CHALLENGES FACING INFORMATION & COMMUNICATION TECHNOLOGY PROJECTS IN PUBLIC SECTOR ORGANISATIONS CASE OF KENYA REVENUE AUTHORITY

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May 2014
Declaration
I hereby declare that this Research Proposal is my original work and has never been presented either in whole or partially to any other examining body for the award of certificates, diploma or degree.

Signature ........................................ Date ........................................
Frank Robert O. Omondi
D53/CTY/PT/23211/2011

The Research Project has been submitted to Kenyatta University with my approval as the Lecturer

Signature: ........................................ Date........................................
Mr. J. Murungi
Dedication
This research is dedicated to the less fortunate persons in the society. May the revelations in this work be a source of hope to them.
Acknowledgement

I acknowledge the Almighty lord for the gift of life and resources to enable me undertake this course and for showering me with His grace and mercies. To Him I attribute my strengths.

I’m very much grateful to my family and my friends for their support and the ideas they unswervingly provided to see me this far.

I would also like to acknowledge all my lecturers for the knowledge they have impacted in me and also to the management of the Kenyatta University for the opportunity to join them and be a part of this accredited University. In particular, I appreciate the input of Mr. Murungi who has sacrificed a lot to facilitate this work by way of supervision.

My appreciation also goes to fellow students for having been so instrumental and helpful in development of this work by way of sharing through discussion groups.
List of Tables

Table 1: Target Population ................................................................. 22
Table 2: Work Plan ........................................................................... 31
List of Figures
Figure 1: Conceptual Framework ................................................................. 20
# TABLE OF CONTENTS

Declaration ...................................................................................... i
Dedication ...................................................................................... ii
Acknowledgement ........................................................................ iii
List of Tables ................................................................................ iv
List of Figures ................................................................................ v
Abstract ......................................................................................... viii
List of Abbreviations and Acronyms ............................................. ix

## 1.0. CHAPTER ONE: INTRODUCTION ........................................... 1

1.1. Background of the Study ........................................................ 1
  1.1.1. Background of IT Project .................................................. 1
  1.1.2. Background of KRA .......................................................... 2
  1.2. Statement of the Problem ...................................................... 2
  1.3. Objectives of the Study ........................................................ 4
  1.4. Research Questions .............................................................. 4
  1.5. Significance of the Study ...................................................... 5
  1.6. Limitations and Delimitations of the Study ............................. 5
  1.7. Scope of the Study ............................................................... 6

## 2.0. CHAPTER TWO: LITERATURE REVIEW ............................ 7

2.1. Introduction to Literature Review ............................................ 7
  2.2. Past Studies/Main Review .................................................... 7
    2.2.1. Information Technology Project ...................................... 7
    2.2.2. Theories of IT Projects .................................................. 9
    2.2.3. Stakeholder Engagement .............................................. 10
    2.2.4. Leadership Style .......................................................... 12
    2.2.5. Change management .................................................... 14
    2.2.6. Training and skills ....................................................... 18
    2.2.7. IT Infrastructure and Dynamics ................................... 21
2.3. Critical Review ................................................................. 22
2.4. Summary of gaps to be filled by the study ............................ 23
2.5. Conceptual Framework ....................................................... 24

3.0. CHAPTER THREE: RESEARCH METHODOLOGY ............. 25

3.1. Introduction to Research Methodology ................................. 25
3.2. Study Design ......................................................................... 25
3.3. Target Population ................................................................. 25
3.4. Sampling/Sample Design ...................................................... 26
3.5. Data Collection Procedures/Instruments ................................. 27
3.6. Data Analysis ......................................................................... 28
3.7. Validity and Reliability .......................................................... 29
3.8. Expected Outcome ................................................................. 29

Appendices .................................................................................. 30
Appendix 1: Introduction Letter .................................................. 30
Appendix 2: Questionnaire .......................................................... 31
Appendix 3: Work Plan ................................................................. 36
References .................................................................................... 37
Abstract
The objective of this study is to examine the challenges affecting Information Technology Projects in Public Sector, with Kenya Revenue Authority as a Case Study. A lot of changes have occurred in organisational and functional processes calling for these changes to be managed. These changes have led to organisations adopting Information and Communications Technology (ICT) and implementation of systems such as Integrated Tax Management System (ITMS) which seeks to enhance service delivery. Traditionally, Public Service organisations had little need to worry about market share and increasing competition since they operate in a monopolistic environment. But in recent time and with a view to achieving the Vision 2030 goals through performance contracting, emphasis on Public Sector Management approaches has forced public organizations to pay closer attention to their service delivery as consumers have begun to expect and demand more for their tax cents. Kenya Revenue Authority has undergone a lot of transformation in order to cope with the changes that have arisen with time and this has even forced the organization to re-structure. These changes include business re-engineering, automation of business and functional processes some of which is implementation of ITMS, and Enterprise Resource Planning (ERP). Factors such as stakeholder involvement/support, resource allocation, training/skills level, change management and top management could affect implementation of these systems. In respect of the above objectives of the study, data will be collected using self administered questionnaires from a sample of one hundred and fifty (150) Kenya Revenue Authority employees who will randomly selected from the eight departments in which automation has been implemented. These departments are Customs Services, Domestic Taxes, Road Transport, Human Resources, Finance and Procurement, ICT, Administration and PMBO. Data collected will be analysed using Statistical Packages for Social Sciences (SPSS) which will descriptive statistics inform of frequencies, percentages and mean scores. The data will then be summarised and presented using tables, pie charts, and bar graphs. Based on the findings the researcher will then make a conclusion and give recommendations.
**List of Abbreviations and Acronyms**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CSF</td>
<td>Critical Success Factors</td>
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<tr>
<td>CFC</td>
<td>Chloro-Flouro-Carbons</td>
</tr>
<tr>
<td>ITMS</td>
<td>Integrated Tax Management System</td>
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<tr>
<td>ICT</td>
<td>Information &amp; Communications Technology</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>IS</td>
<td>Information System</td>
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<td>ITIL</td>
<td>Information Technology Infrastructure Library</td>
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<td>KRA</td>
<td>Kenya Revenue Authority</td>
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<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>PIN</td>
<td>Personal Identification Number</td>
</tr>
<tr>
<td>PMBO</td>
<td>Program Management &amp; Business Office</td>
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<tr>
<td>SPSS</td>
<td>Statistics Packages for Social Sciences</td>
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<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>VMS</td>
<td>Vehicle Management System</td>
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<td>WSIS</td>
<td>World Summit on the Information Society</td>
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Definition of Terms

Unless otherwise stated, the following terms are defined and used in the study as follows:

Compliance – is the timely filing and reporting of required tax information, the correct self-assessment of taxes owed, and the timely payment of those taxes without enforcement action.

Noncompliance – is the failure to file returns, report income, calculate deductions properly as well as pay correctly and on time.

Tax gap – the difference between the taxes actually remitted and the amount that would be remitted if all persons filed complete and accurate tax returns and paid all taxes they owed.

Tax Avoidance – legal reduction in tax liabilities by practices that take full advantage of the tax code, such as income splitting, postponement of taxes and tax arbitrage across income that faces different tax treatment.

Tax Evasion – consists of illegal and intentional actions taken by individuals to reduce their legally due tax obligations e.g. underreporting income, sales, and wealth; or overstating deductions, exemptions, credits; or failing to file appropriate tax returns.

Tax Clinic - Short trainings organized for taxpayers belonging to a particular sector of the economy with the aim of enabling them embrace on-line tax services

Enterprise Resource Planning – is a business management software—usually a suite of integrated applications—that a company can use to store and manage data from every stage of business,

CHAPTER ONE: INTRODUCTION

1.1. Background of the Study

Technology has influenced the way we work, play, and interact with others. It is not surprising that technology has also affected how projects are designed, administered and implemented in public sectors. The use of technology to improve the success of projects in order for the
taxpayers to get value for taxes they pay has come to attract increasing attention in developed and developing countries (Dowe, 2008). Governments worldwide have increasingly been demanding substantially more effective use of modern technology systems for the delivery of services to citizens.

Developed countries are called so because of successfully executing projects that enhance service delivery to the populace. Such projects as observed by Dowe, (2008) include registration of persons, issuance of business permits and efficient tax administration among other essential services.

Kenyan government has embarked on adopting the use of Technology in Projects since the year 2003. The projects are administered through respective government bodies and ministries. Kenya Revenue Authority (KRA) is one such a Public Sector that has invested heavily in the use of Information Technology which have been undertaken from time to time over the years with an aim of achieving specific intentions and or satisfying/bridging identified needs in the society. The nature of projects has also changed where some projects have been technology intensive.

According to Oxford Advanced Learner’s Dictionary Technology is a scientific knowledge used in practical ways in industry or machinery/equipment designed using technology. It is the making, modification, usage, applied activity or behaviour, and knowledge of tools, machines, techniques, crafts, systems, methods of organization or environmental rearrangements in order to solve a problem, improve a pre-existing solution to a problem, achieve a goal or perform a specific function. It can also refer to the collection of such tools, machinery, modifications, arrangements and procedures.

1.1.1. Background of Information Technology Project

Information Technology (IT) is the branch of engineering that deals with the use of computers. Computers are used to store, retrieve and transmit information. The acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information by a microelectronics-based combination of computing and telecommunications are its main fields.
According to Schmidt (2009), a project is a temporary endeavour with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables), undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value. IT projects are those projects that are fully dependent on Information Technology platform for their development and implementation. Given the deviation from the traditional or manual based projects such as construction, IT based projects are faced with various challenges which have always influenced its outcome to be successful of otherwise.

1.1.2. **Background of Kenya Revenue Authority**

Kenya Revenue Authority (KRA) is the tax collection agency of Kenya. It was formed on July 1, 1995 through an act of Parliament to enhance tax collection on behalf of the Government of Kenya. It collects a number of taxes and duties, including: value added tax, income tax and customs. Since KRA's inception, revenue collection has increased dramatically (KRA, Fourth Corporate Plan, 2009), enabling the government to provide much needed services to its citizenry like free primary education and Health Services to all. Over 90% of annual national budget funding comes from local taxes collected by the KRA (Institute of Economic Affairs, 2006).

In order to meet its challenging role of tax collection and administration, KRA has always embarked on modernisations programmes, one of which involves automation (Revenue Reforms in Kenya: Experience and Lessons, 2010). Some of these automation programmes include online application of Personal Identification Number (PIN), online Integrated Tax Management System (ITMS), and online PIN Checker among others. These initiatives are not only resource intensive but also critical in service delivery. Kenya Revenue Authority has a Program Management and Business Analysis Office (PMBO), which is mandated to oversee the formation, development and implementation of projects in the Authority. In the recent past, it has been observed that the PMBO unit has been involved much on ICT based projects which have had various outcomes with varying impact on the Authority’s resources and plans.

1.2. **Statement of the Problem**

Technology is changing so fast that it is almost impossible to plan what type of technology will be in use five years from now, yet any well-meaning organization must adopt the use of
technology. According to Kapur, (2001), successful organizations must undertake Information Technology based projects. The factors affecting the same need critical examination especially in the Kenyan context. Benchmark organizations like the Microsoft have succeeded because of technology.

Public institutions in Kenya have a mandate to deliver services to the citizens as contained in the Service Charter developed by the Office of the Prime Minister. This has made such institutions to heavily invest in IT based projects. For instance, KRA has since 2003 initiated a lot of Reform and Modernization Projects which are all IT based (KRA Tax Reforms and Modernization, 2009). Some of these IT based projects the Authority has invested in are Simba2005, ITMS, Online Services, Vehicle Monitoring System (VMS) among others. The intention of these projects has been to enhance efficiency in service delivery and to enable KRA live to its vision of ‘being the leading revenue authority in the world respected for professionalism, integrity and fairness’. However, according to customer satisfaction survey done by PriceWaterHouseCoopers (PWC) in 2011 on taxpayers’ satisfaction with KRA’s service delivery, 41% of those surveyed felt that KRA needs to do more to satisfy the needs of taxpayers in Kenya. As to whether the IT based projects in KRA has helped improve efficiency, the survey established that the frequent breakdowns, slow-down times and connectivity issues are some of the challenges daily experienced.

There is, therefore, need to establish the challenges facing ICT based projects in public sector, with the focus being on KRA. The dismal result from IT projects is reflected in the relatively high rate of failure for Information Technology projects. The problems affecting Information Technology related project is undesired outcome and dismal results. This could be attributed to inadequate stakeholder involvement, poor leadership style, poor change management strategies and inappropriate infrastructure. In a research done by Vandermitl (2011) on Project Management and its Impact on IT Project success, the key issues highlighted include level of involvement of the stakeholders during development, time at which the project is delivered, literacy level of users among others. It is from this background that this study endeavours to investigate challenges facing Information Technology Projects in Public Sector.
Finally, based on the current challenges facing the implementation of IT based projects in KRA, the researcher proposes to examine factors that may influence the outcome of such projects. This study has further been necessitated by the fact that there is currently no known study on the same topic.

1.3. General Objective

The general objective of this study is to investigate the challenges facing Information Technology Projects in Public Sector.

1.3.1. Specific Objectives

The specific objectives of the study would be:-

1. To find out the effect of stakeholder involvement in IT projects outcome.
2. To investigate how leadership style affects IT projects outcome.
3. To determine the extent to which change management influences IT projects outcome.
4. To establish how availability of skills affects IT projects outcome.
5. To scrutinize role of IT infrastructure in IT projects outcome.

1.4. Research Questions

This study aims to answer the following questions:-

a) What is the effect of stakeholder involvement in IT projects outcome?
b) What is the effect of organizational leadership style on the outcome of IT projects?
c) To what extent does change management influence IT projects outcome?
d) How does availability of skills affect IT projects outcome?
e) How does IT Infrastructure affect IT project outcome?

1.5. Significance of the Study
The major contribution of this study will be the understanding of challenges facing the implementation of information technology projects in Kenya Revenue Authority. The study will therefore be of significance due to the following considerations.

i. To project managers, this study will present the kind of challenges that are encountered when implementing IT related projects in the public sector thereby enhancing their scope of consideration while handling such like projects.

ii. To the Government of Kenya, this research will provide valuable lessons on approaches necessary in ensuring a successful outcome of IT Projects. This will be useful to both current and future automation initiatives that the Government will endeavor to implement.

iii. The Ministry of Finance may take keen interest on the outcome of this project while developing guidelines for projects undertakings within the Ministry.

iv. For public corporations, this study will document and evaluate the efforts of the Management team with a view to serve as a record about the insights that can be extracted from their work and so as to provide a reference point for similar or related projects in the public sector.

1.6. Limitations of the Study

Challenges anticipated by the researcher and how he plans to counter them includes:-

i. Financial support required may not easily be attained given the geographical coverage of the country. The researcher would therefore conduct the study on a case basis which will be assumed to be representative of all public sectors.

ii. Uncooperative respondents may be encountered based on biased personal judgment which may influence the scope of the project. The researcher intends to provide clear guidelines, more so on the data collection to stay focused on the scope.

iii. Time constraint has been a challenge in most of such research works. The researcher anticipates similar problems and intends to not only come up with a time plan but also ensure adherence to it.
1.7. **Scope of the Study**

The study will be focusing on the public Sector in Kenya. The researcher will limit his study to the Kenya Revenue Authority which is a public Sector Organization. Kenya Revenue Authority has stations country wide and it has approximately four thousand six hundred employees. The Authority has embarked on the reform and modernisation projects aimed at efficient service delivery.

The study will be limited to the IT based project which cuts across processes of departments of KRA.
CHAPTER TWO

LITERATURE REVIEW

2.1. Introduction

The chapter covers literature concerning challenges ICT projects in organisations. Organisations have adopted ways of ensuring efficient and effective service delivery worldwide. Among these changes is implementation of IT projects which helps delivery of activities. These projects have been greatly embraced by many organisations. The implementation of ICT projects, however like any other project that may be introduced in an organisation can be successful if well managed or can fail to materialise at any stage of a project.

All projects initiated in an organisation require to be managed. Various scholars have written much about managing projects throughout the project period from the initiation to actual rolling out in organisations to reduce chances of project failure. Some of the factors that lead to project failure are poor planning, poor budget implementation, lipstick support from top management, poor communication of project objectives, Anytime you alter processes, systems, organisation structures or job roles, you need a structured approach to manage both the 'technical' side and the 'people' side of the pending change lack of stakeholder support among others. Management of the technical side are normally solved through project management while most of the people side approach is through change management. The chapter begins with a review on the concept of IT based projects, and then a review on the challenges attributed or suspected to influence these projects.

2.2. Review of Past Studies/Theoretical Review

The field of literature is full of reviewed work on the challenges affecting Information and Communication Technology projects. Such studies are presented in the succeeding sections.

2.1.1 Information Technology Project

Within any implementation project there are multiple life-cycles and frameworks operating in parallel – the ‘Implementation life-cycle’ (providing a framework from the needs assessment, through system selection, implementation and benefits realisation); the ‘Project Management
life-cycle’ (providing a structured framework for planning, control, monitoring and executing) and finally the ‘Change Management’ life-cycle (taking the enterprise from current-state, transition into future-state) (Foley, 2011).

According to Hon. Abel M. Chambeshi, Zambian minister of Communication and Transport on ICT policy (2003), the world has embraced Information and Communication Technology (ICT) as an enabler of social and economic development. The industry is growing very fast and making significant contribution to global trade and investment. ICT is receiving focus at various fora as demonstrated by the United Nations Millennium Development Goals (MDGs) and the World Summit on the Information Society (WSIS). Both initiatives have resulted in the promotion of information and knowledge based society as the basis for creating wealth. An opportunity has arisen for Kenya to join the global village by connecting commerce and trade. This policy sets the framework for Kenyans’ participation in the global economy.

Project Management Body of Knowledge (PMBOK) defines a project as a temporary endeavour undertaken to create a unique product, service or result. The temporary nature of projects indicates a definite beginning and end. The end is reached when the project’s objectives have been achieved or when the project is terminated because its objectives will not or cannot be met, or when the need for the project no longer exists. A project is a work effort made over a finite period of time with a start and a finish to create a unique product or service or result. Because a project has a start and a finish, it is also called a temporary effort or endeavour. Project Outcomes are the difference the funding and the project can make to your community or beneficiaries. Like any project, an IT project is a temporary endeavour (with a start date and an end date) to bring about a specific finalized goal. Examples of IT projects could be Programming computer software, a mobile app, or video game, Designing hardware architecture for a computer platform, Web development for an online shopping site, and Data security on a social network or bank server

Today, because Information Technology is such a fast-growing industry, even projects that are not exactly defined as “IT” (such as those in the construction or services industries) are not entirely separate from IT. For instance, a concert is not an IT project, but the featured band might advertise the event by creating a new website.
According to the Royal Academy of Engineering Report (April 2004) IT systems are integral to the functioning of our society. They contribute to the design, production and delivery of innumerable products and services that we encounter as we live, learn, work and play, and their significance will inevitably increase in coming years. Yet horror stories of colossal IT project failures hit the headlines on what seems like a daily basis, as illustrated by the news cuttings on the inside cover. This is partly responsible for the perception, which is to some extent supported by evidence, that the success rates of software and IT systems projects are disappointingly low.

2.1.2 Theories of IT Projects

There are a number of theories attempting to address technology, which tend to be associated with the disciplines of science and technology studies (STS) and communication studies. Most generally, the theories attempt to address the relationship between technology and society and prompt questions about agency, determinism/autonomy, and tele-economy. If forced, one might categorize the theories into social and group theories. Additionally, one might distinguish between descriptive and critical theories. Descriptive theories attempt to address the definition and substance of technology, the ways it has emerged, changed and its relation to the human/social sphere. More substantively it addresses the extent of which technology is autonomous and how much force it has in determining human practice or social structure. Critical theories of technology often take a descriptive theory as their basis and articulate concerns, examining what way the relationship can be changed. The authors mentioned in this article are those that have some concern with technology or media, though they often borrow from one another and of course build upon seminal theorists that preceded them.

According to Bas (2006) the theory of project views tasks and operations as a transformation process. So, you have some inputs, a change happens, and presto, you get some outputs. You throw some garbage in, the team has a go at it, and you get some garbage out. You provide requirements specifications as input, the operation programming starts, and the end result is some running program.

IT projects are no exception from this conclusion. IT remains the lifeblood of forward-thinking organizations (Snyder, 2009). The application of ICT concepts has become a subject of
fundamental importance to organizations and indeed a prerequisite for local and global competitiveness. Boer (2000) wrote that Information Technology and the development of business computer systems, is relatively new, by which, he says less than 50 years old.

2.1.3 Stakeholder Engagement

Stakeholder Engagement has been defined as the process by which an organization involves people who may be affected by the decisions it makes or can influence the implementation of its decisions (Snyder, 2009). They may support or oppose the decisions, be influential in the organization or within the community in which it operates, holds relevant official positions or be affected in the long term. Stakeholder is everybody who is involved in the project or whose work or interest might be affected by Project.

Stakeholder theory suggests that the purpose of a business is to create as much value as possible for stakeholders. In order to succeed and be sustainable over time, executives must keep the interests of customers, suppliers, employees, communities and shareholders aligned and going in the same direction. Innovation to keep these interests aligned is more important than the easy strategy of trading off the interests of stakeholders against each other. Hence, by managing for stakeholders, executives will also create as much value as possible for shareholders and other financiers.

According to Gatt (2010) Stakeholders may have varied level of interest, involvement, and influence on the project. It is extremely important to identify all the stakeholders and manage them as Stakeholders can have negative and positive influence on the project. Gatt points out that the stakeholders can include Customer, End Users, Sponsor, Program manager, Portfolio Manager, PMO, Project manager, Project Team, Functional Managers, Operation Managers, Sellers, Vendors, Legal department.

Thompson (2012) observed that “stakeholder management is critical to the success of every project in every organization I have ever worked with. By engaging the right people in the right way in your project, you can make a big difference to its success... and to your career." As you become more successful in your career, the actions you take and the projects you run will affect more and more people. The more people you affect, the more likely it is that your actions will
impact people who have power and influence over your projects. These people could be strong supporters of your work – or they could block it. Stakeholder Management is an important discipline that successful people use to win support from others. It helps them ensure that their projects succeed where others fail.

Stakeholder Analysis is the technique used to identify the key people who have to be won over. You then use Stakeholder Planning to build the support that helps you succeed. The stakeholder's project team role, the project planning activities in which he participates and his level of involvement in or responsibility for a particular activity, depends on the project's mission and his reporting relationship to the project management office, or PMO, which, in particular, leads to his classification as an internal or external stakeholder. For example, an IT project's internal stakeholders reporting directly to the PMO include a project manager and developer. In turn, external stakeholders may include customers and the personnel and training departments. Activities assigned to both internal and external stakeholders during the project planning phase may be the same.

Internal stakeholders are accountable for or held responsible for particular project planning activities and are required to participate in certain activities, whereas external stakeholders generally aren't. Like external stakeholders, internal stakeholders are also incidentally involved in or consulted regarding other activities for which they have no direct responsibility. Planning activities in which internal stakeholders participate with differing levels of involvement include project scope estimation; definition of work product, task attributes and project life cycle; projection of effort and cost; creation of budget and project schedule; identification of project risks; planning for data management, project resources, personnel, stakeholder involvement and training; creation and review of project plan; reconciliation of work and resource requirements; and gaining stakeholder commitment to the project plan. Project planning activities in which external stakeholders participate are frequently identical to those of internal stakeholders. However, roles of external stakeholders are limited to that of consultants rather than team members directly accountable for individual project planning activities.

Stakeholder engagement provides opportunities to further align business practices with societal needs and expectations, helping to drive long-term sustainability and shareholder value. It is
intended to help the practitioners fully realise the benefits of stakeholder engagement in their organization, to compete in an increasingly complex and ever-changing business environment, while at the same time bringing about systemic change towards sustainable development.

According to a review conducted by the Scottish Parliament (2002), research across various fields within management has consistently demonstrated, early involvement of stakeholders in strategic decision-making processes may lengthen planning and negotiations, yet ultimately enhance the acceptability and feasibility of outcomes. The experience of designing and implementing new technology provides arguably the most dramatic, recent example of this. In essence, the message of this experience is that a separation of the stakeholders involved in the design and implementation stages significantly reduces the probability of appreciably enhancing organizational performance.

This is partly because early involvement allows for synthesis in the design and implementation of strategic projects, as well as simultaneous attention to ‘people’ and ‘technical’ issues at an early stage. Effective inclusion is also fundamental to developing a range of partnership benefits, such as a holistic approach that encourages value for money and improved service quality skills transfer from the private sector, innovation and creativity in service developments, diversity in approaches to public services, and organizational learning. According to the Ministry of Finance in Kenya (2010), reforms in the public service will further enhance strategic planning in government, continuous improvement, and stakeholder engagement.

2.1.4 Leadership style

A leadership style is a leader's style of providing direction, implementing plans, and motivating people. There are many different leadership styles that can be exhibited by leaders in the political, business, public or other fields.

The authoritarian leadership style or autocratic leader keeps strict, close control over followers by keeping close regulation of policies and procedures given to followers. To keep main emphasis on the distinction of the authoritarian leader and their followers, these types of leaders make sure to only create a distinct professional relationship. Direct supervision is what they
believe to be key in maintaining a successful environment and followership. In fear of followers being unproductive, authoritarian leaders keep close supervision and feel this is necessary in order for anything to be done.

On the other hand, Foster D.E. (2002) outlines that democratic leadership style consist of the leader sharing the decision-making abilities with group members by promoting the interests of the group members and by practicing social equality.

According to Thong et al Top management support is a key recurrent factor critical for effective information systems (IS) implementation. Shore (2009) wrote that top-management support is on everyone’s list of critical success factors (CSFs). In fact, it is usually at the very top of the list. Fail to get it, we are told, and the project stands little chance of succeeding. Indeed, without top level support the project may never be approved, or if it is approved at all it may take forever for it to get through the process. Without support, cooperation from other departments may be impossible to obtain, and commitment from team members unenthusiastic. Imagine trying to round out the project team with a representative from marketing, yet top management has offered only unenthusiastic support. While we can all agree that top-management support is essential, it’s not really clear what we mean by “top-management support.” Does it mean that the project was presented to top management and they nodded? Does it mean that they were under pressure to approve the project from higher-ups? Or, does it mean that they enthusiastically supported the project and understood its role in meeting the organization’s business objectives?

When top level is support is strong everyone knows it. But they also know it when top level support is weak. Indeed everyone knows it. Project managers know it. Team members know it. Those in other functional areas know it. Even end-users or customers know it. Just because the project did receive unequivocal support may also mean nothing. In fact too much “top management support” may condemn a project to failure. Think about the Titanic, the Edsel, the Columbia Shuttle, the Denver baggage handling system. Didn’t they get top management support? What is apparent is that top-management support comes in a variety of shapes and sizes and that it is only a start to say the project has top-management support.
According to Zutshi et al (2003), top management plays a significant role in the successful implementation and maintenance of any program by providing both tangible (dollars) and intangible (support, encouragement of employees, and commitment of time) resources that determine the successful adoption and maintenance of the programme. This is evident in the case of Ericsson, where resulting from its directors’ vast experience and expertise, even before the regulations for CFCs (chloro-flouro-carbons) became mandatory, the company was able to proactively respond to it by changing its raw materials. This way the company not only reduced its impact on the environment but also it obtained a competitive edge at the same time.

According to Transforming Kenya, Transformative leadership is about inspirational leadership, leaders who are charismatic, visionary and transformative. For successful Public Service leadership to occur, it requires strategic application that fuels support for the vision and strategy by empowering and inspiring others. The organization emphasizes its goals include revolutionizing public service office by providing and processing official documents online saving on time and costs, creating a 24/7 user-friendly, convenient channel to enable easy access to public services via mobile phones and providing highly knowledgeable, friendly staff in an ultramodern, high-tech public service facility. From the foregoing, Transforming Kenya’s goals can only be facilitated by way of undertaking ICT based projects to realize its dream.

2.1.5 Change Management
Change management is an approach to shifting/transitioning individuals, teams, and organizations from a current state to a desired future state. It is an organizational process aimed at helping change stakeholders to accept and embrace changes in their business environment. In some project management context, change management refers to a project management process where changes to a project are formally introduced and approved.

Kotter (2001) defines change management as the utilization of basic structures and tools to control any organizational change effort. Change management's goal is to minimize the change impacts on workers and avoid distractions. As a multidisciplinary practice that has evolved as a result of scholarly research, Organizational Change Management should begin with a systematic diagnosis of the current situation in order to determine both the need for change and the capability to change. The objectives, content, and process of change should all be specified as
part of a Change Management plan. Change Management processes may include creative marketing to enable communication between change audiences, but also deep social understanding about leadership’s styles and group dynamics. As a visible track on transformation projects, Organizational Change Management aligns groups’ expectations, communicates, integrates teams and manages people training. It makes use of performance metrics, such as financial results, operational efficiency, leadership commitment, communication effectiveness, and the perceived need for change to design appropriate strategies, in order to avoid change failures or solve troubled change projects.

Successful change management is more likely to occur if the benefits management and realization to define measurable stakeholder aims, create a business case for their achievement (which should be continuously updated), and monitor assumptions, risks, dependencies, costs, return on investment, dis-benefits and cultural issues affecting the progress of the associated work. Effective Communications that informs various stakeholders of the reasons for the change (why?), the benefits of successful implementation (what is in it for us, and you) as well as the details of the change (when? where? who is involved? how much will it cost? etc.) and devising an effective education, training and/or skills upgrading scheme for the organization can also result in a positive change management.

Counter resistance from the employees of companies and align them to overall strategic direction of the organization Provide personal counselling (if required) to alleviate any change-related fears and closely Monitoring of the implementation and fine-tuning as required. Change management can take many forms and include many change environments. The most common is organizational change management. Organizational change management is the process of developing a planned approach to change in an organization. Typically the objective is to maximize the collective benefits for all people involved in the change and minimize the risk of failure of implementing the change. The discipline of change management deals primarily with the human aspect of change. To be effective, change management should be multi-disciplinary, touching all aspects of the organization. However, at its core, implementing new procedures, technologies, and overcoming resistance to change are fundamentally human resource management issues.
It is also important to estimate what impact a change will likely have on employee behaviour patterns, work processes, technological requirements, and motivation. The leadership must assess what employee reactions will be and craft a change programme that will provide support as workers go through the process of changing. Through DEPOT programmes, organizations have been able to motivate their staff to feel confident not only to accept change, but to drive it. The programmes are implemented, disseminated throughout the organization, monitored for effectiveness, and adjusted where necessary.

In general terms, a change programme describes the change process to all people involved and explains the reasons why the changes are occurring. The information should be complete, unbiased, reliable, transparent, and timely. It is also designed to effectively implement the change while being aligned with organizational objectives, external environmental trends, and employee perceptions and feelings. It provides support to employees as they deal with the change, and wherever possible involves the employees directly in the change process itself. We have seen that it is beneficial for staff to see how change in the organisation will enable the organisation to achieve its vision and mission, and how the individual will then also be more successful. This creates ownership on the part of the individual to drive the identified change process.

According to Psychological Contract theory, which help explain the complex relationship between an organization and its employees: Do not 'sell' change to people as a way of accelerating 'agreement' and implementation. 'Selling' change to people is not a sustainable strategy for success, unless your aim is to be bitten on the bum at some time in the future when you least expect it. Change needs to be understood and managed in a way that people can cope effectively with it. Change can be unsettling, so the manager logically needs to be a settling influence.

Check that people affected by the change agree with, or at least understand, the need for change, and have a chance to decide how the change will be managed, and to be involved in the planning and implementation of the change. Mehrabian (1956) advises for the use of face-to-face communications to handle sensitive aspects of organisational change management. Managers should be encouraged to communicate face-to-face with their people too if they are
helping in managing an organizational change. Email and written notices are extremely weak at conveying and developing understanding.

If you think that you need to make a change quickly, probe the reasons - is the urgency real? Will the effects of agreeing a more sensible time-frame really be more disastrous than presiding over a disastrous change? Quick change prevents proper consultation and involvement, which leads to difficulties that take time to resolve. For complex changes, refer to the process of project management, and ensure that you augment this with consultative communications to agree and gain support for the reasons for the change. Involving and informing people also creates opportunities for others to participate in planning and implementing the changes, which lightens your burden, spreads the organizational load, and creates a sense of ownership and familiarity among the people affected.

Belbin (1981) observed that for organizational change that entails new actions, objectives and processes for a group or team of people, use workshops to achieve understanding, involvement, plans, measurable aims, actions and commitment. Encourage your management team to use workshops with their people too if they are helping you to manage the change. You should even apply these principles to very tough change like making people redundant, closures and integrating merged or acquired organizations. Bad news needs even more careful management than routine change. Hiding behind memos and middle managers will make matters worse. Consulting with people, and helping them to understand does not weaken your position - it strengthens it. Leaders who fail to consult and involve their people in managing bad news are perceived as weak and lacking in integrity. Treat people with humanity and respect and they will reciprocate.

Change management in information technology (IT) projects should address the same concerns as other corporate change efforts such as cultural transformations. Ignoring the wide-reaching impact IT initiatives have on the workplace will result in the continued failure of IT systems to deliver value over time. Be mindful that the chief insecurity of most staff is change itself. See the process of personal change theory to see how people react to change. Senior managers and directors responsible for managing organizational change do not, as a rule, fear change - they
generally thrive on it. So remember that your people do not relish change, they find it deeply disturbing and threatening. Your people's fear of change is as great as your own fear of failure.

2.1.6 Training and Skills

In the field of human resource management, training and development is the field which is concerned with organizational activity aimed at bettering the performance of individuals and groups in organizational settings. It has been known by several names, including human resource development, and learning and development.

Harrison observes that the name was endlessly debated by the Chartered Institute of Personnel and Development during its review of professional standards in 1999/2000. "Employee Development" was seen as too evocative of the master-slave relationship between employer and employee for those who refer to their employees as "partners" or "associates" to be comfortable with. "Human Resource Development" was rejected by academics, who objected to the idea that people were "resources" — an idea that they felt to be demeaning to the individual. Eventually, the CIPD settled upon "Learning and Development", although that was itself not free from problems, "learning" being an over-general and ambiguous name.

Torrington et al (2004) noted that "stakeholders" in training and development are categorized into several classes. The sponsors of training and development are senior managers. The clients of training and development are business planners. Line managers are responsible for coaching, resources, and performance. The participants are those who actually undergo the processes. The facilitators are Human Resource Management staff. And the providers are specialists in the field. Each of these groups has its own agenda and motivations, which sometimes conflict with the agendas and motivations of the others.

The conflicts are the best part of career consequences are those that take place between project team members/stakeholders and their bosses. The number one reason people leave their jobs is conflict with their bosses. And yet, as author, workplace relationship authority, and executive coach, Hoover points out, "Tempting as it is, nobody ever enhanced his or her career by making the boss look stupid." Harrison (2005) argues that training an employee to get along well with
authority and with people who entertain diverse points of view is one of the best guarantees of long-term success. Talent, knowledge, and skill alone won't compensate for a sour relationship with a superior, peer, or customer.

A skill is the learned capacity to carry out pre-determined results often with the minimum outlay of time, energy, or both. In other words the abilities that one possesses. Skills can often be divided into domain-general and domain-specific skills. For example, in the domain of work, some general skills would include time management, teamwork and leadership, self motivation and others, whereas domain-specific skills would be useful only for a certain job. Skill usually requires certain environmental stimuli and situations to assess the level of skill being shown and used.

People need a broad range of skills in order to contribute to a modern economy and take their place in the technological society of the 21st century. The fundamental aim of training is to help the organization achieve its purpose by adding value to its key resource – the people it employs. Training means investing in the people to enable them to perform better and to empower them to make the best use of their natural abilities. The particular objectives of training are to develop the competences of project team members/stakeholders and improve their performance. It is also aimed to help people to grow within the organization in order that, as far as possible, its future needs for human resource can be met from within. In addition, Training reduces the learning time for project team members/stakeholders starting in new jobs on appointment, transfers or promotion, and ensures that they become fully competent as quickly and economically as possible.

Companies derive competitive advantage from training and development. Training and development programmes, as was pointed out earlier, help remove performance deficiencies in employee. This is particularly true when - (1) the deficiency is caused by a lack of ability rather than a lack of motivation to perform, (2) the individual(s) involved have the aptitude and motivation need to learn to do the job better, and (3) supervisors and peers are supportive of the desired behaviours.
There is greater stability, flexibility, and capacity for growth in an organization. Training contributes to employee stability in at least two ways. Project team members/stakeholders become efficient after undergoing training. Efficient project team members/stakeholders contribute to the growth of the organization. Growth renders stability to the workforce. Further, trained project team members/stakeholders tend to stay with the organization. They seldom leave the company. Training makes the project team members/stakeholders versatile in operations. All-rounder can be transferred to any job. Flexibility is therefore ensured. Growth indicates prosperity, which is reflected in increased profits from year to year. Who else but well-trained project team members/stakeholders can contribute to the prosperity of an enterprise?

Needs assessment diagnoses present problems and future challenges to be met through training and development. Organizations spend vast sums of money (usually as a percentage on turnover) on training and development. Before committing such huge resources, organizations would do well to the training needs of their employees. Organizations that implement training programmes without conducting needs assessment may be making errors. For example, a needs assessment exercise reveal that less costly interventions (e.g. selection, compensation package, job redesign) could be used in lieu of training.

Training and Development helps in optimizing the utilization of human resource that further helps the employee to achieve the organizational goals as well as their individual goals. It also helps to provide an opportunity and broad structure for the development of human resources’ technical and behavioural skills in an organization. It also helps the employees in attaining personal growth. It is also believed that Training and development helps in Development of skills of employees, productivity of team members, enhances team spirit, improves health culture, quality of output, and enhances health and safety among others.
2.1.7 IT Infrastructure and Dynamics

The term IT infrastructure is defined in Information Technology Infrastructure Library (ITIL) v3 as a combined set of hardware, software, networks, facilities, etc. (including all of the information technology), in order to develop, test, deliver, monitor, control or support IT services. Associated people, processes and documentation are not part of IT Infrastructure. The Information Technology Infrastructure Library is a set of practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business. In its current form (known as ITILv3 and ITIL 2011 edition), ITIL is published in a series of five core publications, each of which covers an ITSM lifecycle stage.

ITIL describes procedures, tasks and checklists that are not organization-specific, used by an organization for establishing a minimum level of competency. It allows the organization to establish a baseline from which it can plan, implement, and measure. It is used to demonstrate compliance and to measure improvement. Responding to growing dependence on IT, the UK Government's Central Computer and Telecommunications Agency in the 1980s developed a set of recommendations. It recognized that without standard practices, government agencies and private sector contracts had started independently creating their own IT management practices. ICT technical support is the specialist technical function for infrastructure within ICT. Primarily as a support to other processes, both in infrastructure management and service management, technical support provides a number of specialist functions: research and evaluation, market intelligence (particularly for design and planning and capacity management), proof of concept and pilot engineering, specialist technical expertise (particularly to operations and problem management), creation of documentation (perhaps for the operational documentation library or known error database). There are different levels of support under the ITIL structure, these being primary support level, secondary support level and tertiary support level, higher-level administrators being responsible for support at primary level.

In information technology and on the Internet, infrastructure is the physical hardware used to interconnect computers and users. Infrastructure includes the transmission media, including telephone lines, cable television lines, and satellites and antennas, and also the routers,
aggregators, repeaters, and other devices that control transmission paths. Infrastructure also includes the software used to send, receive, and manage the signals that are transmitted.

In some usages, infrastructure refers to interconnecting hardware and software and not to computers and other devices that are interconnected. However, to some information technology users, infrastructure is viewed as everything that supports the flow and processing of information.

Infrastructure companies play a significant part in evolving the Internet, both in terms of where the inter-connections are placed and made accessible and in terms of how much information can be carried how quickly. IT operations teams continually face application and infrastructure change requests — from large-scale projects to small patch requests. Meeting these requests responsively requires IT teams to fully understand how changes impact application performance and the end-user experience. Change management has increasingly become more challenging because of the evolving complexity of the application delivery chain.

IT and infrastructure changes are a fact of life, but if they are not managed carefully these changes can lead to service outages, downtime and poor customer experiences. Successfully implementing changes within an organization’s IT infrastructure requires understanding baselines and validating performance after changes are implemented across the different geographies of your business. To ensure change management success — and reduce the risk of unplanned downtime and the associated brand damage it causes — you need visibility into end-user performance.

2.3. Critical Review

According to The Standish Group Magazine Review (2005), which tracks IT project success rates, only 29 per cent of IT projects conducted in 2004 were completed successfully. The numbers are depressing for a variety of reasons. IT projects fail because they’re just plain harder. They include the usual project-management challenges, such as deadlines, budget constraints and too few people to devote to the project. But they also face unique technology challenges, from hardware, operating system, network or database woes, to security risks,
interoperability issues, and the changes manufacturers make to their hardware and software configurations.

IT projects fail at the beginning—not the end—due to a lack of sufficient planning. An IT organization must consider the resources it needs to devote to a project, the skills required and the people who need to be involved, and realistically consider the time it will take to create, test and implement the project deliverables. Otherwise, the project will be a mess. The IT organization will never complete it on time, on budget or with the required functionality, which are three common factors for project success.

Third, IT projects fail because they're rushed. Because so many companies today rely on IT for a competitive advantage, they speed through development efforts and systems implementations in order to be first to market with new, IT-based products, services and capabilities. Organizations often feel that, to remain competitive, they must cut costs and maintain business operations, but that adds to the pressure on a big, expensive project such as an ERP implementation or a platform upgrade. A project with inadequate planning, risk assessment and testing is doomed from the start. According to Morgan (2006), IT projects fail because their scope is too unwieldy. He suggests that a project with a large scope can usually be better executed by breaking it down into a series of smaller, more manageable projects.

2.4. **Summary of Gaps to be Filled by the Study**

Although significant numbers of IT projects are routinely completed successfully, it must be conceded that the data on IT project success rates provide cause for concern. For example, a recent study on the state of IT project management in the UK carried out by Oxford University and Computer Weekly (2003) reported that a mere 16% of IT projects were considered successful. Similarly, in another UK survey published by the BCS, only three out of the more than 500 development projects assessed met the survey’s criteria for success. Nevertheless, the Standish Group estimates current success rates in the US at around 34%, which represents a significant improvement on the 16% success rate recorded in their first survey in 1995. The Oxford University/Computer Weekly survey also suggests that UK success rates, although low, may be improving.
It is difficult to quantify the financial cost arising from these low success rates, however a recent review by Unites States Project Organization (2007) estimated that a phenomenal US$150 billion per annum was attributable to wastage arising from IT project failures in the Unites States, with a further US$140 billion in the European Union7. Irrespective of the precise amount, it is clear that the price tag associated with IT project failures is unacceptably high. In addition, the increasing prevalence and complexity of software in safety critical systems, business critical systems and medical devices means that there is growing potential for high human costs arising from IT system failure. The study therefore intends to bridge the gap that leads to losses due to unsuccessful IT projects in Public Sector in Kenya.

2.5. Conceptual Framework

![Conceptual Framework Diagram](image-url)

*Fig 1: Conceptual Framework (Source: Author, 2014)*
CHAPTER THREE:
RESEARCH METHODOLOGY

3.1. Introduction to Research Methodology

This chapter discusses the research methodology that the researcher intends to use while carrying out the study. The chapter includes the research design, target population, sample selection, sample size, and research instruments. The chapter will also present how the validity and reliability of the instruments will be ensured. The chapter concludes with data collection procedures and data analysis techniques.

3.2. Study Design

The research design to be used in this study is descriptive survey because of exclusiveness in its data collection and its ability of analysis on the factors that affect effective outcome of IT projects in public sector. The study aims at collecting information from respondents on their attitudes and opinions in relation to what affects the outcome of IT projects at Kenya Revenue Authority, a selected institution in public sector. The researcher will use both primary and secondary sources of data. The primary data will be obtained through the use of questionnaires and interviews while secondary data will be got from the organization’s archives and other government/legislative directions in relation to the policy on IT management and procedures.

3.3. Target Population

The target population of study will be on the staff based at the headquarters, numbering one thousand four hundred and ninety six (1,496). The study will carried out at Kenya Revenue Authority’s headquarters, located at Times Tower along Haile Selasie Avenue in Nairobi, Kenya. Purposive sampling will be used to select Times Tower other than other stations in the country because it houses majority of the employees and the Project Management Business Office (PMBO) of which the focus is on, is centralized and is based at the headquarters. KRA was also selected given its large number of employees.
This can be tabulated as shown below:

<table>
<thead>
<tr>
<th>Department</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customs Service</td>
<td>456</td>
<td>30.48%</td>
</tr>
<tr>
<td>Domestic Taxes</td>
<td>364</td>
<td>24.33%</td>
</tr>
<tr>
<td>Road Transport</td>
<td>81</td>
<td>5.41%</td>
</tr>
<tr>
<td>Human Resources</td>
<td>43</td>
<td>2.87%</td>
</tr>
<tr>
<td>Administration</td>
<td>94</td>
<td>6.28%</td>
</tr>
<tr>
<td>PMBO</td>
<td>6</td>
<td>0.40%</td>
</tr>
<tr>
<td>Finance</td>
<td>42</td>
<td>2.81%</td>
</tr>
<tr>
<td>I.C.T.</td>
<td>410</td>
<td>27.41%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,496</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Table 1: Target Population (Source: KRA March, 2014)*

3.4. **Sampling/Sample Design**

Muganda (2010) defines sampling frame as a list of accessible population of people, events or documents that could be included in a survey from which the researcher will pick a sample to collect data. Mugenda and Mugenda (2006) note that simple random sampling as a powerful technique. The sample of 150 from a population of 1,496 forms 10% of the target population which as recommended by Birchall (2009) and Kothari (2003) as sufficient to carry out statistical inferences. The researcher therefore, adopted this. This will ensure that the sampling frame is current, complete and relevant for the attainment of the study objectives. This resulted in a total of 232 respondents for the study.

The study will involve one hundred and fifty (150) employees of KRA. The selection of the sample size is reached based on Gay’s (1996) guidelines. Random sampling will be employed where a sample of 10% will be selected which translated to 150 respondents. The study will use the existing KRA departments as strata (revenue and support). A list of employees from the groupings of the departments will form the sampling frame. Through random sampling, a sample was then selected from each stratum separately, producing a stratified sample. Since random sampling was used, it ensured that all respondents in each stratum had an equal
opportunity for selection. The stratified sampling design was to ensure that all concerned departments within the population being studied are adequately represented in the sample.

3.5. Data Collection Procedures/Instruments

The study will use semi-structured questionnaire for collecting primary data from the selected respondents. According to Kothari (2004), a questionnaire is the most effective survey instrument due to its many advantages including economy, ease of use and standardization of responses. It is also easier to analyse data from questionnaires. The researcher will design and personally distribute the questionnaires to the respondents at their places of work at Times Tower Building. The questionnaire will be divided into four parts. The first part will contain five (5) general questions concerning the respondent and the organization. The part will have four closed questions on gender, age, number of years working in the company, level of education of the respondent and the respondent’s level in the target division. The second part will contain four (4) questions. These four questions dwell on the challenges emanating from management of IT projects in public institutions. The first question will be scaled, the second a closed one and the other two open questions.

The third part of the questionnaire contains five questions dwelling on government regulation and policies in the telecom industry touching on liberalization, as well as the factors hindering the effective outcome of IT projects, development and implementation of sound regulatory policies for triggering technological innovation. The first question will be a Llikert scaled question, the second a closed-ended question and the others will be open questions. The final part of the questionnaire will be focused on strategic responses employed by the target company to respond to challenges brought about by IT in project management. This part will have four items. The first item was a Likert type question, the second a closed-ended question and the other two open-ended questions.

The researcher will self-administer the questionnaires to all the sampled respondents at their workstations at Times Tower. Five days after administering the questionnaire, the investigator will, in person, call and e-mail all the respondents to remind them of the collection date of the filled questionnaire. After one week, the researcher will go round collecting all the filled
questionnaires. Those that shall have not completely filled their questionnaires will be negotiated on when possibly they can be collected, but within a time span of two (2) days and the questionnaires collected thereafter as shall have been agreed.

3.6. Data Analysis

After collecting the questionnaires from the respondents, the researcher will check them for completeness and only the ones completely and properly filled will then be considered for analysis. The checking is to ensure that data is accurate, consistent with the facts gathered, uniformly entered as completely as possible and has been well arranged to facilitate coding and tabulation. The questionnaires found fit for analysis will be coded and the raw data entered into Statistical Package for Social Scientists (SPSS) which generates descriptive statistics inform of frequencies, percentages and mean scores. The closed ended questions will be analysed through percentages to depict the weight given to each of the item. The open-ended questions will be analysed through content analysis to depict the main themes from the responses while likert type questions will be analysed through mean scores. Results from the analysis will be presented through tables for ease of interpretation and understanding.

The data collected from the questionnaires, observations and interviews were collated, coded, summarized and analyzed by the use of descriptive statistics (statistics and frequencies) and inferential statistics. Descriptive statistics in form of frequencies, means and standard deviations were also utilized to analyze data from observation schedules. Analysis of Variance (ANOVA) was used to analyze the degree of relationship between the variables in the study. This was meant to reveal strength and direct association between the variables.

The multiple regression analysis was used to determine whether the group of factors proposed together influenced the implementation of Performance Related Pay as per the developed model in chapter two. The analysis was done using Statistical Package for Social Sciences version 17 (SPSS). Leyla (2001) explains that SPSS offers extensive data handling capabilities and numerous statistical routines that can analyze small to very large amounts of data statistics. Likert type scale was used to calculate the overall score of the respondents. It is considered more reliable because respondents answer each statement in the questionnaire. The rating scale communicates interval properties to respondents and therefore, produces data that can be rated
to an interval scale. The data collected from the Likert-type scale can be evaluated easily through standard techniques.

### 3.7. Validity and reliability

Mugenda (2010), states that pilot testing is important for developing and testing adequacy of research instruments, finding out whether research material is realistic and workable, as well as determining the extent of effectiveness of the sampling frame and technique. Identification of logistical problems that may occur whilst using proposed methods and finding out resources that may be needed in terms of finance and research assistants.

The target population consisted of 1,496 staff of KRA based in Times Tower, Nairobi. In conducting the Reliability Measurement, the researcher first will pre-test the questionnaire on 10% of the sample of 150 to ensure its reliability. The pilot testing will be done using twenty four (24) respondents four from each department. Targeted respondents involved in the test pilot however, will not eligible for the study. The aim of the pilot testing as Mugenda and Mugenda (2006) emphasize will be to eliminate common errors and omissions and help in testing the study plan. To minimize error and increase reliability of data collected, the reliability pre-test questionnaire will be tested using scores obtained from a single test administered to individuals from within the sampling frame hence save time (Mitchelle 1996). Cronbach’s coefficient Alpha will then be computed using statistical package for social science (SPSS) to determine how items correlate among themselves. This method will further reduce time required to compute a reliability coefficient in other methods (Mugenda and Mugenda, 2003).

### 3.8. Expected Output

At the end of this research, the researcher expects to obtain adequate findings regarding the factors affecting effective outcome of IT based project in the public sector in Kenya. The researcher expects the respondents to give clear and adequate responses that will make the study achieve its objectives.
APPENDICES

Appendix I: Introduction Letter

Frank Robert Omondi,
P. O Box 22230 – 00100,
Nairobi – KENYA,

18th April, 2014

Dear Respondent,

RE: RESEARCH PROJECT
I am a student at Kenyatta University, pursuing a Masters degree in Business Management – Project Management option. As part of the requirements of the course, I am required to carry out an independent research. I have since settled on the Challenges Facing Information & Communication Technology Projects in Public Sector with a Case of Kenya Revenue Authority. To enable me successfully carry out the study, a questionnaire is provided to facilitate data collection which will be the major basis of findings of the research.

It is from this background that I kindly request you to respond to the questions as directed and as honestly as possible. I understand that you have a busy schedule and your participation in this evaluation is greatly appreciated and information given will be treated in strictest confidence.

Sincerely,

Frank Robert
APPENDIX 2: QUESTIONNAIRE

Introduction
Information Technology Project is relatively a new field with varying challenges, competition and volatility. There are factors which, in one way or the other influences the outcome of these kinds of projects. Kenya Revenue Authority has implemented some of its processes by carrying out such projects. This is why KRA was chosen to find out what factors will influence the outcome of such project to the success or ineffective.

Please answer all questions to the best of your ability. There is no right or wrong answers. What matters is your personal opinion from your experience. The survey should take approximately 5 working days. Please rate each of the following statements by ticking as appropriate or put the right answer in the gaps given.

PART I: GENERAL INFORMATION

1. Gender? □ Male □ Female

2. Age group? □ Below 30 □ 31-40 □ 41—50 □ Above 50 years

3. Number of years you have worked in the company? ______________________

4. What is your highest level of education?
   □ High School □ College Diploma □ Degree □ Others _____________

5. What is your grade in the organization?
   □ KRA 1-3 □ KRA 4-5 □ KRA 6-7
   □ KRA 8-10 □ KRA 11-12 □ KRA 13-16

PART II: Information Technology Project in Public Sector

1. Do you think IT projects have been successful in KRA?
   Yes [ ] No [ ]

2. If yes, to what extent?
   A. Very great extent (5)
   B. Great extent (4)
C. Not great nor low extent (3)
D. To a low extent (2)
E. To a very low extent (1)

3. If NO, explain why?

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................................................................................................................................................................

4. What do you think can be done to IT Projects in KRA to make their outcome effective?

................................................................................................................................................................
................................................................................................................................................................
................................................................................................................................................................

PART III: Stakeholder Involvement and IT Project in Public Sector

1. In your opinion, has there been enough stakeholder involvement during the development of IT projects in KRA?

Yes [ ] No [ ]

2. If yes, to what extent?

A. Very great extent (5)
B. Great extent (4)
C. Not great nor low extent (3)
D. To a low extent (2)
E. To a very low extent (1)

3. Do you think stakeholder involvement affects the outcome of IT projects in KRA?

Yes [ ] No [ ]

4. Explain your answer in 3 above.

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42
PART IV: Management Support and IT Project Outcome

1. In your opinion, has KRA Management been supportive of IT projects?
   Yes [ ]  No [ ]

2. If yes, to what extent?
   A. Very great extent (5)
   B. Great extent (4)
   C. Not great nor low extent (3)
   D. To a low extent (2)
   E. To a very low extent (1)

3. Do you think Management Support have an effect on the outcome of IT projects in KRA?
   Yes [ ]  No [ ]

4. Explain your answer in 3 above.
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………
   …………………………………………………………………………………………………………………

PART V: Change Management and IT Project Outcome

1. In your opinion, do you think there has been supportive change management while implementing IT projects in KRA?
   Yes [ ]  No [ ]

2. If yes, to what extent?
   A. Very great extent (5)
   B. Great extent (4)
   C. Not great nor low extent (3)
   D. To a low extent (2)
   E. To a very low extent (1)

3. Do you think Change Management sways the outcome of IT projects in KRA?
   Yes [ ]  No [ ]
4. Explain your answer in 3 above.

PART VI: Training & Skills and IT Project Outcome

1. In your opinion, do you think there is sufficient Skills to support implementation of IT projects in KRA?
   Yes [ ] No [ ]

2. If yes, to what extent?
   A. Very great extent (5)
   B. Great extent (4)
   C. Not great nor low extent (3)
   D. To a low extent (2)
   E. To a very low extent (1)

3. Do you think Training and Skills influences the outcome of IT projects in KRA?
   Yes [ ] No [ ]

4. Explain your answer in 3 above.

5. In your opinion, does the following parameters present challenges to ICT projects in KRA?

<table>
<thead>
<tr>
<th>Measure</th>
<th>Not at all</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
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<td>Induction Training of staff</td>
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<td>Refresher training</td>
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<tr>
<td>Job experiences</td>
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</table>
PART VII: IT Infrastructure and IT Project Outcome

1. Are there enough ICT facilities to support development and implementation of IT projects in KRA?
   Yes [ ] No [ ]

2. If yes, to what extent?
   - A. Very great extent (5)
   - B. Great extent (4)
   - C. Not great nor low extent (3)
   - D. To a low extent (2)
   - E. To a very low extent (1)

3. Do you think ICT facilities influence the outcome of IT projects in KRA?
   Yes [ ] No [ ]
   Explain your answer in 3 above.
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................

4. Do changes in Technology affect IT Projects in public sector?
   Yes [ ] No [ ]

5. If yes, to what extent?
   - A. Very great extent (5)
   - B. Great extent (4)
   - C. Not great nor low extent (3)
   - D. To a low extent (2)
   - E. To a very low extent (1)

6. If your answer is NO in 4 above, explain.
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................
   ..........................................................................................................................

45
APPENDIX 3: WORK PLAN

The sequence and schedule of major events during study period will be as tabulated below

**Work Plan Table**

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Questionnaire Construction</td>
<td>January 2014</td>
</tr>
<tr>
<td>Pilot Study</td>
<td>February 2014</td>
</tr>
<tr>
<td>Field Data Collection</td>
<td>April 2014</td>
</tr>
<tr>
<td>Data Analysis, Report Writing and Dissemination</td>
<td>May 2014</td>
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</tbody>
</table>

*Table 2: Work Plan*

**Work plan Schedule**

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<th>ACTIVITY</th>
<th>January 2014</th>
<th>February 2014</th>
<th>April 2013</th>
<th>May 2014</th>
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<tr>
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<td>Pilot Study</td>
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<tr>
<td>Data Analysis</td>
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<tr>
<td>Report Writing</td>
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<tr>
<td>Dissemination</td>
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REFERENCES


http://www.projectsmart.co.uk/project-management-and-its-impact-on-it-project-success.html


Kenya Revenue Authority Tax Reforms and Modernization: Lessons and Challenges, 2009

Kenya Revenue Authority (2012), Fifth Corporate Plan


R Meredith Belbin, Management Teams, Why they Succeed or Fail (1981)


