Kenya. This chapter covers the data analysis, results and discussion of the study findings. This chapter covers the data analysis, results and discussion of the study findings. The presentation of the data analysis, results and discussion is founded on the classification of questions in the questionnaire used.

4.1.1 Response Rate

The researcher targeted 141 human rights NGOs in Nairobi County. As shown in Table 4.1, out of the 141 questionnaires that were administered, 82 filled questionnaires were collected. This translates into 58% return rate which is satisfactory according to Babbie (2008) who argues that any response of 50% and above is adequate for analysis. The response rate largely demonstrates a willingness of the respondents to participate in the study.

Table 4.1: Response Rate

Response	Frequency	Percentage
Responded	82	58%
Not responded	59	42%
Total	141	100%

4.1.2 Reliability Analysis

A pilot study was undertaken to pre-test both the validity and reliability of data collected using the questionnaire before the main study. The results in Table 4.2 shows a summary of the findings where the Cronbach's Alpha values were 0.9, 0.7, 0.8, and 0.8. According to George and Mallery (2003), closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. In addition, George and Mallery (2003) provide the following rules of thumb: Cronbach's alpha coefficient > 0.9 = Excellent; Cronbach's alpha coefficient > 0.8 = Good, Cronbach's alpha coefficient > 0.7 = Acceptable; Cronbach's alpha coefficient > 0.6 = Questionable; Cronbach's alpha coefficient > 0.5 = Poor, and Cronbach's alpha coefficient < 0.5 = Unacceptable.

The results show that that the instrument consistently returned high scores averaging 0.8 which is good and highly acceptable since Cronbach's alpha coefficient of over 0.7 qualifies an instrument as reliable and consistent (Nachmias and Nachmias, 2006; Kothari, 2008; Sekaran, 2006). The research

instrument therefore had relatively high internal consistency as a reliability coefficient of 0.70 or higher is considered acceptable in most social science research situations.

Table 4.2: Reliability Coefficients

Scale	Cronbach's Alpha
Strategic Leadership and Management	0.9
Availability of Requisite Equipment and Infrastructure	0.7
Organizational Core Competences	0.8
Strategic Resource Allocation	0.8

The results show that the questionnaire was therefore used as the data collection tool for this strategic planning study. The relevance of the instrument was tested through face validity in which the degree to which statements and questions on the instrument adequately represented the characteristics being measured. This was done through consultation with peer groups and university dons from within the University of Nairobi giving an objective judgment. The consultations entirely came to an agreement on validity of the instrument. Content validity was ensured by having the questionnaire undergo peer preview by a scholar in the study area.

4.2 Background Information

This section investigated the demographic data of the respondents as background information of the study. The information presented in this section include the gender, age bracket, level of education, position held and the years of experience working with their NGOs.

4.4.1 Gender of the Respondents

The research sought to find out the gender of the respondents. Table 4.3 shows a summary of the findings on the gender of the respondents.

Table 4.3: Gender of the Respondents

Gender	Frequency	Percent
Female	34	41%
Male	48	59%
Total	82	100%

From the study, majority of the respondents were male staffs, shown by 59%, while 41% of them comprised of female staffs. The findings show that the human rights NGOs in Nairobi had both male and female members; however the majority of them are males. This implies that the views expressed in these findings are gender sensitive and can be taken as representative of the opinions of both genders as regards to the strategy for effective implementation of ICT in NGOs in Nairobi

City County. As such, the views expressed in this study are gender sensitive and hence are likely to be supported by all.

4.4.2 Age of the Respondents

The study investigated the composition of the respondent in terms of age. As shown in Table 4.4, majority were aged between 26 and 35 years comprising 56% of the respondents, 31% of the respondents were aged between 18 and 25 years, 12% of the respondents were aged between 36 and 45 years, while 2% of the respondents were aged 45 years above.

Table 4.4: Age of the Respondents

Age	Frequency	Percent
18 – 25 years	25	31%
26 – 35 years	46	56%
36 – 45 years	9	12%
Over 45 years	2	2%
Total	82	100%

The study findings show that more than majority of them were well distributed in terms of age and that they are active in productivity and hence can contribute constructively in this study.

4.4.3 Level of Education of the Respondents

Human rights NGOs employ staffs in different work stations hence different academic qualifications. The study thus sought to establish the highest academic qualifications attained by the respondents. As shown in Table 4.5, 57% of the respondents had acquired a Bachelor’s or undergraduate degrees level of education, 29% of the respondents indicated that they had acquired college certificates or diplomas, while 13% of them indicated that they had acquired post graduate level.

Table 4.5: Level of Education of the Respondents

Level of Education	Frequency	Percent
Diploma or Certificate	25	29%
Undergraduate Degree	46	57%
Masters Degree	11	13%
Total	82	100%

These findings show that most of the respondents had at least an undergraduate degree and hence understood the information sought by this study. In addition, the findings imply that all the respondents were academically qualified and also familiar with their duties and could dispense them effectively in terms of professional work ability and performance.

4.4.4 Designation of the Respondents

Further the study sought to establish the various positions held by the respondents in their departments. According to the study findings in table 4.6, 35% of the respondents indicated that they were supervisors in the NGO, 29% of them were assistant managers, and 23% were employees while 13% of them indicated that they were directors/managers.

Table 4.6: Designation

Designation	Frequency	Percent
Director/Manager	11	13%
Assistant Manager	24	29%
Supervisor	29	35%
Employee	19	23%
Total	82	100%

These findings show that the respondents that participated in the study were mainly those involved in the formulation and implementation of strategies for ICT in NGOs.

4.2.5 Length of Experience

The length of service and working in an organization determines the extent to which one is aware of the issues sought by the study. The respondents were asked to state the various number of years worked at their present work stations. Table 4.7 shows a summary of the results.

Table 4.7: Length of Experience

Length of Experience	Frequency	Percent
1 – 3 years	4	5%
4 – 6 years	59	72%
7 – 10 years	13	16%
More than 10 years	6	7%
Total	82	100%

Majority (72%) respondents had worked for 4 – 6 years, 16% had worked for 7 – 10 years, 7% had worked for over 10 years and 5% had worked for 1 – 3 years. This results imply that most of the respondents participating in this study had been working in NGOs long enough and therefore conversant of the information that the study sought pertaining to the strategies for effective implementation of ICT in NGOs. Thompson *et al.* (2008) emphasized the need to retain employees that will have enough experience for all stages of strategy formulation and implementation. This study found that majority of respondents been working in their respective NGOs for at least 4 years indicating they are fairly experienced in strategy implementation.

4.3 Strategic Leadership and Management

In section 4.4, the study sought to establish the effect of leadership and management on effective implementation of ICT in NGOs. The study attempted to establish whether the organization leadership understood ICT strategy implementation. As shown in Table 4.8 shows a summary of the findings on where most (68%) of the respondents indicated that their leadership and management understood ICT strategy implementation process 32% indicated that their management had no understanding of ICT strategy implementation.

Table 4.8: Leadership and Management Understanding of ICT Strategy Implementation

Response	Frequency	Percent
Yes	56	68%
No	26	32%
Total	82	100%

The findings show that NGOs' management understand ICT strategy implementation process to some extent. However, the NGOs need to build capacity for the 32% who were indicated to have no understanding of the process. Vlach (2008) also found that strategic and transformational leadership behaviours of NGO leadership and management play an essential role in the implementation of large-scale innovation NGOs. Such form of leadership is one of the best styles of leadership that can significantly determine the extent to which technology becomes integrated in organizations (McChesney, 2007).

The respondents were asked to indicate whether the management's activities are based on the organization's ICT strategy implementation plan. Table 4.9 shows a summary of the findings. As depicted by the results in Table 4.9, most (63%) of the studied respondents indicated that management was determined for ICT implementation through their activities.

Table 4.9: Management Activities and ICT Strategy Implementation

Response	Frequency	Percent
Yes	52	63%
No	30	37%
Total	82	100%

The respondents explained that the management activities are in line with ICT strategy implementation's plan. However, a significant number of the respondents representing 37% felt that management's activities are not in line with ICT strategy implementation plan.

Attempts were also made to establish the parties' involvement in strategy implementation. On a 5-point Likert scale where 1-1.499 not at all, 1.500 - 2.499 was little extent; 2.500 - 3.499 was moderate extent; 3.500 - 4.499 was large extent and 4.500 - 5.000 was very large extent, the respondents were required to rate the extent to various parties were involved in guiding the process of ICT implementation.

Table 4.10: Parties Involved Guiding ICT Strategy Implementation Process

Party	Mean	Standard Deviation
a) The Board/Directors	3.00	1.06
b) The Chief Executive Officer (CEO)	3.65	1.17
c) Functional/Business Managers	3.95	1.99
d) Staff	3.82	0.64
e) Subordinate staff	3.68	1.12

As shown in Table 4.10, most of the respondents agreed that CEOs (mean score of 3.65); Functional and Business Managers (mean score of 3.95); general Staff (mean score of 3.82) and Subordinate staff (3.68) are involved in ICT strategy implementation to large extent. However, a significant number were neutral on the involvement of the authorities' boards in ICT strategy implementation (mean score of 3.00).

The prevailing management styles play a crucial role in ICT implementation. Study findings reveal that the most effective management was democratic chosen by with majority (69%) of respondents, followed by Bureaucratic chosen by 14% of respondents. Neurocratic style was chosen as the most effective by 10.6% of respondents while authoritarian style was chosen by 4% of respondents. The least effective style according to the findings was Laissez Faire with 3% of respondents. The findings are presented through Table 4.11.

Table 4.11: Management Styles

Management Style	Frequency	Percent
Authoritarian	3	4%
Democratic	57	69%
Bureaucratic	11	14%
Neurocratic	9	10%
Laissez Faire	2	3%
Total	82	100%

Source: Research Data (2015)

The findings show that the road Authorities have adopted various management styles will suit particular steps in ICT implementation and are in line with findings of Mulube (2009) and Anand

et al. (2009) who concluded that different management styles exist in organizations for effective ICT implementation. According Leting (2009), people are motivated and creative only under a particular type of management.

On a 5-point Likert scale where 1-1.499 strongly disagree, 1.500 - 2.499 was disagree; 2.500 - 3.499 was neutral; 3.500 - 4.499 was agree and 4.500 - 5.000 was strongly agree, the respondents were required to indicate the level of agreement with the various aspects relating to commitment and support of the top management towards ICT implementation. Table 4.12 shows a summary of the findings.

From the data, the agreed that there's evidence of management's vision for strategy implementation from management (mean score of 3.68), management support for strategy action plans through strategy implementation programs (mean score of 4.43) and management mobilization of staff towards organization vision and strategies (mean score of 3.95). These findings are consistent with those of Boylen et al. (2005) who concluded that top management support facilitates a working environment that promotes the effective strategy implementation in an organization.

Table 4.12: Top Management Commitment and Support for ICT Implementation

Top Management Commitment and Support	Mean	Std. Dev
a) Evidence of management's vision for strategy implementation from management	3.68	1.11
b) Evidence of management support for strategy action plans through strategy implementation programs.	4.43	1.17
c) Management's support for commitment of resources strategy implementation	3.06	0.76
d) Management mobilization of staff towards organization vision and strategies.	3.95	1.99
e) Management's proactivity in creating climate in which strategy implementation is encouraged and learning is facilitated	4.27	0.53

Source: Research Data (2015)

The findings also show that the management is proactive in creating climate in which strategy implementation is encouraged and learning is facilitated (mean score of 4.27). According to Aube' et al. (2007), the commitment of the management also enhances employees' commitment which positively influences ICT implementation.

4.4 Availability of Requisite Equipment and Infrastructure

ICT strategy implementation requires that an institution achieves a reasonable measure ICT implementation. The study sought to establish whether NGOs have the required and reliable infrastructure for ICT strategy implementation process. As shown in Table 4.13, 57% of the studied population agreed that their NGOs have the required and reliable infrastructure for ICT strategy implementation process while a significant number of the respondents, equivalent to 43%, indicated that NGOs do not have the required and reliable infrastructure for ICT strategy implementation process.

Table 4.13: NGOs have Reasonable Measure of E-Readiness Status

Response	Frequency	Percent
Yes	47	57%
No	35	43%
Total	82	100%

These results imply that the NGOs are yet to achieve a reasonable measure of e-readiness status to fully implement ICT strategy. This may be attributed to high IT cost, Government policy towards IT, underutilization of existing technologies, digital illiteracy, lack of trained manpower and inadequate IT exposure and infrastructure that is common in most of the developing countries (Mutula and Brakel, 2006). These findings can be linked with the open systems theory which recognizes there is interaction between people and technology in NGO work stations and that in order to perform their tasks, people require some defined structure while the NGOs must have technological resources (equipment and softwares) in order to complete tasks.

Von Hippel (2005) argues that the open system systems theory can guide ICT implementation study due to its all-encompassing nature to get the total picture of the factors that influence ICT implementation in organizations, as this avoids an overemphasis of some elements over others.

Based on the findings that NGOs are yet to achieve a reasonable measure of e-readiness status to fully implement ICT strategy, 64% of the respondents unanimously reiterated that, to a great extent, there is need for the NGOs to acquire new ICT system and infrastructure for ICT implementation, 19% of the respondents indicated that, to a very great extent, NGOs need to acquire new ICT system and infrastructure for ICT while 17% of the studied population stated

that, to a moderate extent, NGOs need acquire new ICT system and infrastructure for ICT implementation. Table 4.14 shows a summary of the findings.

Table 4.14: Extent to which New ICT System and Infrastructure Needs to be acquired

Extent	Frequency	Percent
Moderate Extent	12	17%
Great Extent	45	64%
Very Great Extent	13	19%
Total	70	100%

The findings indicate that NGOs' key decision makers need to invest more on IT as enshrined in Kenya's Vision 2030 which incorporates IT infrastructure in its plan with Konza city being its blue print (Kenya Vision, 2030).

On a 5-point Likert scale where 1-1.499 Not at All, 1.500 - 2.499 was Least Extent; 2.500 - 3.499 was Moderate Extent; 3.500 - 4.499 was Great Extent and 4.500 - 5.000 was Very Great Extent, the respondents were required to indicate the extent to which various aspects of IT infrastructure in affect ICT implementation in NGOs.

Table 4.15: Aspects Relating to IT Infrastructure for ICT Implementation

Benefit	Mean	Std. Dev.
a) Information technology infrastructure is necessary for ICT implementation	3.5152	0.7550
b) IT infrastructure in NGOs is inadequate to support the implementation of ICT.	3.9322	1.4923
c) There is lack of staff with required IT-knowledge at the NGOs for ICT implementation	4.5022	1.3883

As shown in Table 4.15, the studied population strongly agreed that there is lack of staff with required IT-knowledge for ICT implementation in NGOs. They also agreed that information technology infrastructure is necessary for implementation of ICT (mean score of 3.5152) while the IT infrastructure in NGO is inadequate to support the implementation of ICT (mean score of 3.9322). Infrastructure is important and will be the backbone of the system from the servers, network and work stations and issue of security and data integrity (Diamond and Khemani, 2006).

4.5 Organizational Core Competences

Capacity building is a major factor affecting the success of ICT implementation in organizations. This section sought to establish the relationship between employees learning and skills development and ICT implementation in NGOs.

The study sought to establish whether the staff at NGOs had the required skills, abilities and experience for ICT implementation. Table 4.16 shows a summary of the findings. Majority (76%) of the respondents indicated that staff at the firm have the required skills, abilities and experience for ICT implementation while a significant number of the respondents represented by 24% showed that staff at the firm don't possess the required skills, abilities and experience for ICT implementation.

Table 4.16: Staff Have Required Skills, Abilities and Experience for ICT Implementation

Response	Frequency	Percent
Least Extent	62	76%
Moderate Extent	20	24%
Total	82	100%

Capacity building and training need to be scoped during the early stage of the need assessment process. The process should allow for the identification of various user groups, assess the level of knowledge, recruiting needs, and define the scope of the training curricula, targeting the various key audiences (Balogun, 2003). Training should begin from the beginning of the reform, starting by those who will be most immediately affected by ICT implementation. A broader and permanent training programme should also be developed and implemented. The theory of reasoned action suggests capacity building increases one's intent, behaviour, and attitude towards technology adoption and use (Ajzen and Fishbein, 2005).

The respondents were requested to indicate their level of agreement on whether NGOs has adopted capacity building through training in ICT implementation. As shown in Table 4.17, most (49%) of the respondents agreed, 24% of the respondents strongly agreed while 10% disagreed. A significant number of the respondents represented by 17% neither agreed or disagreed.

Table 4.17: Employees' Empowerment Programs in ICT Implementation

Response	Frequency	Percent
Disagree	13	16%
Neutral	15	18%
Agree	38	46%
Strongly Agree	16	20%
Total	82	100%

The study findings imply that NGOs are forging forward to ensure that ICT implementation procedures and measures are in place by training its employees. Training and capacity building programs are defined to improve employees and organizational capabilities. These findings are consistent with those of Hendriks (2012); that training and development programs should be based on

training of and management needs identified by a training need analysis so that the time and money invested in training and management development is linked to the core business or goals of the organization during ICT implementation.

The study sought to establish whether NGOs encourage employees to develop skills and competences for strategic change. Table 4.18 shows a summary of the findings where most (64%) of the respondents indicated that NGOs support staff skills development in strategic change. Still, a significant number of the respondents making up 36% of the studied population showed that the firm does not support staff skills development in ICT implementation.

Table 4.18: NGOs Support for Skills Development in ICT Implementation

Response	Frequency	Percent
Yes	52	64%
No	30	36%
Total	82	100%

The findings show that while NGOs acknowledge that strategic change involves considerable their awareness and capacity building as noted by Gallagher (2007), limited support as indicated by 36% of the respondents maybe a hindrance to ICT implementation success although this be remedied by training.

Further, the respondents were requested to indicate the number of trainings had undertaken between 2010 and 2014 and the resulting increase in ICT implementation. Table 4.19 and Figure 4.5 show a summary of the study findings.

Table 4.19: Trainings and Increase in ICT implementation

Year	No. of Training	Percentage Increase in ICT implementation
2010	7	9%
2011	11	12%
2012	16	14%
2013	19	17%
2014	25	23%

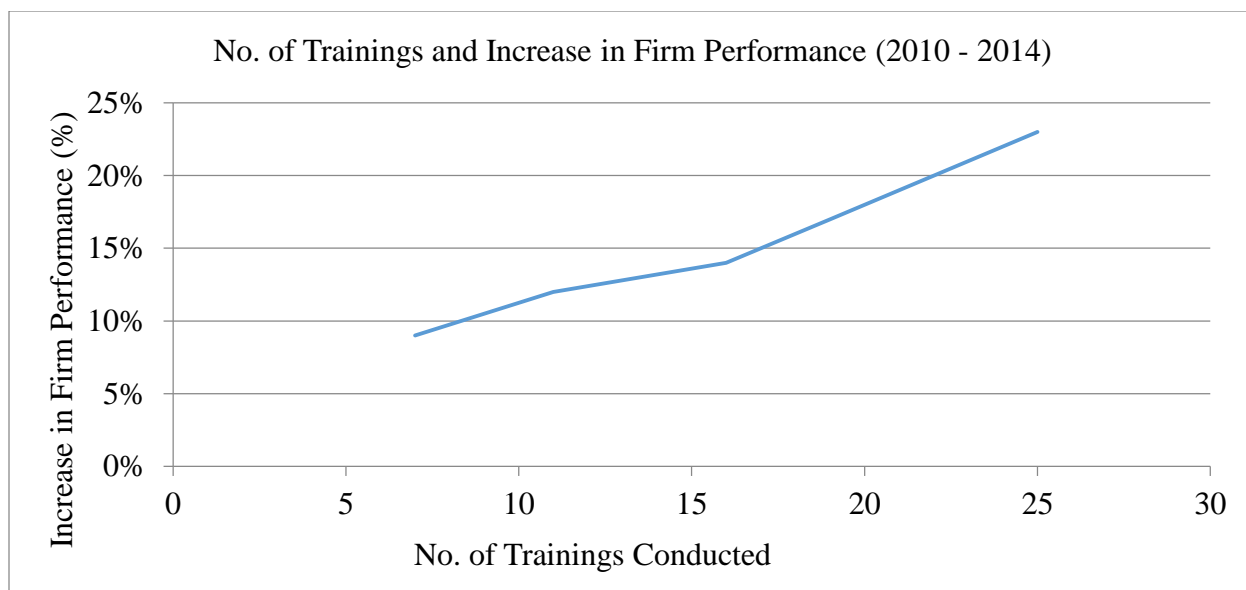


Figure 4.2: Trainings and Increase in Firm Performance

The findings show a 14% increase in ICT implementation from 9% in 2010 to 23% in 2014 following the conduction of 7 and 25 trainings respectively by NGOs.

Further, the study sought to establish the extent to which employee learning and skills development affected ICT implementation in NGOs in the previous 5 years. As depicted in Table 4.20, most (52%) of the respondents unanimously indicated that employee learning and skills development affect ICT implementation to a great extent; 27% indicated to a very great extent while 21% indicated to a moderate extent. The findings show that training and capacity building programs in strategic are important in improving ICT implementation. According to Hendriks (2012), employee learning and skills development lead to firms achieving their core business or goals during ICT implementation.

Table 4.20: Extent to Employee Learning and Skills Development Affect ICT Implementation

Extent	Frequency	Percent
Moderate Extent	17	21%
Great Extent	43	52%
Very Great Extent	22	27%
Total	82	100%

4.6 Resource Allocation

In this section, the study sought to establish the relationship between resource allocation and ICT implementation in NGOs. The study sought to establish whether the resources for strategy implementation in their NGOs were adequate. As depicted in Table 4.21, 40% of the studied

population unanimously indicated that the resources were adequate for ICT implementation in NGOs; 28% indicated that the resources were quite adequate while 13% of the respondents indicated that the resources were very adequate. However, 18% of the respondents indicated that the resources were inadequate.

Table 4.21: Adequacy of Resources for ICT Implementation

Adequacy	Frequency	Percent
Very inadequate	6	7%
Quite inadequate	9	11%
Adequate	33	40%
Quite adequate	23	28%
Very adequate	11	13%
Total	82	100%

These results show that the adequacy of resources have an influence on ICT implementation in NGOs. These findings are in line with the findings of Beeby and Simpson (1995) who have indicated that differences in implementation occur due to adequacy of resources possessed by organizations which can improve or reduce the effect of particular goals in the organization if well utilized or underutilized respectively.

The study sought to establish whether the resources were suitable for ICT implementation in NGOs. As shown in table 4.22, 43% of the studied population indicated that the sources in the firm were suitable for ICT implementation; 29% indicated that the resources were quite suitable while 15% perceived that the resources were very suitable. Only 13% of the studied population indicated that the resources in NGOs were quite unsuitable for ICT implementation.

Table 4.22: Suitability of Resources for ICT Implementation

Suitability	Frequency	Percent
Quite unsuitable	11	13%
Suitable	35	43%
Quite suitable	24	29%
Very suitable	12	15%
Total	82	100%

These findings are similar to those of Lim and Khine (2006) who established suitability of resources as one of the issues that almost all developing countries face in ICT implementation.

The study sought to establish the extent to which resource allocation affected ICT implementation in NGOs in the previous 5 years. As depicted in Table 4.23, most (39%) of the studied population

indicated that resources contribute to ICT implementation to a very high extent; 26% indicated high extent while 21% indicate moderate contribution of resources to ICT implementation. Only 15% indicated that organizational resources contribute to ICT implementation to a low extent.

Table 4.23: Extent to Which Resource Allocation Affect ICT implementation

Extent	Frequency	Percent
Very High	32	39%
High	21	26%
Moderate	17	21%
Low	12	15%
Total	82	100%

These findings show that organizational resources can be a constraint for ICT implementation. It proposed that organizational resources are directed towards management of dependencies arising out of critical resources required for its output and effective management of these dependencies results in survival. According to Jofre (2011), management often finds it necessary to prioritize its strategies to make a judgment about which ones are most critical to implement given the finite or even scarce organizational resources available.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers summary of the study, conclusion and recommendations. The summary of the study entails an outline of how the study was conducted and findings. The conclusions and recommendations of the study are based on the study findings.

5.2 Summary of the Findings

A statistically acceptable number of the targeted sample returned the questionnaires, all of which were analyzed. The use of drop and pick method improved the response rate while another method of personalizing the introduction letter and motivating the research assistants helped keep the field participants focused on completion of the questionnaire filling exercise. The response rate was therefore fit enough for carrying out study analysis. Babbie (2008) observed that a response rate of over fifty percent is adequate for statistical analysis. This study had an adequate response rate and was therefore considered adequate for analysis.

The instruments were pilot-tested and analyzed for reliability and validity using the Cronbach's alpha formula and face validity test by university professors. Statistical Package for Social Sciences (SPSS) version 21.0 was used as the statistical tool for analysis throughout the analysis. The qualitative data collected was analyzed through content analysis method. The quantitative data analyzed and presented using descriptive and inferential statistics.

5.2.1 Strategic Leadership and Management

The study findings show that the studied NGOs' leadership and management understood ICT strategy implementation process as indicated by 68% of the respondents. However, a significant number of the respondents representing 32% that their management had no understanding of ICT strategy implementation. This implies that although NGOs' leadership and management understand ICT strategy implementation process to some extent, the NGOs need to build capacity for the 32% who were indicated to have no understanding of the ICT implementation process. NGOs' management activities are in line with ICT strategy implementation's plan as indicated by 63% of the studied population.

ICT mainly involves the NGOs' CEOs, Functional and Business Managers; general Staff and Subordinate staff. The involvement of all management levels thus is critical for the ICT implementation in NGOs because each level of management has an important role to play, and must understand and own the implementation process. The prevailing management styles were democratic and bureaucratic styles of management. The two styles enable the management team's overall ability to work together for a common goal and also to tap into the individual entrepreneurship skills of these team managers.

5.2.2 Availability of Requisite Equipment and Infrastructure

The study established that that human rights NGOs had the required and reliable infrastructure for ICT implementation process although a significant number of the respondents, equivalent to 43%, indicated that the NGOs do have the required and reliable infrastructure for ICT implementation process. These results imply that NGOs are yet to achieve a reasonable measure of e-readiness status to fully implement ICT in their operations. Further study findings indicated that, to a great extent, there is need for the NGOs to acquire new ICT system and infrastructure for ICT implementation.

The studied population strongly agreed that there is lack of staff with required IT-knowledge for ICT implementation in NGOs and that information technology infrastructure is necessary for implementation of ICT. They added that IT infrastructure in NGO is inadequate to support the implementation of ICT. Infrastructure is important and will be the backbone of the system from the servers, network and work stations and issue of security and data integrity. The open systems theory recognizes there is interaction between people and technology in NGO work stations and that in order to perform their tasks, people require some defined structure while the NGOs must have technological resources (equipment and softwares) in order to complete tasks.

5.2.3 Organizational Core Competences

Most (76%) of the respondents indicated that the staff in the studied NGOs have the required skills, abilities and experience for ICT implementation. Further, the NGOs are forging forward to ensure that ICT implementation procedures and measures are in place by training its employees through well-defined programs. They also supports staff skills development in strategic change and acknowledges that strategic change involves considerable their awareness and capacity building as noted by Gallagher (2007). Employee learning and capacity training and capacity building programs are

important in improving ICT implementation and limited support maybe a hindrance to strategic change success although this be remedied by training.

5.2.4 Resource Allocation

Research findings show that the studied human rights NGOs have adequate and suitable resources for strategic change. Adequacy of resources in strategic change has an influence on firm performance. These findings are in line with the findings of Beeby and Simpson (1995), who have indicated that differences in strategic change occur due to adequacy of resources possessed by organizations which can improve or reduce the effect of particular goals in the organization if well utilized or underutilized respectively. These findings show that organizational resources can be a constraint on ICT implementation. It proposed that NGOs resources are directed towards management of dependencies arising out of critical resources required for its output and effective management of these dependencies results in survival.

5.3 Conclusion

The first conclusion is that leadership and management has facilitated a working environment that promotes the effective ICT implementation particularly in today's globalized world where NGOs have to cope with rapidly changing environments.

Second, human rights NGOs had the required and reliable infrastructure for ICT implementation process. However, not all NGOs have achieved a reasonable measure of e-readiness status to fully implement ICT in their operations.

Third, staff in NGOs have the required skills, abilities and experience for ICT implementation and the NGOs are forging forward to ensure that ICT implementation procedures and measures are in place by training its employees through well-defined programs.

Fourth, the study concludes that differences in ICT implementation occur due to adequacy of resources possessed by organizations which can improve or reduce the effect of particular goals in the organization if well utilized or underutilized respectively.

5.4 Recommendations

The study recommends that NGOs should focus on taking the right measure in ICT implementation. The leadership and management should take appropriate measures at the rightful time to ensure set goals are achieved and energies are channeled towards enhancing strategies that propel ICT implementation.

With regard to requisite equipment, NGOs' key decision makers need to invest more on IT as enshrined in Kenya's Vision 2030 which incorporates IT infrastructure in its plan with Konza city being its blue print.

The study recommends that employees should be trained appropriately on new processes, technologies and systems in ICT implementation. The management should clearly communicate to employees what has to be done and employees should be involved in setting the standards under which their performance in ICT implementation will be evaluated.

5.5 Suggestions for Further Research

This study focused on strategic leadership and management; availability of requisite equipment and infrastructure; organizational core competences and staff training and strategic financial resources allocation. More research studies should be carried out to find out other strategies for effective implementation in NGOs.

The focus of this study was on human rights NGOs in Nairobi. Future research studies should consider similar studies in other NGOs so as to give a wider representation of views of strategies for effective implementation of ICT in Kenya.

REFERENCES

- Abbey, E. M. (2008), "Constructive Regulation of Non-Government Organizations", *The Quarterly Review of Economics and Finance*, 48(4), 370–376.
- Abdullabhai, M. and Acosta, F. (2012), "Impact of Adopting Enterprise Resource Planning Systems by Commercial Organizations in Kenya", *DLSU Business and Economics Review*, 21(2): 63 – 86
- Abdulrahman, A., Abbas, N., and Syed, R., (2012), "Does Country of Origin Matter on Product Evaluation among Saudi Consumer Perceptions?" *American Academic & Scholarly Research Journal*, 4(2), 1 – 6.
- Aczel, J. C., Peake, S. R., and Hardy, P. (2008), "Designing Capacity-building in E-learning Expertise: Challenges and Strategies", *Computers & Education*, 50(2), 499-510.
- Ageyi, S. H., and Voogt, D. L. (2011), "Critical Factors in the Successful Adoption of Technology: A Checklist Based on TDC Findings", *Educational Technology*, 1(2): 57-58.
- Ajzen, I. (1985), "*From Intentions to Actions: A Theory of Reasoned Action*", New York: Springer.
- Ajzen, I., Albarracín, D., and Hornik, R., (2007), "*Prediction and Change of Health Behavior: Applying the Theory of Reasoned Action Approach*", Mahwah, NJ: Lawrence Erlbaum.
- Ajzen, I., and Fishbein, M., (2005), "The Influence of Attitudes on Behavior", *The Handbook of Attitudes*, Lawrence Erlbaum Associates.
- Al-Harbi, H. (2014), "*Towards Successful Implementation of ICT in Education*", The 2014 WEI International Academic Conference Proceedings, 2014 Vienna, Austria. The West East Institute, 33-46.
- Al-Jaghoub, S., Westrup, C. (2010), "Jordan and ICT-led Development: Towards a Competition State", *Information Technology & People*, 16(2), 93-110.
- Amoako-Gyampah, K. and Salam, A. F. (2003), "An Extension of the Technology Acceptance Model in an ERP Implementation Environment" *Information & Management*, 41, 731–745.
- Ansoff, H. I (2010), "*Corporate Strategy (10th Edition)*", London: Penguin: 1st Publication, McGraw Hill.
- Armitage, C. J., and Conner, M., (2001), "Efficacy of the Theory of Reasoned Action: A Meta-analytic Review", *British Journal of Social Psychology*, 40(4), 471 – 499.
- Attewell, P., (1992), "Technology Diffusion and Organizational Learning: The Case of Business Computing", *Organization Science*, 3(1), 1-19.
- Awino, Z. B, Muchara, M., Ogutu, M, and Oeba, L. K. (2012), "Total Quality and Competitive Advantage of Firms in the Horticultural Industry in Kenya", *Prime Journal of Business Administration and Management*, 2(4), 521-532
- Awino, Z. B. (2000), "*Effectiveness and Problems of Strategy Implementation of Financing Higher Education in Kenya by the Higher Education Loans Board*", (Unpublished MBA Project).School of Business, University of Nairobi, Kenya.
- Babbie, E. (2008), "*Survey Research Methods*", Belmont: Woodsworth.
- Baddii, A., and Sharif, A. (2003), "Information Management and Knowledge Integration for Enterprise Innovation: Logistics", *Information Management Journal*, 16(3), 145-155.
- Bagozzi, R. P., (2007), "The Legacy of the Technology Acceptance Model and a Proposal for a Paradigm Shift", *Journal of the Association for Information Systems*, (8)4, 244–254.
- Blahova, M. & Knapkova, A., (2011), "*Effective Strategic Action: From Formulation to Implementation*", IPEDR vol.2. IAC S IT Press, Manila, Philippines

- Boudreau, M., and Robey, D., (2005), “Enacting Integrated Information Technology: A Human Agency Perspective”, *Organization Science*, 16(1): 3–18.
- Caldeira, M. M., and Ward, J. M., (2003), “Using Resource-based Theory to Interpret the Successful Adoption and Use of Information Systems and Technology in Manufacturing Small and Medium-sized Enterprises”, *European Journal of Information Systems* 12(2), 127-141.
- Chuttur, M. Y. (2009) “*Overview of the Technology Acceptance Model: Origins, Developments and Future Directions*”, Indiana University, USA. Sprouts: Working Papers on Information Systems, 37(9), 33 – 56.
- Cooper, D. and Schindler, P. (2003), “*Business Research Methods (8th Edition)*”, McGraw-Hill: New York.
- David, F. R., (2010), “*Strategic Management (9th Edition)*”, Englewood Cliffs: NJ Prentice Hall
- Davis, F., Bagozzir, R., and Warshaw, P., (1989). “User Acceptance of Computer Technology: A Comparison of Two Theoretical Models”. *Management Science*, 35 (8), 982-1003.
- Delone, W. H., and McLean, E. R., (2003), “The DeLone and McLean Model of Information Systems Success: A Ten-year Update”, *Journal of Management Information Systems* 19(4), 9-30.
- Ensminger, D. C., Surry, D. W., Porter, B. E. and Wright, D. (2004). "Factors Contributing to the Successful Implementation of Technology Innovations", *Educational Technology & Society*, 7(3), 61-72.
- Ghobakhloo, M., Arias-Aranda, D., and Benitez-Amado, J., (2011), “*Information Technology Implementation Success within SMEs in Developing Countries: An Interactive Model*”, POMS 22nd Annual Conference: Operations management: The enabling link Reno, Nevada, U.S.A.
- GoK, (2006), “*Information and Communications Technology Sector Policy Guidelines*”, Government Press, Nairobi, Kenya.
- GoK, (2007), “*Kenya Vision 2030: A Globally Competitive and Prosperous Kenya*”, Government of Kenya, Nairobi, Kenya.
- Grant, R. M., (2010), “*Contemporary Strategy Analysis: Text and Cases (7th Edition)*”, John Wiley & Sons, Hoboken, N.J.
- Harrison, C. (2010), “Did the WSIS Achieve Anything at All?” *The International Journal for Communication Studies*, 66(3/4): 281 – 290.
- Hill, C. W. L., and Jones, G. R., (2012), “*Strategic Management Theory: An Integrated Approach, Cengage Learning (10th Edition)*”, Englewood Cliffs, NJ: Prentice-Hall.
- Hrebiniak, L.G. (2006), “Obstacles to Effective Strategy Implementation”, *Organizational Dynamics*, 35, 12-31.
- Hui, C. H., (1982), “*Measurement in Cross-cultural Psychology: a Review and Comparison of Strategies for Empirical Research (Unpublished manuscript)*”, University of Illinois, Urbana, IL.
- ITU-WTD, (2003), “*World Summit on the Information Society, World Telecommunications Development Report*”, ITU, Geneva, Switzerland.
- Jauch, L. R, Gueck, W. F., (1988), “*Business Policy and Strategic Management (7th Edition)*”, New York: McGraw-Hill.
- Javalgi, R. G., Khare, V., and Gross, A. C., (2005), “An Application of the Consumer Ethnocentrism Model to French Consumers”, *International Business Review*, 14(3), 325–44.

- Jeyaraj, A., J. W. Rottman and M. C. Lacity (2006) "A Review of the Predictors, Linkages, and Biases in IT Innovation Adoption Research", *Journal of Information Technology*, (21)1; 1–23.
- Jones, A. (2004), "A Review of the Research Literature on Barriers to the Uptake of ICT". British educational communications and technology agency (BECTA), Corp Creator.
- Kabbar, E. F. and Crump, B. J. (2006), "The Factors that Influence Adoption of ICTs by Recent Refugee Immigrants to New Zealand", *Informing Science Journal*, 9(3), 111-121.
- Kameri-Mbote, P., (2002), "*The Operational Environment and Constraints for NGOs in Kenya*", International Environmental Law Research Centre, Geneva (2002).
- Kariuki, G., (2009), "Growth and Improvement of Information Communication Technology in Kenya", *International Journal of Development using Information and Communication Technology*, 5(2), 146-160
- Kim, W. C. Mauborgne, R. 2007, "Blue Ocean Strategy", *Leadership Excellence*, 4(3): 33 – 45.
- Kinuthia, J. N., (2012), "*Information Technology Investment and Performance of NGOS in Kenya*", Unpublished MBA Thesis, University of Nairobi.
- Kiptalam, B. and Rodrigues, B., (2010), "Accessibility and Utilization of ICTs among Secondary School Teachers in Kenya", *Electronic Journal on Information Systems in Developing Countries*, 1(1): 1-14.
- Koske, F.K. (2003). *Strategy Implementation and its Challenges in Public Corporations. The case study of TELKOM Kenya Limited*. (Unpublished MBA Project). University of Nairobi, Kenya.
- Machuki, V. N. (2005), "*Challenges of Strategy Implementation at CMC Motors Group Limited*", Unpublished Master's Research Project: University of Nairobi, Kenya.
- Kothari, C. R (2008), "*Research Methodology: Methods and Techniques, 2nd Ed*", Wishira Prakashan.
- Kozma R. B. (2008). "*Comparative Analysis of Policies for ICT in Development*", New York: Springer.
- Lau, S., and Woods, P. (2008), "An Empirical Study of Learning Object Acceptance in Multimedia Learning Environment", *Journal of Business Systems, Governance and Ethics*, 1(2), 13-28.
- Lawson, D., McKay A., and Okidi, J. (2005), "Poverty Persistence and Transitions in Uganda: a Combined Qualitative and Quantitative Analysis", *Communication of the ICM*, 26(6): 430 – 444.
- Lederer, A., Maupin, D., Sena, M., and Zhuang, Y., (2000), "The Technology Acceptance Model and the World Wide Web". *Decision Support Systems*, 29 (3), 269-282.
- Levin, T. and Wadmany, R. (2005), "Changes in Organizational Beliefs and Practices: Rich Technology-based Organizations". *Technology, Pedagogy and Education*, 14(3), 281-307.
- Lule, I., Omwansa, T., and Waema, T., (2012), "Application of Technology Acceptance Model (TAM) in M-Banking Adoption in Kenya", *International Journal of Computing and ICT Research*, 6 (1), 31-43.
- Machuki, V.N., and Aosa, E., (2011). The influence of the external environment on the performance of publicly quoted companies in Kenya. *Prime Journals. Business Administration and Management (BAM)*, 1(7), 205-218.
- Mansell, R. (2006), "Ambiguous Connections: Entitlements and Responsibilities of Global Networking", *Journal of International Development*, 18(4), 1-13.
- McChesney, R.W. (2007), "*Communication Revolution: Critical Junctions and the Future of Media*", The New Press, New York, NY.

- Mitchell, G., (2009), "Digital Planet: Africa Broadband, Tim Berners-Lee, Great Firewall of China and Galaxy Zoo", *BBC World Service*.
- Muthuiya, F. A. (2004), "*Strategy Implementation and their Challenges in Non Profit Making Organizations in Kenya: The Case of African Medical and Research Foundation-Kenya*". (Unpublished Master's Research Project). University of Nairobi, Kenya.
- Naidu, S., (2009), "Globalization and Democratization: The Case for NGOs", *Routledge South African Journal of International Affairs*, 8:2, 95-103.
- Njagi, S. (2010), "*Challenges of Strategy Implementation at Equity Bank Limited*", Unpublished Master's Research Project: University of Nairobi, Kenya.
- Noble, C. H. and Mokwa, M. P., (2009), "Implementing Marketing Strategies: Developing and Testing a Managerial Theory", *Journal of Marketing*, 63(3); 57-73.
- Nyaga, N. S., (2014), "*Challenges Facing Effective Information And Communications Technology (ICT) Implementation In Selected Public Secondary Schools In Nakuru North District Nakuru County*", Unpublished MBA Thesis, Kenyatta University.
- Ocen, G. (2013), "Organizational Implementation of ICT: Findings from NGOs in the United Kingdom and Lessons for Developing Countries", *Organizational Implementation of ICT*, 3(4): 230 – 242.
- Odindo. L., (2008), "*Knowledge-Based Economy*", OECD G D (96)102, Paris.
- Okumus, F. (2003), "A Framework to Implement Strategies in Organizations", *Management Decisions*, 41(9); 42 – 61.
- Park, S., (2009). "An Analysis of the Technology Acceptance Model in Understanding University Students' Behavioural Intention to Use e-Learning", *Education Technology & Society*, 12(3), 150-162.
- Pearce, J. and Robinson, R. (2005), "*Strategic Management*", Malaysia: McGraw Hill International
- Porter, M. E., (2004), "Competitive Advantage: Creating and Sustaining Superior Performance, (1st Edition)", Free Press, United States.
- Prugsamatz, R., (2010), "Factors that Influence Organization Learning Sustainability in Non-profit Organizations", *Learning Organization*, 17(3); 243-267.
- Ramayah, T., and Mohd-Suki, N., (2006), "Intention to Use Mobile PC among MBA Students: Implications for Technology Integration in the Learning Curriculum", *UNITAR e-Journal*, 1(2), 1-10.
- Ramesh, R., (2011), "*Strategic Management*", Structured Notes as per the Syllabus of MD University, Rohtak, Haryana
- Reilly, C., Horan, J., Johnston, R., Stanley-Smith, C., Vincent, D. and Butler, C. (2003). "*E-Government: More than an Automation of Government Services*", Information Society Commission, Dublin, Ireland.
- Repkine, A. (2008), "*ICT Penetration and Aggregate Production Efficiency: Empirical Evidence for a Cross-Section of Fifty Countries*", MPRA Paper No. 7902, Muenchen, Germany.
- Rice, A. E. and Ritchie, C. (1995), "Relationships between international non-governmental organizations and the United Nations", *Transnational Associations*, 47(5), 254-265.
- Robina, M., and Nawaz, A. (2014), "Investigating Impacts of Globalization on Performance of NGOs: A Survey of NGOs from Dera Ismail Khan, KP, Pakistan", *Global Journal of Human-Social and Political Science*, 14(8): 25 – 32.
- Rogers, E. (1995), "*Diffusion of Innovations*", New York: The Free Press.

- Saade, R., Nebebe, F. and Tan, W. (2007), "Viability of the "Technology Acceptance Model" in Multimedia Learning Environments: A Comparative Study". *Interdisciplinary Journal of Knowledge and Learning Objects*, 3, 175-184.
- Saeed, S. Rohde, M. and Wulf, V., (2010), "A Framework towards IT Appropriation in Voluntary Organizations", New York: Free Press
- Sahay, S. and Avgerou, C. (2002), "Introducing the Special Issue on Information and Communication Technologies in Developing Countries", *Information Society* 18(2): 7376.
- Sentosa, I., and Nik, K., (2012), "Examining a Theory of Reason Action and Technology Acceptance Model (TAM) in Internet Purchasing using SEM", *Journal of Arts, Science & Commerce*, 2(2), 61-73
- Soule, H. (2008), "Transforming Communities: Creating Dialogue Using Web 2.0 Tools", *Learning & Leading with Technology*, 36(1), 12-15.
- Ssewanyana, I. K. (2009), "ICT Usage in NGOs in Uganda", *The African Journal of Information Systems (AJIS)*, 1(3): 5 – 28.
- Standish Group (2005), "A Survey of Factors that Lead to Failure", *Journal of Project Management*, 3(4): 155 – 166.
- Stehr, N. (2000), "Deciphering Information Technologies: Modern Societies as Networks", *European Journal of Social Theory*, 3(1), 83-94.
- Stensaker, B., Maassen, P., Borgan, M., Oftebro, M. and Karseth, B. (2007), "Use, Updating and Integration of ICT: Linking Purpose, People, and Pedagogy", *Information & Management*, 54(3), 417-433.
- Tapscott, D. and Ricoll, D. (2003), "*The Naked Corporation*", Free Press. New York.
- Ticehurst, G. W., and Veal, A. J., (2000), "*Business Research Methods: A Managerial Approach*", Australia NSW: Pearson Education.
- Torero, M. (2008), "The Access and Welfare Impacts of Telecommunications Technology: Case of Cameroon", *Journal of African Economies*, 9(4): 411-429.
- Tusubira, F. F. and Mulira, N. (2004), "Integration of ICT in organizations: Challenges and best practice recommendations based on the experience of Makerere University and other organizations. Paper Presented at the Conference on "Universities: Taking a leading role in ICT enabled human development", 6 – 8, September 2004, Kampala, Uganda
- Underwood, G. J., (2004), "The Economics of Information", *Journal of Political Economy*, 69(3), 213-25.
- Vlach, M. (2008), "*Reconceptualizing the Digital Divide*", First Monday, Vol. 7 No.7.
- von Hippel, E., (2005), "*Democratizing Innovation*. Cambridge, Mass.: MIT Press.
- Weber, S., (2004), "*The Success of Open Source*". Cambridge, Mass.: Harvard University Press.
- Webster, F., (2006), "*Theories of the Information Society (3rd Edition)*", International Library of Sociology, New York: Routledge.

APPENDICES
Appendix I: Questionnaire

Dear Sir/Madam

Thank you for taking time to answer this short questionnaire regarding the Strategies for Effective Implementation of Information and Communication Technology among Human Rights NGOS in Nairobi. My name is Alex Yator; a student at the University of Nairobi. This research is in partial fulfilment of the degree of Masters of Business Administration. Your participation in this study is completely voluntary and there are no foreseeable risks associated with it. However, if you feel uncomfortable answering any questions, you can withdraw from the survey at any point. Your questionnaire responses will be strictly confidential and data from this research will be reported in the dissertation anonymously.

Section A: Background Information

1. What is your gender?
 - a) Male
 - b) Female
2. What is your bracket?
 - a) 18 – 25 years
 - b) 26 – 35 years
 - c) 36 – 45 years
 - d) Over 45 years
3. What is your highest level of education qualification?
 - a) Undergraduate
 - b) Post Graduate
 - c) College Diploma
 - d) Tertiary
 - e) High School
4. What is your role in the organization?
 - a) Director/Manager
 - b) Assistant Manager
 - c) Supervisor
 - d) Employee
5. Please indicate your length of service with the organization
 - a) Less than 1 year
 - b) 1 – 3 years
 - c) 4 – 6 years
 - d) 7 – 10 years
 - e) More than 10 years

Section B: Strategic Leadership and Management

6. Do members of your organization leadership and management team understand the ICT strategy implementation process?

- a) Yes []
- b) No []

Briefly elaborate your opinion

7. Do you think management activities are based on your organizations' ICT strategy implementation plan?

- a) Yes []
- b) No []

Elaborate your response

8. On a scale of 1 to 5, (where 1= Not at all, 2=Least extent, 3=Moderate extent, 4=Great extent, 5=Very great extent) please indicate the extent of involvement of the following in guiding the strategy implementation process of ICT in your organization.

People/Department	1	2	3	4	5
f) The Board/Directors					
g) The Chief Executive Officer (CEO)					
h) Functional/Business Managers					
i) Staff					
j) Subordinate staff					

9. In your opinion which management style would lead to the most effective implementation of ICT by your organization?

Management Style	Description	Choice
Authoritarian	All determination of policy, techniques, action steps, work, tasks, teams and appraisal/rewards by the leaders	
Democratic	Policy, techniques, action steps, work tasks, and teams are reached through discussions. Leaders encourage, assist and guide objectively	
Bureaucratic	A system of rule by rules, defined by efficiency, procedures, regulations, formality and uniformity. Role of the leader is monitoring routine activities.	
Neurocratic	Characterized by an intensive struggle to become a bigger and better executive without much regard for his own self-interest in terms of relaxation, family or extra organizational pursuits. He leaves nothing to chance and calls all the shots.	
Laissez Faire	Individuals/groups have freedom to determine policy, techniques, action steps, work tasks, and team members. Minimal participation by leader only when required.	

10. With regard to commitment and support of the top management towards ICT implementation, kindly indicate your level of agreement with the following statements. (Key: 1- Strongly disagree; 2-Disagree; 3-Neutral; 4- Agree;5- strongly agree)

Commitment of Top Management	1	2	3	4	5
a) Evidence of management's vision for ICT implementation from management					
b) Evidence of management support for ICT implementation action plans through strategy implementation programs.					
c) Management's support for commitment of resources ICT					
d) Management mobilization of staff towards organization vision and strategies.					
e) Management's proactivity in creating climate in which ICT implementation is encouraged and learning is facilitated					

Section C: Availability of Requisite Equipment and Infrastructure

11. Would you say your NGO has the required and reliable IT infrastructure for ICT strategy implementation process?

- a) Yes
- b) No

Explain

12. To what extent does your NGO need for acquire new ICT system and infrastructure for ICT strategy implementation?

- a) Not at all
- b) Least extent
- c) Moderate extent
- d) Great extent
- e) Very great extent

13. Indicate the extent to which the following aspects of IT infrastructure affect ICT strategy implementation in your NGO.

Aspects IT Infrastructure	Not at All	Least Extent	Moderate Extent	Great Extent	Very Great
Information technology infrastructure is necessary for implementation of e-procurement.					
IT infrastructure in Nairobi City County is inadequate to support the implementation of IFMIS.					
There is lack of staff with required IT-knowledge at the County for the IFMIS implementation.					

Section C: Staff Training and Skills Development

14. Do employees at your organization possess the necessary skills, abilities, and experience required for ICT implementation?

- a) Yes []
- b) No []

Explain

15. Indicate your level of agreement that your organization has adopted capacity building through training in ICT implementation.

- a) Strongly disagree []
- b) Disagree []
- c) Neutral []
- d) Agree []
- e) Strongly agree []

16. Does your organization encourage employees to develop skills and competences for ICT implementation?

- i) Yes []
- ii) No []

Explain

17. Please indicate the number of trainings by your organization in ICT implementation between 2010 and 2014.

Year	No. of Training	Percentage Increase in Firm Performance
2010		
2011		
2012		
2013		
2014		

18. To what extent has enhancing employees learning and skills development affected ICT implementation in your organization in the last 5 years?

- a) No extent []
- b) Less extent []
- c) Moderate Extent []
- d) Great Extent and []
- e) Very Great Extent []

Section D: Resource Allocation

19. Rate the adequacy of resources for ICT strategy implantation in your organization.

- a) Very inadequate []
- b) Quite inadequate []
- c) Adequate []
- d) Quite adequate []
- e) Very adequate []

20. Are the resources in your organization suitable for ICT strategy implementation?

- a) Very unsuitable []
- b) Quite unsuitable []
- c) Suitable []
- d) Quite suitable []

e) Very suitable []

21. To what extent has resource allocation affected ICT strategy implementation in your organization?

- a) Very Great []
- b) Great []
- c) Moderate []
- d) Least []
- e) Not at All []

Appendix II: List of Human Rights NGOs in Nairobi City County

1. Action Resort for Change
2. Advisory & Assistance on Children's Rights
3. African agenda
4. African Centre for Rights and Governance
5. African Child
6. African Network for the Prevention and Protection against Child Abuse and Neglect - Kenya
7. Ambassadors of Change
8. ANPPCAN – Kenya
9. Ashoka East Africa
10. Basic needs UK in Kenya
11. Centre for Advocacy on Legal Ethics and Human Rights Issues (CALER)
12. Centre for African Post- Cultural Studies
13. Centre for Assistance and Rehabilitation of Ex - prisoners
14. Centre for Economic and Libertarian Affairs
15. Centre for Human Rights and Civic Education
16. Centre for Human Rights and Democracy
17. Centre for Minority Rights Development
18. Centre for Research And Advocacy In Human Rights
19. Centre for Restoration of Human Rights and Democracy.
20. Centre for Restoration Of Human Rights And Democracy
21. Centre for Rights And Development
22. Centre for Rural Youth Education, Mentorship And Civic Rights Awareness
23. Centre for Social Welfare
24. Centre for Social Welfare, Justice And Governance
25. Centre for the Rehabilitation and Education of Abused Women and Children.
26. Centre on Advocacy On Legal Ethics And Human Rights Issues
27. Cheryl Williams Foundation
28. Child Rights And Special Needs Education Center
29. Childhood and Youth Voices Organization
30. Children Law Centre Of Kenya
31. Children Of The World Centre
32. Children's' Rights Information Network
33. Community Initiative For Paralegal Development Organization
34. Community Leadership Advancement Network
35. Commuters Welfare Association
36. Development Kenya Action
37. Dove Child Development Program
38. Economic And Social Rights Centre - Hakijamii
39. El-taller Organization
40. Empowerment Resources Development Centre
41. Enlightenment Outreach Kenya
42. Environmental Legal Resource And Rehabilitation Centre

43. Family And Law Centre
44. Forces Widows And Orphans Organization
45. Foundation For Girl Child
46. Foundation for Human Rights And Resources Monitoring
47. Framework For Rural Assistance
48. Friends of America Foundation
49. Friends of the Kenyan Child Organization
50. Furaha Organization For Care Upkeep, Shelter For Children
51. Gender Education Empowerment And Leadership Organization
52. Glorious Rehabilitation And Education Programme
53. Gucha - Bomoba Women Organization
54. Harvest For The Poor Initiative
55. Health Rights Advocacy Forum
56. Hearing Impaired Voices Of Kenya
57. Hearts for Children In Crisis Outreach
58. Heshima Kenya
59. Hope Africa
60. Hope for the Blind Development Centre
61. Horn of Africa Development Initiative
62. Human Rights And Environmental Conservation In Kenya
63. Human Rights Initiative For Women Living With HIV/AIDS In Kenya
64. Independent Medico-Legal Unit
65. Initiative for Advancement of Children And Women Rights
66. International Widows and Orphans Welfare Society of Kenya
67. Italian Agency for the Development and Assistance to New Sudan
68. Kenia Kinder Hilfe (Kenya Children Help)
69. Kenya Association for the Intellectually Handicapped
70. Kenya Consumers' Organization
71. Kenya Environmental and Pastoralist Integrated Development Initiative Programme
72. Kenya Human Rights Commission
73. Kenya Organized Women Association
74. Kenya Poverty Elimination Networks
75. Kenya Tourism Concern
76. Kenya Women Participating in Rural Activities
77. Kenya Workers Rights and Harmonisation Program
78. Kima Kimwe Residents Rights and Intergrated Development Organisation
79. Kirira Child Welfare Organization
80. Kistrech Theatre International
81. Land Rights in Modern Africa
82. Legal Aid and Enlightenment Network
83. Life Changers (Kenya)
84. Mashinani Organisation on Rights and Environment
85. Mathare North Youth Foundation
86. Mombasa Legal Rights Centre

87. Namoni Community Development Ogranization
88. National Empowerment of Deaf Kenya
89. National Alliance for the Protection of Minorities and Marginalized Persons
90. Network for Adolescent and Youth of Africa (NAYA) Kenya Chapter
91. Network of Child Rights and Advocacy Forum
92. New Sudan Women Federation
93. No Peace Without Justice
94. Northern Vision for Peace and Pastoral Aid
95. Olmaa Pastoralists' Development Programme
96. Pastoralist Organization for Women Empowerment and Rights
97. Peace Building International
98. Peoples Rights Forum
99. Physicians for Human Rigths Inc.
100. Pokot Legal Awareness Campaign and Civic Education
101. Poverty Eradication for Development Organization
102. Progressive Initiatives and Methodologies for Social and Economic Enhancement in Kenya
103. Regional Network on Child Protection (RENOCP)
104. Residents Land Protection of Kenya
105. Rift valley and Western Kenya Development Organization
106. Rights and Vision Keepers Organization
107. Ruiru Rehabilitation Centre
108. Health and Development - Kenya
109. Save Somali Women and Children
110. Save the Children Finland
111. Save the Children Fund UK
112. Senior Women Citizen for Change
113. Serve all the People of Africa Development Programme
114. Social and Economic Rights Advocacy Centre
115. Socio - Economic Rights & Advocacy Centre
116. South Nyanza Forum for Gender and Socio - Economic
117. Sulunye Foundation
118. Tabasamu Mtoto
119. The boy Child Foundation
120. The East African Human Rights Institute
121. The Junior Shelters
122. The League of Pastoralists Women of Kenya
123. Tolerance International Africa
124. Tomorrow's Child Initiative
125. Totos International Advocates for Human
126. Touch the Heart Centre
127. Trace Kenya
128. Ujana Power - Kenya
129. Urgent Action Fund for Women's Human Rights
130. Users and Survivors of Psychiatry in Kenya

131. Waso Trust Land Project
132. Watoto wa Baraka International
133. West Kenya Legal aid Centre
134. Western Advocacy and Care Foundation
135. Western Kenya Human Rights Watch
136. Widows and Orphans Welfare Association Society of Kenya
137. Women for Justice in Africa
138. Women Minority Rights Initiative
139. Women United for Peace Initiative
140. Women's Empowerment Link
141. Women's Property Rights Organization