

**EFFECTS OF ICT SUPPORT SERVICES ON REVENUE  
COLLECTION BY KENYA REVENUE AUTHORITY**

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## DECLARATION

This project is my original work and has not been presented for a degree in any other University

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_

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This project has been presented for examination with my approval as the appointed University supervisor.

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## **DEDICATION**

To my Husband, Kevin Mburu Kuria, my children Joseph, Joy and Anthony, friends and all benefactors whose support in one way or another has contributed to successful completion of the thesis.

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## **ABBREVIATIONS AND ACRONYMS**

GoK	Government of Kenya
ICT	Information Communication Technology
KRA	Kenya Revenue Authority
PIN	Personal Identification Number
TRA	Tanzania Revenue Authority

## ABSTRACT

Over the years, Kenya Revenue Authority (KRA) revenue collection has increased from its inception, accounting for over 93% of total government revenue. The impetus of the study is based around three relevant theories; institutional theory, change management theory and theory of systems. The challenges affecting revenue collection are over employment leading to supervision problems and budget constraints, non-payment of taxes by local community, administrative problems like corruption and lack of enforcement on revenue collection by local authorities, lack of administrative capacity to fully tap revenue sources among others. The main aim of the study was to explore the effects of ICT support services on revenue collection at KRA. This study used a descriptive survey research design. Primary qualitative data was used in this study specifically by use of interview guide. It was collected from all the six departments at KRA. Interviews were conducted from 6 selected departments where each department two employees were selected in the top management category to be precise the commissioner and deputy commissioner. Data collected was purely qualitative in nature therefore content analysis was used for data analysis since it involves discussion and was presented in prose. The study findings revealed that ICT support services have greatly influenced the revenue collection at KRA. This has been made possible by the strategies that the organization has put in place over the years by modernisation of revenue collection system through the introduction of iTax platform, I Customs, ICMS, manifest management system all these have aided in the automation of customs procedures. The study further concludes that automation of revenue collection processes offers great deal of significant management since it facilitates effective access to services and provides convenient and fast customer feedbacks. The study concludes that the level of compliance has increased among the tax payers due to the strategies that KRA is putting in place such as ensuring all companies registered obtain a PIN, all employers during recruitment process to enquire for tax compliance certificates, blocking of tax defaulters and also opening of service agents who can handle customers conveniently at different localities not necessarily at KRA offices like Huduma Centres. ICT development is of core importance to many organizations in need of growing successfully and improves efficiency in operations and in serving clients. More training on the reforms and modernization at KRA should be enhanced so as to improve on the skills, knowledge and professional capacity of the employees to increase revenue. In addition, more revenue collection centers need to be established since they have been effective in enhancing financial performance by the Authority. Given that the study focused only on strategic effect of ICT support services on revenue collection based on primary qualitative data (interview guide) and focused on the management employees only, it is recommended that a similar study on the effect of ICT support services on revenue collection at KRA be undertaken to include other employees and tax payers as well. The study also recommends that another study can be carried out using other methods of data collection such as questionnaires to cater for large population and secondary data to cater for factual data on performance.



# CHAPTER ONE: INTRODUCTION

## 1.1 Background of Study

Organizations today have increasingly become aware of the importance of strategic management. This awareness in a system is a critical dimension in the performance of organizations. The actual incidents validate the assumption that despite how sophisticated and modern the business actions of the organization may become, it will be really hard to maintain its growth and effectiveness except if there are strategies that harmonize its operations. According to Wright (2010) “the frequent and uncertain changes, greater competition between firms, the need for continuous innovations, quality enhancement and cost reduction force companies to face the challenge of improving their competitiveness and consequently their performance”. This recognition has pushed strategic management as a key field of study and the restored interest has assisted in the growth of new approaches in running of organizations. The concept of the strategic management thus covers organization-wide issues in the context of a whole range of its operational influences. According to Pearce & Robinson (2009) “strategic management is the process of specifying an organization's objectives, developing policies and plans to achieve these objectives and allocating resources so as to implement the plans”. By practicing effective strategic management organizations seek to reposition themselves in order to create new competences and capacities to exploit and deal with new situations and this is made possible through provision of overall direction to the organization by the top management.

Lately Kenya Revenue Authority (KRA) has advanced into recent and wholly integrated revenue administration agency. Tax collection has been on the increase since its inception and caters for over 93% of total government income. Kenya

Revenue Authority plays critical roles in facilitation of trade and investments, protection against banned and illegal goods and promoting national security at large. This success is largely attributed to development and execution of strategic planning process and performance management systems. Taxation can be defined as the obligation by government of compulsory levies and contributions on the general public, assets, income, merchandise and business transactions, with an aim of raising government income or revenue for expenditure. The collection of tax revenue is made possible by the government's statutory organization, Kenya Revenue Authority (KRA). The major reasons for Kenya to enforce taxation include; to collect monies for financing societal services such as health, national security, education and infrastructural developments; secondly, to increase the money sent or catering for the poor; to promote investments; and to protect local markets on domestic products through heavy taxes on unnecessary imports (KRA, 2012).

The Kenyan taxation system is built on three important components; namely tax policy, tax law and tax administration. Tax administration incorporates a set of activities in ensuring that tax is levied based on relevant tax laws and sanctions applied where appropriate. It comprises three interrelated functions, namely; identification of tax liabilities, the collection, prosecution, and penalty activities (KRA, 2012). KRA gets its revenue from the taxes, therefore to ensure a success in this procedure, the tax authorities ought to receive internal support. Thus, the study seeks to investigate the perceived effect of ICT support services on tax collection.

According to Norton (2006) "the of goal Information Systems, was not only to provide citizens, economic organizations, companies and institutions with a range of excellent and effective services, but they also created a new form of citizenship based on the participation of all individuals in the provision of services and the decision-

making process which was aided by the intensive use of new Information and Communication Technologies” (Norton, 2006; 25).

The impetus of the study was based around two relevant theories; Institutional theory, which explains how institutional environment can objectively influence the interaction between departments in the organization to promote effectiveness in revenue collection and the theory of systems which views organizations as systems need to interact with the environment or other organs of the organizations to ensure certain objectives are met.

### **1.1.1 ICT Application**

Computerization of tax or income collection systems involve investing in up to date technology for instance: information communication technology (ICT) so as to advance the revenue system to attain integration and improve on information sharing in order to improve system effectiveness and efficiency. All departments in the organization “should put in place an effective and efficient revenue collection system in monitoring framework that ensures adequate supervision of the budgeted programs and project activities to enhance accountability and absorption of resources” (Amin, 2013;15). Tax reforms and revenue collection structure and system are influential in trying to improve and simplify tax administration by using new technology such as ICT.

Tax or revenue administration automation had a positive effect on the cost of tax administration, automation and effectiveness of revenue collection. In furtherance, “automation of process at revenue collection points has a positive impact on the tax clearance time” (Haughton & Desmeules, 2001; 7). They further assert that “automation of Tax-Information Processing System does not require high equipment cost, but rather

helps to ease the burden of over-staffing, high re-engineering cost confronted by among other government institutions” (pg. 8).

### **1.1.2 Revenue Collection**

Municipal income generation is a fundamental element for financial policy and management in any monetary system because of its influence on country’s operation. Revenue is the engine for any government since it’s the key instrument which ensures government funding thus “tax revenue collection should comply with best practices of equity, ability to pay, economic efficiency, convenience and certainty” (Visser & Erasmus, 2005:10).

There is an increasing need by the government to collect much revenue by way of taxes to face the increasing financial expenditures budgeted by the country. System automation has been proven capable of introducing immense efficiencies into business procedures which could result in increased revenue collection (Zhou & Madhikeni, 2013). Application of technological solutions towards the strategic goals for government is a key step towards transforming government into an entity that can keep abreast of the needs, requirements and expectations of today's modern world.

### **1.1.3 Kenya Revenue Authority**

Kenya Revenue Authority was formed in 1995 as a semi-autonomous government agency with the general aim to provide operational sovereignty in revenue collection and administration. The agency is headed by a Chief Executive who is primarily accountable to a self-standing Board of Directors. Nevertheless, the cabinet secretary in charge of finance holds responsibility for policy direction as KRA is still an agent of the Kenyan Government. During its formation KRA brought together the then

Departments of Income Tax, Value Added Tax, Customs and Excise which were departments from the Ministry of Finance as well as the Road Transport Department which was from the Ministry of Transport (KRA, 2012).

During its earlier years of its inception KRA faced daunting challenges in terms of poor operating procedures and undocumented internal business processes. It also faced poor and inadequate use of ICT in its operations. There were also challenges of a negative corporate culture, lack of integration and collaboration among the revenue collecting departments, poor work ethic from its workforce leading to poor levels of integrity among staff and a poor public image from external publics. The non-integration of departments leads to lack of a common corporate culture, lack of synergy in operations and duplication of efforts and structures due to poor organization structure based on tax heads rather than on functional lines. A June 2002 report by Transparency International; Kenya ranked KRA 14th out of a sample of 50 public institutions on corruption, this meant that the organization was facing serious staff integrity challenges (KRA, 2012).

## **1.2 Research Problem**

For a long time, tax collection has been seen as a despised activity. However, levies are crucial since without them, there would be no funds to construct public infrastructure that aids businesses and the general public to be more industrious. According to Awiti (2010) “raising revenue has traditionally been high on the agenda of governments, represented by the Ministry of Finance (MOF), because of the critical importance of import duties as a source of budget revenue for many developing countries” (pg. 20). Local authorities such as Kenya Revenue Authority are key driving forces for development. Local Authorities “provide infrastructure and services

that contribute to economic development at the local level” (Awiti, 2010:21). Service delivery deterioration by local authorities in Kenya is so evident and lack of financial resources is the normal excuse given by many local authorities.

According to Ogondi (2011) the challenges affecting revenue collection are as a result of supervision problems due to high numbers of employees and budget constraints, taxes evasion by local community, administrative setbacks such as corruption, lack of enforcement on revenue collection by local authorities, lack of administrative capacity to fully tap revenue sources among others. The “National Business Agenda released by the private sector outlined that despite improved services”, taxpayers still faced problems “relating to customs clearance time, complexity of forms and procedures and understanding of statutory procedures such a valuation, classification and many more” (pg. 17).

Mwambingu (2002) examined the influence of change on Revenue Collection by KRA and found that “the change that had the greatest influence on the amount of revenue collected by the Authority was the introduction of targets, performance appraisals, the introduction of taxpayer education and information initiative, computerization of the administrative systems and change in corporate culture” (pg. 15). Kimeli (2003) on the other hand explored taxpayers’ attitudes and tax compliance behavior in Kenya’s small and medium enterprises in Kerugoya and Kirinyaga. Muriithi (2003) conducted a study on the local tax amendments and collection of revenue in the country and he found that the tax amendments had positively impacted the general tax structure. Taking into consideration that related studies highlighted above and others such as those of: Mwambingu (2002), Kariuki (2002), Kieleko (2003) and Muriithi (2003) have dealt with various initiatives being undertaken at

KRA on tax collection and tax compliance. Never the less not much research have evaluated the involvement of departmental structures such as the ICT, HR, Security, Procurement, Audit, Administration and finance in the support of revenue collection in KRA, thus the study sought to answer this question; what is the perceived effect of ICT support services on revenue collection at KRA?

### **1.3 Research Objective**

To determine the strategic effect of ICT support services on revenue collection at Kenya Revenue Authority.

### **1.4 Value of the Study**

Revenue collection in Kenya involves many stakeholders and therefore it is driven by policy. The study findings can inform the policy makers on the areas and aspects of revenue collection that require policy interventions for the purpose of improving efficiency in its collection. The study also can be of significance to the government and management of KRA as it will provide information on the organs of the organizations that provide significance support on revenue collection.

Also in Practice, the management employees can use the findings of the study to get informed on the areas that require their attention both at their working places and in their other professional engagements. From these findings, improvement measures can be made in order to have better coordination within the organization so as to realize the company's goals and objectives. Other organizations with the intention of implementing support structures in its organizations can also find this study beneficial. Various scholars will also use the research as a useful point of reference as well as for further research in a similar scope.

The study enriches the system theory by highlight the way organizations are achieving and improving competitive advantage through embracing technology. The theory explains the reason why organizations adopt technical innovations. The system theory further helps in understanding organizations as systems in that organizations interact with outside world which are often referred to as systems. On the other hand, institutional theory which stipulates that in strategic management the fundamental sources and drivers to firms' superior performance are mainly associated with the attributes of their resources and capabilities to interact with the environment which there are operating in. The theory presumes that any organization has to conform to its environment and thus organizational environment and external pressures can objectively influence the interaction between departments in the organization to promote effectiveness in revenue collection.



## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This section presents and analyses theories, general and empirical work written about similar or useful studies undertaken by other scholars. The relationship between the independent and dependent variables under study are presented herein.

### **2.2 Theoretical Literature**

#### **2.2.1 Change Management Theory**

Today change is constant and organizational leaders who anticipate change and react rapidly and responsibly are successful. However, the organizational leaders who anticipate and invent the future are even more successful because those who initiate change are the leaders in their industry (Romanelli & Tushman, 1994). “There are many models that can be used for successful organizational change, however it is important for organizational leaders to identify and use a model for transformation that will help their organizations survive the dynamics in the external environment” (pg. 13).

The critical aspect in change management process is the organizations ability to win the organization’s employees on the change. Effectively managing organizational change involves four-step processes which include “recognizing the changes in the broader business environment, developing the necessary adjustments for their company’s needs, training their employees on the appropriate changes and winning the support of the employees with the persuasiveness of the appropriate adjustments” (Romanelli & Tushman, 1994; 25). “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 resolve troubled change projects” (Reiss, Albert, Roth & Jeffrey, 1993; 7). This theory is relevant to the study since it elaborated on the change management process and how effective change management can lead to improved revenue collection. The theory addresses the issues that ensured there is no resistance to change to ensure smooth operations in any strategy management implementations made by the organization to improve revenue collection.

### **2.2.2 Systems Theory**

Bertalanffy (1968) defines Systems theory as “a working hypothesis, the main function of which is to provide a theoretical model for explaining, predicting, and controlling phenomenon”. The most common and one fundamental part of every system was explained by Kuhn “as knowing one part of a system enables us to know something about another part, hence the information content or a piece of information is proportional to the amount of information that can be inferred from the information” (Kuhn, 1974; 65). Systems may either be controlled (cybernetic) or +5uncontrolled. In controlled systems information is sensed, and changes are effected in response to the information. Kuhn (1974) considers this “as the detector, selector, and effect on functions of the system”.

The detector is therefore interested on the movement of data between systems, while the selector on the other hand, is characterized using laws and regulations used by the systems for decision making or rather it’s the method guiding how the operations and

transactions take place between the systems. The only intersystem interaction is between Communication and transactions. Communication “is the exchange of information, while transaction involves the exchange of matter-energy”. Every organization and societal interaction involves communication and transactions. Kuhn's design emphasizes that “the role of decision is to move a system towards equilibrium; communication and transactions provide the vehicle for a system to achieve equilibrium” (pg. 57).

This theory is relevant to the study as it helps in understanding organizations as systems. From the theory, organizations interact with outside world which are often referred to as systems. Sections of organizations interact amongst themselves to see a certain objective met.

### **2.2.3 Institutional Theory**

Basic fundamental notions and principles of the institutional theory provides practical standards followed in scrutinizing organization and environmental associations while stressing on “the social rules, expectations, norms, and values as the sources of pressure on organizations. This theory is built on the concept of legitimacy rather than efficiency or effectiveness as the primary organizational goal” (Doug & Scott, 2004;15). The stated environment is conceived to be the “organizational field, represented by institutions that may include regulatory structures, governmental agencies, courts, professionals, professional norms, interest groups, public opinion, laws, rules, and social values”. Institutional theory presumes that any organization has to conform to its environment. However, there exist “some fundamental aspects of organizational environment and activities not fully addressed by institutional theory that make the approach problematic for fully understanding organizations and their

environment; the organization being dependent on external resources and the organization 's ability to adapt to or even change its environment" (pg.19).

Some of renown institutional theorists such as "Meyer & Rowan (1991); DiMaggio & Powell (1983)" asserts that the organizational working environment and surroundings market pressures can greatly influence development of organizational official structures. The authors argue that "innovative structures that improve technical efficiency in early-adopting organizations are legitimized in the environment. Ultimately these innovations reach a level of legitimization where failure to adopt them" showcases itself as "irrational and negligent" (or are passed in as authoritative judicial commands). "At this point new and existing organizations will adopt the structural form even if the form doesn't improve efficiency" (Meyer & Rowan, 1991; pg. 15); DiMaggio & Powell, 1983; pg. 8).

Institutional theory is relevant to the study as it explains how organizational environment and external pressures can objectively influence the interaction between departments in the organization to promote effectiveness in revenue collection.

### **2.3 Empirical Review**

According to Loonam (2008), with recent information and technology advancements, globalization, intense competition and changing customer needs and heightened preferences for convenience have led to massive restructuring of the service industry. Some of the literature reviewed revealed that ICT can basically affect organizational efficiency negatively and can decrease productivity. On the contrary, other literature supports and proves favorable impact of Information and Communication Technology charges on the values of an organization (Solows, 2005).

A similar study, Kozak (2005) investigated major effect of Modern information and communication technology development on income generated and effectiveness in cost reduction by organizations over a period of twelve years between 1992 and 2003. From the findings, there was a noticeable correlation between the executed technological tool, profits obtained and expense reduction. This ICT transformation enhances great improvement in organizations operations all over the world. For example, development of global networks has significantly reduced the costs of international fund transfers. Berger (2003) revealed that organizations making use of ICT tools such as, “electronic payments and information exchanges can deliver high quality customer services delivery to customers with less effort”. Through principals for a firm’s ICT foundation and services are compiled in the enterprise structure.

Odoyo (2005) examined how organization’s control, information systems and collection of revenue associate within Local Authorities in Kenya. Odoyo’s focus was to determine the quality levels of services given to the customers and also investigate “if Information Systems had a relationship with effectiveness and efficiency of Revenue Collection in Kenyan Local Authorities”. Odoyo discovered the existence of a clear relation between effective collection of revenue in local authorities and information systems. Also, there was a huge and positive relationship involving organization’s Control Systems and revenue collection. However, the study findings also indicated that implementation of information systems was being derailed by the staff resistance to change. Unlike that study, in the present study the information systems are already implemented at KRA and thus this present study is only interested in finding out the effect of ICT support services on revenue collection or rather how has ICT helped the organization in realizing its goals of maximizing revenue collection.

Otieno et al, (2013), conducted a study on “the effect of Information Systems on Revenue Collection by Local Authorities in Homa Bay County, Kenya” and found out that ICT investment is very vital to Local Authorities in enhancing revenue collection. This is because computerized Information Systems had a positive effect on income collection. Automation of commission actions for example revenue collections enhanced due to well-timed revenue collection, enhanced administration integrity and provision of clear records.

Chatama (2013) did a study to examine the means by which ICT has modernized Tax administration methods and enhanced revenue collection, focusing on Tanzania Revenue Authority (TRA). According to the researcher, “ICT was introduced into the department in year 2001 for facilitating maintenance and timely access of records and fast processing of return so as to remove postal delays; minimize operational costs; curb cheating and plug revenue loss”. The study found that the revenue collected increased over the study period and this was attributed to the introduction of ICT systems which shortened the processing time for returns and the time for responding to queries raised by tax payers. However, even though different economic factors like; “increased internal trade, reduced importation and more reliance to domestic products may cause the increase”, without good tax administration policies, such income would not have been reflected in overall collections. This thus confirms that ICT usage enhances better tax administration and increases revenue collection. This study is different from the current study in that it was conducted in Tanzania which has different tax administration policies from the Kenyan Tax system. It will be of help to find out if the same findings will be found in the Kenyan context.

Mugisha, (2001) confirms that, use of information and technology enhanced opportune accessibility to correct and significant data, (a basic requirement towards

excellent preparation, formulation, supervision, analysis and other activities that guide towards economic growth, similarly, Suluo (2003) indicated that, implementation of ICT has paved way for increased development in organizations operations. Norton (2006) argued that “Web service portals could constitute a useful means of offering the services needed by all users then and in the future. At the same time, they embodied a new opportunity for the deployment of ICT after the disappointing results of the new economy and the unfulfilled promise of a revolution in business and economic activities” (pg. 48). In the early weeks of March 2004, the Kenyan Government kicked off a strong and enterprising e-government strategy (GoK, 2004). The three years plan was aimed at achieving certain objectives and targets, these were, “to efficiently deliver government information and services to the citizens; to promote productivity among public servants; to encourage participation of citizens in government; and to empower all Kenyans in line with development priorities outlined in the 2003 – 2007 Economic Recovery Strategy for Wealth and Employment Creation” (GoK, 2004).

Sigey (2010) researched on “the impact of automation as a structural change strategy on customs clearing procedures at Kenya Revenue Authority”. Using the study, He sought to find out and explain the actual “impact of automation on clearance procedures in the customs service department of the KRA”. Sigey’s findings indicated that automation of clearance procedures in the local tax department greatly enhanced operational usefulness and productivity, increased employees’ professionalism and productivity, reduction of operational costs and improved governance. The study recommended that the KRA management should think about the safety of the system in regards to manipulation which can be a significant danger to the organization and to the Kenyan Government as a whole. The study focused on implementation of ICT

system and its accrued benefits to the organization but did not focus on the day to day support services that ICT influence in revenue collection.

Ling and Nawawi (2010) conducted a study in Malaysia on coordinating skills in advanced Information and Communications systems and tax software in tax education. The study's target population was tax practitioners and its aim was to establish the basic skills needed by taxpayers to be able to effectively use an online tax system. The study discovered that three special abilities were required for the best interaction between an individual and a computer based tax system namely, "spread sheet software, word-processing software and e-mail". These findings from the study has inferences on the present study as in during ascertaining of the effectiveness of ICT support services, the basic skills that system user sought to possess must be considered. Ignoring these skills could possibly make the overall goal targeted by the entire system, not to be achieved as confirmed by Maede (2002). Maede (2002) confirmed that "despite the heavy investment that the Malaysian tax authority put in new online system, only 20% of the targeted taxpayers were able to use it after three years of implementation. This was mainly attributed to lack of necessary user skills like computer literacy; however, taxpayer's behaviour also played a role" (pg. 45).

A study conducted by Maina (2013), made use of primary data that was collected using a structured questionnaire, data analysis was done using a regression model and the results showed LAIFOMS (sig. = 0.017), employee skills explained up to 27% of local authority revenue collection. The research came to a conclusion that the studied revenue collectors actually understood and appreciated the position played by information technology tools in ensuring effective and efficient revenue mobilization, however the availability and accessibility was a barrier to proper LAIFOMS implementation. The above finding imply without doubt that given the proper tax



administration in Local authorities, LAIFOMS implementation would be smooth and would increase the revenue collection even more. This shows that the public and local authority employees are not resisting change the problem is with the authorities in implementing the systems.

Otieno *et al.* (2013) study established the availability of a relationship between Information Systems (IS) and efficiency and effectiveness in revenue collection, there was a clear and positive correlation between ICS implemented and revenue collection. The study is useful to the present study for full integration of IS, and more specifically e-payment system, in revenue collection. Wahab (2012) revealed that effective integration and utilization of an e-payment structure proved to be low mainly because of the scarce point of sale terminals at the given shopping spots. The generally recognized ease of use is being affected greatly by the scarce or inadequate points of sale terminals, although there is strong recognition among the public and organizations on the usefulness of e-payment systems. The study recommended clients (the public) to be educated and extensive distribution of e-payment point of sale terminals to business owners be undertaken.

#### **2.4 Research Gaps**

The literature reviewed shows a number of international studies that have examined the effect of automation on revenue collection. For instance; Kozak (2005) investigated major effect of Modern information and communication technology development on income generated and effectiveness in cost reduction by organizations, Chatama (2013) did a study to examine the means by which ICT has modernized Tax administration methods and enhanced revenue collection, focusing on Tanzania Revenue Authority (TRA) and Ling and Nawawi (2010) conducted a

study in Malaysia on coordinating skills in advanced Information and Communications systems and tax software in tax education. Locally, the few studies done have concentrated on impact of automation on revenue collection in County and local authorities (Odoyo, 2005; Otieno et al, 2013; Maina, 2013). The above studies have been done on other countries which have different setting from Kenya and those done locally have focused only on the county Governments, this study therefore sought to fill this gap by establishing the effect of ICT support services on revenue collection at Kenya Revenue Authority.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter specifies and explains the main research methodology that was adopted in carrying out this study. It highlights the research design implemented, population studied, sampling technique and sample size, instruments used in data collection and procedure, pilot tests, data analysis and presentation.

### **3.2 Research Design**

Research design can be described as “how data collection and analysis are structured in order to meet the research objectives through empirical evidence economically” (Cooper and Schindler, 2006). Using a descriptive research design this study ascertained and made assertions on how ICT support services affect revenue collection.

Kothari (2004), describes descriptive research studies as “those studies which are concerned with describing the characteristics of a particular individual or of a group and ascertain whether variables are associated”. Survey therefore aims at obtaining information or data that explains existing phenomenon by asking human beings about their perceptions, attitudes and behavior (Mugenda& Mugenda, 2003). The main focus of this study was qualitative. According to Berg (2001) qualitative studies are “interested in analyzing information in a systematic way in order to come up to with useful conclusions and recommendations, and also obtain detailed information about the phenomena being studied and then tries to establish patterns, trends and relationships from the information gathered” (Berg, 2001). Qualitative data thus aims at providing basic information without proofing it.

### **3.3 Data Collection**

Primary qualitative data was used in this study specifically by use of interview guide. It was collected from all the six departments at KRA. This instrument was considered appropriate for this study because all the respondents were literate and the number was fairly large. The choice to use the interview guide was informed by the fact that this method of data collection ensures that objective and accurate results are obtained. Interview guides are good in measuring perception, attitude, values and behavior and thus the scale assisted in converting the qualitative responses into quantitative values (Mugenda & Mugenda, 2003).

Interviews were conducted from 6 selected departments where each department two employees were selected in the top management category to be precise the commissioner and deputy commissioner. Interviews assist the researcher to clarify issues from people with expert or deep knowledge on specific aspects of the study. An interview guide (Appendix II) was used to ensure that uniform set of issues are discussed across the various sampled interviewees.

### **3.4 Data Analysis**

Burns and Grove (2003) explained data analysis as “a mechanism for reducing and organizing data to produce findings that require interpretation by the researcher” (pg. 31). De Vos (2002) on the other hand describes “data analysis as a challenging and creative process characterized by an intimate relationship of the researcher with the participants and data generated” (pg. 10). This is necessary as raw data convey little meaning to most people. Data collected was purely qualitative in nature. Content analysis was used for data analysis since it involves discussion and was presented in prose.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter gives the results of the analysis of the data that were ascertained from the interview as outlined in the research methodology in the previous chapter. The first part gives a general description of the respondents in terms of position in the organization, period in the position and length of time worked for KRA. The second section gives the results from the interview and the last section gives a discussion of the findings from the study. The results and discussion is organized to reflect the objective of the study.

### **4.2 General Information of the Respondents**

The study sought to find out the general information of the respondents such as position in the organization, period in the position and period in the firm. Out of the twelve respondents, eight of the respondents were supervisors, two were managers and the other two were assistant managers in the organization. In respect to the period in the position, majority (10) of the respondents indicated they have been in the position for two years while the other two respondents indicated four years. The respondents were also asked to indicate the length or period of time they have worked in the organization, six of the respondents indicated they had worked for a period of about 9 years, another four of the respondents indicated eight years and the other two indicated seven years. This was a representative sample in the sense that it captures responses from individuals who have worked for KRA for different durations of time.

### **4.3 Qualitative Analysis on Effects of ICT Support Services on Revenue Collection at KRA**

The study sought to find out the strategies that the organization had put in place to aid in the attainment of revenue collection targets. The respondents indicated that the organization had put in place various strategies to enhance revenue collection at KRA such as the organization has introduced new systems such as I Customs, ICMS, manifest management system all these have aided in the automation of customs procedures. Some of the respondents indicated the introduction of i-Tax which has made paying taxes and filing tax returns easier hence increasing voluntary compliance. It has also increased the tax base through by linking with IFMIS where tax is automatically withheld and reported in iTax for all payments to suppliers of the GOK. The findings are in support of Amin (2013) who asserted that computerization of tax or income collection systems involve investing in up to date technology for instance: information communication technology (ICT) so as to advance the revenue system to attain integration and improve on information sharing in order to improve system effectiveness and efficiency.

The respondents further indicated that the organization has embraced new systems: The roll-out of iCMS at Passenger terminals has enabled efficient collection of revenue as the system classifies the goods according to their duty bands and tabulates taxes payable, Use of PDQ machines and mobile payment options and presence of red and green channels that have allowed passengers to make a self-assessment. The other strategies that the organization has put in place are provision of online passenger declaration forms that customs officers use for risk profiling upon arrival of the passengers, enhanced the number of patrols and surveillance around the airport, use of

K9 (Canines) and adoption of training strategies where the organization conducted more trainings to staff that have led to more interceptions.

Registration of more taxpayer to expand tax base was also enhanced in the organization. This was done by ensuring all companies registered at the registrar of Companies have PIN and block recruitment of taxpayers. In addition to the mentioned strategies, offering amnesty to non-compliant taxpayers to ensure they all comply with tax laws going forward, blocking of PIN numbers of perpetual defaulters. This compels taxpayers to comply as they cannot trade without PIN and opening of support centres that ensured the services are accessible to all Kenyans were also embraced at KRA. The findings imply that modernisation of revenue collection system through the introduction of iTax platform had ensured no revenue leak. These findings are in line with Otieno *et al.* (2013) who established the availability of a relationship between Information Systems (IS) and efficiency and effectiveness in revenue collection, there was a clear and positive correlation between ICS implemented and revenue collection. In regards to how the organization had performed over the last 3 years; the respondents unanimously agreed that there was gradual increase in revenue collection due to the new systems and to be precise the revenue collected has gone up to 1.3 trillion shillings. One of the respondents from JKIA Passenger Terminals indicated that there had been an increase in revenue collection in the C&BC department attributed to training in scanner and manifested cargo. In general, there was an increase in revenue growth from KES 1.1 trillion in financial year 2014/2015 to 1.3 trillion in f/y 2016/2017, and the organization had performed well given the level of growth in GDP and other macro-economic variables. The respondents were of the opinion that transparency and accountability would be key to identifying opportunities for taxation, developing taxpayer knowledge and efficiency would help increase the

tax base. This was in line with Chatama (2013) who found that the revenue collected increased over the study period and this was attributed to the introduction of ICT systems which shortened the processing time for returns and the time for responding to queries raised by tax payers.

The respondents were asked to indicate and explain whether there been any improvement in revenue collection since the inception of ICT support services in the organization. All the respondents indicated yes unanimously that there has been improvement in revenue since inception of ICT support services. The respondents indicated that “yes there has been an increase in revenue collection due to the adoption of I Customs systems. Revenue rose to 1.3trillion as the new system enhanced accountability”. Others indicated “Absolutely yes, in terms of: Fast response to system related issues i.e. confirmation of bank payments, Availability of reliable network providers and efficient equipment management”. Some of the respondents indicated that the revenue collection is made easy and efficient since taxpayers are able to make payment real time and their ledgers are updated real time which minimizes chances of revenue loss, the online platform also reminds taxpayers in case of any default hence enable them to comply and revenue performance can be easily monitored by generating relevant reports. All in all, the findings indicated that there has been tremendous growth in revenue collection since the introduction of RAMP. Nearly all revenue collection processes are now computerized making it easy to monitor and enforce tax compliance.

As reported by all twelve respondents, automation of processes in the organization has enhanced efficiency to a great extent. The respondents explained in length that automation has enhanced accountability as it leaves an audit trail on all officers’



operation and with the roll-out of iCMS challenges in the previous system (Simba) have now been addressed. In addition, automation of APSC (Air Passenger Service Charge) has enabled better accountability in its collection and business automation allows all processes to be online. These processes can be accessed by all relevant parties on need basis without necessarily referring to each other. By so doing the process is efficient as there is no wastage of time and resources.

In regards to effects of ICT support services on revenue collection in the organization; all the respondents indicated that ICT support services affected revenue collection to a great extent. The respondents felt that ICT support system has enhanced revenue collection as the systems are interlinked once payment of taxes has been made on the bank it reflects on the customs entry form C17B, ICT support services also improves revenue collection by providing readily available data for compliance checks and also makes it easy for taxpayers to comply and makes it easier to monitor and enforce compliance. Similarly, some of the respondents indicated that ICT support services affects revenue collection since they manage the servers which are the organization's data banks and they also provide regular reports that enable decision making.

The study sought to find out whether automation of processes helps in improving accountability and transparency and if it does how? All the twelve respondents said yes it does. Some of the ways highlighted by the respondents on how it helps in improving accountability and transparency are; "The officer's details are attached to their generated entries, direct assessments and APSC collections, through controlled access, i.e. passwords, Automation enhances accountability and transparency as it leaves behind an audit trail as systems remembers details". Additionally, two respondents asserted that the automated system leaves trail for any activity done

online. It therefore enables audit trail and accountability for any changes in the system. It is also transparent in that all activities done online can be traced to the person who did and are available to anyone interested in knowing. Finally, the findings revealed that given that control of ICT systems with different persons and level of visibility of tax transactions is open to many people increases transparency and accountability.

The respondents were asked to indicate and explain whether the ICT system provides convenient and fast customer feedbacks. Ten of the respondents indicated yes it does because ICT system provides convenient and fast customer feedback as the system is intelligent to the extent that it can display the entries not acted upon and that is feedback in essence, Use of PDQs for instance have addresses the challenge of National bank's downtimes and the feedback is automated and instant hence convenient. Two of the respondents indicated to some extent because most of the feedbacks are not automated and requires manual/personal intervention leading to some delays. All the respondents agreed unanimously that ICT facilitates effective access to services to a great extent. This is so because with ICT, the services are faster and readily available e.g. customer data is already available after initial registration. Retrieving the data is easy. The customer can therefore be served at any point and can access their information on need basis e.g. the taxpayer can reprint their PIN certificate without visiting any KRA office. In addition, through the KRA website, passengers are able to gain access to our services and interact with officers through interactive platforms and the convenience of accessing services from anywhere and the automation of most services. One of the respondents opined that ICT facilitates effective access to services since the only requirement to access the ICT system is

network connectivity and hence a client can operate from a cyber or at the comfort of his home.

From the study, the online process of automation has enhanced revenue collection as it's seen in real time. A manager can know the revenue collected by a click of a button. The organizational performance has been enhanced by the online processes a great deal. Some of the respondents felt that the online process was effective largely at DTD domain however at Passenger Terminals the automated process was mainly for direct assessment i.e. un manifested goods. Others indicated that online processes improved performance by increased compliance. The online processes are readily available to users at their comfort as they are accessible. This enables users to comply as there is no time wastage trying to look for the services. Lastly some felt that the online process was fairly effective but some bugs have to be fixed. They asserted that online process improved revenue collection due to reduced compliance costs

The respondents also gave other ways in which ICT support services influenced revenue collection in the organization. Some of the ways are; An ICT support service has enhanced revenue in terms of sending an alert in terms of extra revenue collection through revenue enhancement initiatives, Through the linking process with other stakeholders i.e. clearing agents, banks etc., Issue defaulter notices, Give information to taxpayer- readily available in KRA website, Guide taxpayers on what to do hence minimize number of taxpayers visiting the office, Enable revenue officers to concentrate on monitoring and other revenue improvement initiatives as customers have self- support systems, Ease of monitoring as the reports are readily available and by acting as the invisible police, where it sends automatic reminders for payment of outstanding taxes.

From the study, there were a number of suggestions for improvements on the effect of automation on revenue collection processes in the organization. There is need to increase the internet infrastructure such as the number of computers. The need to embrace and promote continuous training of users on any new developments and making the online systems fault prove so as to ensure the information available online is correct and no errors. There is need to involve stakeholders e.g. taxpayers in system improvement as they are end users and understand the system better. The respondents said there is need for making regular changes in the system in line with the changing laws and more sensitization of all users to make maximum use of the system. Further it was suggested by one of the respondents that KRA should increase server capacities to reduce system downtimes during peak periods/deadline dates.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMENDATIONS**

### **5.1 Introduction**

This chapter covers the summary of the findings from the study; the strategic effects of ICT support services on revenue collection at Kenya Revenue Authority. This chapter further gives the conclusions of the study and the recommendations that can be made from the findings to the various stakeholders involved in this research.

### **5.2 Summary**

This section presents a summary of the study findings in relation to study objective. As discussed in chapter one, the general objective of the study was to establish the strategic effects of ICT support services on revenue collection at Kenya Revenue Authority. The type of research design adopted was descriptive design. The target population of this study comprised of staff of Kenya Revenue Authority (KRA) in Nairobi, here the focus was mainly on management employees. The study relied on primary qualitative data and specifically by use of interview guide. Twelve management employees were interviewed from all the six departments at KRA, where two employees were randomly selected from each department. Content analysis was used for data analysis since it involves discussion and was presented in prose.

The study findings revealed that ICT support services have greatly influenced the revenue collection at KRA. This has been made possible by the strategies that the organization has put in place over the years by modernisation of revenue collection system through the introduction of iTax platform, I Customs, ICMS, manifest management system all these have aided in the automation of customs procedures.

ICT development in KRA management information system has been made compatible with other systems and flexible enough to support the growth of the firm and very crucial in assisting employees to enhance their performance and curb revenue loss. By automation of services, KRA has increased the access to useful information by the tax payers, increased public access of information, increased efficiency and helped in curbing fraudulent practices such as soliciting bribes at the customs borders. ICT support services have also enabled the organization in saving time of operations and increased their level of transparency. This is because automation of processes provides convenient and fast customer feedback as the system is intelligent to the extent that it can display the entries not acted upon and that is feedback in essence. The findings further indicated that ICT facilitated effective access to services to a great extent. This is so because with ICT, the services are faster and readily available e.g. customer data is already available after initial registration.

The findings indicated that the organization had also employed other strategies such as rregistration of more taxpayer to expand tax base. This was done by ensuring all companies registered at the registrar of Companies have PIN and blocking recruitment of taxpayers, this is where all the companies recruiting ensures that they ask for tax compliance certificates thus increasing the tax base and compliance level among the tax payers. In addition to the mentioned strategies, offering amnesty to non-compliant taxpayers to ensure they all comply with tax laws going forward, blocking of PIN numbers of perpetual defaulters, and opening of support centres that ensured the services are accessible to all Kenyans such as Huduma Centres.

The study findings further indicated that since the inception of ICT support services there had been tremendous growth in revenue collection. Revenue rose to 1.3 trillion as the new system enhanced accountability, fast response to system related issues i.e

confirmation of bank payments and availability of reliable network providers and efficient equipment management. All in all, the findings showed that revenue collection was made easy and efficient since taxpayers are able to make payment real time and their ledgers are updated real time which minimizes chances of revenue loss, the online platform also reminds taxpayers in case of any default hence enable them to comply and revenue performance can be easily monitored by generating relevant reports. The respondents were of the opinion that transparency and accountability is key to identifying opportunities for taxation, developing taxpayer knowledge and efficiency which would help increase the tax base.

### **5.3 Conclusions**

Overall, results indicate that organizational performance of KRA is affected by the strategies employed by the organization in regards to ICT and computerized operations. The automation of processes at KRA has greatly improved performance since the level of accountability, efficiency and transparency has improved. This could be a pointer that employees have fully applied their knowledge and have fully enhanced their level of understanding of computer operations in relation to tax administration. The study concludes that the revenue system automation has contributed to increased Revenue collection. The study further concludes that automation of revenue collection processes offers great deal of significant management since it facilitates effective access to services and provides convenient and fast customer feedbacks.

The study also concludes that the level of compliance has increased among the tax payers due to the strategies that KRA is putting in place such as ensuring all companies registered obtain a PIN, all employers during recruitment process to

enquire for tax compliance certificates, blocking of tax defaulters and also opening of service agents who can handle customers conveniently at different localities not necessarily at KRA offices like Huduma Centres.

The study also concluded that continuous training to both employees and tax payers would increase revenue since they will adopt the new technologies been implemented by the organization. This conclusion also raises the issue of stakeholder participation in implementation of new strategies to enhance its success.

Finally, the study concludes that reforms and modernization of processes at KRA has been effective on revenue collection strategies. This has been enhanced due to improved clearance times and increased access to services, improved efficiency and transparency. The reforms and modernization have also provided a greater reliance on new information technology.

#### **5.4 Limitations of the Study**

The focus of the current study was to establish the strategic effect of ICT support services on revenue collection at KRA and therefore it was only linked to studying one organisation. This may, however affect the generalizability of the findings to other public institutions that collect revenue such as county governments and thus it is suggested that further study should be conducted on a wide array of financial public institutions so as to establish the impact of the strategic effect of ICT support on revenue collection.

The current study was qualitative in nature as it relied on interview schedules. This technique may to some extent not capture all the intended effects of strategic effect of ICT support on revenue collection under consideration thus the study suggests that future study may use quantitative data to enable expand the target population.



## **5.5 Recommendations**

ICT development is of core importance to many organizations in need of growing successfully and improves efficiency in operations and in serving clients. More training on the reforms and modernization at KRA should be enhanced so as to improve on the skills, knowledge and professional capacity of the employees to increase revenue. In addition, more revenue collection centers need to be established since they have been effective in enhancing financial performance by the Authority. The study further, recommends that the revenue collection process should be continuously revised so as to ensure that the number of transaction increases and that tax evasion is avoided. Policy makers should come up with policies that prevent the tax evasion in Kenya.

The study recommends that there is need to involve stakeholders e.g. taxpayers in system improvement as they are the end users and they need to understand the system better, there is need for making regular changes in the system in line with the changing laws and more sensitization of all users to make maximum use of the system and KRA should increase server capacities to reduce system downtimes during peak periods/deadline dates.

Finally, the study recommends that the ICT department should ensure that there is effective project coordination and change management for success of this automated system. Further, the department should ensure that there is a good data system and that is compatible with the system's needs.

## **5.6 Suggestions for Further Research**

Given that the study focused only on strategic effect of ICT support services on revenue collection based on primary qualitative data (interview guide) and focused on

the management employees only, it is recommended that a similar study on the effect of ICT support services on revenue collection at KRA be undertaken to include other employees and tax payers as well. The study also recommends that another study can be carried out using other methods of data collection such as questionnaires to cater for large population and secondary data to cater for factual data on performance. Another study can be carried out to find out the relationship between ICT support services and revenue collection in other public sector such as local Authorities in Kenya

## REFERENCES

- Bertalanffy, V. L. (1968). *General systems theory*. New Currents in Modern Thought, 19: 31-36; New York: Braziller.
- Carcello, J. V., Hermanson, D. R. & Raghunandan, S. (2005). Factors Associated with US Public Companies. Investment in Internal Auditing: *Accounting Horizons*, 19,
- Chang, S.C., Lin, R.J., Chen, J.H. & Huang, L.H. (2005). Manufacturing flexibility and manufacturing proactiveness: empirical evidence from the motherboard industry. *Industrial Management & Data Systems*, 105 (8), 1115-32.
- Chatama, Y. J. (2013). The impact of ICT on Taxation: the case of Large Taxpayer Department of Tanzania Revenue Authority. *Developing Country Studies*, 3 (2) 91
- Cheah-Liaw, G., Petzall, S. & Selvarajah, C. (2003). The role of human resource management (HRM) in Australian-Malaysian Joint ventures. *Journal of European Industrial Training*, 27(5), 244 – 262.
- Cooper, D., & Schindler. (2006). *Business Research Methods*, (9<sup>th</sup> ed.). New Delhi. Tata McGraw-Hill Publishing Company Limited
- DiMaggio, P.J. & Powell, W.W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, Vol. 48, No.2, 147-160.
- Doug, M. & Scott, W.R. (2004). Organizations and Movements. *In Social Movements and Organization Theory*, xx-xx, Gerald Davis, Doug McAdam, W. Richard Scott, and Mayer Zald. New York: Cambridge University Press
- Gichira, P.M. (2001). *Employee Performance Management Practices In The Private Security Services Industry: The case of security guard*

- Giffin, A F & Schmidt, J A, 2002. '*Why HR Can Make or Break Your MandA*',
- Government of Kenya, (GoK, 2004). E-Government Strategy: The Strategic Framework, Administrative Structure, Training Requirements and Standardization Framework, Cabinet Office, Office of the President, Nairobi: Government Printer.
- Gulisano, V. (2000). *Coordinating Global Distribution: A Customer-Intimate Approach*. Retrieved [www.hakanson.ascet.com](http://www.hakanson.ascet.com) on 24th March 2014
- Gunasekaran, A., Patel, C. & McGaughey, E. (2004). A framework for supply chain performance measurement. *International Journal of Production Economics*, 87, 333-47.
- Institute of Internal Auditors. (2003), *Internal Auditing Reporting Relationship, Serving the Masters*, Altamonte Springs Florida. The Institute of Internal Auditor's Research Foundation
- Jensen, M. & Meckling, W. (1976). Theory of the firm: Managerial behaviour agency costs and Capital structure. *Journal of Financial Economics*.
- Kehoe, D. & Boughton, N. (2001). Internet Based Supply Chain Management: A Classification of Approaches to Manufacturing Planning and Control. *International Journal of Operations & Production Management*, 21 (4), 44-57
- Kenya Revenue Authority Strategic plan (2012). *Fifth Corporate Plan, 2012/2013*
- Kenya Revenue Authority Strategic plan (2012). *Fifth Corporate Plan, 2012/2013*

- Kothari C.R (2004). *Research Methodology, Methods and Techniques* (Second Revised Edition), New Age International Publishers, New Delhi
- Kuhn, A. (1974). *The Logic of Social Systems*. Jossey-Bass, San Francisco
- Meyer, J.W., & Rowan, B. (1991). Institutionalised Organizations: Formal Structures as Myth and Ceremony. *American Journal of Sociology*, Vol. 83, No. 2, 340 - 363.
- Mugenda, O. M. & Mugenda, A. G. (2003); *Research Methods: Quantitative and Qualitative Approaches*, Acts Press, Nairobi, Kenya
- Mugisha, S. (2001). Using ICT in development: the case of Uganda international conference paper on Information Technology. *Communications and Developments ITCD* (36), 29th – 30th November, Kathmandu, Nepal.
- Myloni, B., Harzing, A.-W. K. & Mirza, H. (2004). Host country specific factors and the transfer of human resource management practices in multinational companies. *International Journal of Manpower*, 25(6), 518 – 534
- National Association of School Psychologists. (2013) *Research on School Security. The Impact of Security Measures on Students Retrieved from [http://www.nasponline.org/communications/pressrelease/NASP\\_Statement\\_on\\_Increasing\\_Ard\\_Security.pdf](http://www.nasponline.org/communications/pressrelease/NASP_Statement_on_Increasing_Ard_Security.pdf) on 25th March 2014*
- Norton, P; (2006). *Introduction to Computers*. McGraw-Hill Technology Education. China
- Odoyo, C. (2005). *Effect of Information Systems on Revenue Collection by Local Authorities in Home Bay County, Kenya*. Published Project.Maseno University
- saunder et al. (2009).

Simchi-levi, D., Kaminsky, P. & Simchi-levi, E. (2000). *Designing and Managing the Supply Chain*. Irwin McGraw-Hill Companies, Inc., Boston, MA

Suluo, A.J.S. (2003). The role of information and communication technologies in insurance industry: the case of Tanzania insurance organizations. *MBA Dissertation*, Mzumbe University.

Treasury Board of Canada Secretariat (2013). Security Policy Group. *Security Organization and Administration Standard*. Retrieved from [www.tbs-sct.gc.ca](http://www.tbs-sct.gc.ca) on 25<sup>th</sup> March 2014

## APPENDICES

### APPENDIX I: Introduction Letter

THE DEPUTY COMMISSIONER

THE HUMAN RESOURCE DEPARTMENT,

KENYA REVENUE AUTHORITY,

P.O.BOX 48240-00100

NAIROBI

Date.....

Dear Sir,

#### **RE: VOLUNTARY PARTICIPATION IN DATA COLLECTION**

My name is Janice Kiema a post graduate student at University of Nairobi. I am conducting a study on the Strategic effects of ICT support services on revenue collection at KRA. I wish to ask for your permission to conduct interviews with the top management employees from all the departments in the organization. The identified respondents are deemed to be in possession of the required information that will enable me in compiling this research. The data collected is for research purposes only and it takes the form of a survey which should take no more than 15 minutes of your time. All responses received are anonymous and information collected will not be distributed to any other party.

Thank you.

Yours Sincerely,

Janice Kiema

## **APPENDIX II: Interview Guide**

Instructions: This interview has been designed for academic use only, with the sole purpose of collecting data to establish the strategic effect of ICT support services on revenue collection at Kenya Revenue Authority. Please note that the information you provide will be treated with utmost confidentiality.

Your response is highly appreciated.

### **Part 1: Basic Information**

1. Name (optional).....
2. Position in the organisation.....
3. Period in Position.....
4. Period in the firm.....

### **Section 2: Effects of ICT support services on Revenue Collection**

1. Which strategies has the organization put in place that aid in the attainment of revenue collection targets? If Yes which strategies? Explain your answers
2. Kindly explain how the organization has performed over the last 3 years?
3. Has there been any improvement in revenue collection since the inception of ICT support services? Explain
4. To what extent has automation of processes in your organization enhanced efficiency? Explain
5. To what extent do you think the ICT support services affect revenue collection in the organization? Explain how.
6. Does automation of processes help in improving accountability and transparency? How?



7. Does the ICT system provide convenient and fast customer feedbacks?  
Explain
8. To what extent do ICT facilitate effective access to services? Explain
9. How effective is online process of automation of revenue collection process in your organization? How do these online processes affect the organizational performance?
10. How else does ICT support services influence revenue collection in the organization?
11. What can you recommend to be done to improve the effect of automation of revenue collection processes in the organization?