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## DETERMINANTS OF SUCCESSFUL IMPLEMENTATION OF I-TAX SYSTEM AS A STRATEGY TO ENHANCE TAX COLLECTION IN KENYA

Mutisya, R. N., 1\* & Were, S. 2

<sup>1\*</sup> Msc. Candidate, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya <sup>2</sup> Ph.D, Lecturer, Jomo Kenyatta University of Agriculture & Technology [JKUAT], Kenya

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#### **ABSTRACT**

The purpose of this study was to establish the determinants of i-tax system implementation as a strategy to enhance tax collection at Kenya Revenue Authority in Kenya. This study adopted a descriptive design and targeted a population of all KRA employees and tax payers in Nairobi focusing on employees directly involved with itax system implementation and tax payers. It employed simple random sampling to select 62 employees and 96 tax payers giving a total of 158 potential respondents. This study relied on primary data specifically a questionnaire that comprised of open and closed ended questionnaires. Descriptive statistics such as percentages, mean, frequency distribution and standard deviation were computed to describe the characteristics of the variables of interest while in inferential statistics, corelation, multiple regression analysis were used establish the nature and magnitude of the relationships between the variables and to test the hypothesized relationships. The results of data analysis were presented using figures, charts and tables for easy understanding and interpretation. The study findings indicated that resource availability, capacity building, monitoring and user technical skills were key determinants of itax system implementation. The study concluded that itax system implementation helped in revenue collection since it had automated all the tax processes and had been adopted fully by all taxpayers though there were cases of tax evasion. The study recommended that Kenya Revenue Authority should use effective measures to mobilize and motivate tax payers to register online for applicable tax heads in order to widen the tax base and enhancement revenue collection. The study concluded that the top management should support and improve on their involvement on itax system implementation to improve employees' attitude and also provide the resources required for implementation process. There was need for the management of the organization to continue providing the necessary exposure to the employees in terms of trainings in application software to realize the importance or positive contribution it may have on the organization's processes.

Key Words: Resource Availability, Capacity Building, Monitoring, User Technical Skills

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#### **INTRODUCTION**

Electronic revenue collection in developing countries has gained increasing prominence in the policy debate recently. For instance Nisar (2013) argued that recent trends in public taxation stress the need of developing a system of tax assessment and collection that involves internet services. Several factors explain this, including the potential benefits of taxation for state building; independence from foreign aid; the fiscal effects of trade liberalization; the financial and debt crisis in the "West"; and the acute financial needs of developing countries. Governments in developing countries face great challenges in collecting tax revenues, which result in a gap between what they could collect and what they actually collect. One of this challenges according to Muita (2011), is the embracing of emerging technologies and tax payment methods that are more efficient so as they can reduce wastage. One of the technologies he argues is electronic tax system which so far has been embraced by the Kenya Revenue Authority. According to Cobham (2010), the electronic tax system has been around, globally, for the last 30 years. Its history began in 1986 as a small test program in which only 5 tax payers from Cincinnati, Raleigh Durham, and Phoenix agreed to participate. Since then, electronic tax system has grown to become common place, serving millions of taxpayers every year.

KRA is a Public Sector Company. The Kenya government has been spearheading massive reforms under the banner Public Sector Reforms in order to streamline the operations in the public sector for better management and accountability. Several initiatives for Public Sector Reforms have been put in place in order to enhance citizen satisfaction in terms of service delivery and entrench a culture of managing for results. To achieve this, different organizations in the public sector have come up with strategies to outline the various measures to be put in place and the implementation methodology to achieve the

desired results. One such organization is the KRA (SGS, 2012).

KRA is a Semi-Autonomous Government Agency (SAGA) established by a statute (CAP 469). Since its inception in 1995, KRA has emerged as one of the leading successful public sector bodies in terms of meeting its core objective of revenue collection. KRA is responsible for assessing, collecting and accounting for all revenues in accordance with specific laws.

KRA has in the recent years, undertaken tax reforms aimed at effective execution of its mandate against the backdrop of ambitious treasury targets. In 2004, the revenue administration reform modernization programme (RARMP) commenced at KRA with the objective of achieving a fully integrated tax administration. This resulted to the inception of the first online system known as integrated tax management system (ITMS) in 2008. Though ITMS was an online system it did not fully automate the tax administration process hence inefficient. For instance, the taxpayers were required to present electronically generated payment slips to KRA offices for capturing upon making payments i.e the payment gateway was not linked with the banks. This mix of online and manual processes created inefficiencies. These coupled with public outcry for simpler system, led to the conception of iTax idea in October 2011. iTax was introduced in 2013 with a pilot being done in partnership with large taxpayers to assess system capability and stability before a country wide out roll out in 2014 (ICPAK, 2015).

#### Statement of the Problem

Organizations are indeed open systems and have to respond to their environment through appropriate strategies. Once strategies are developed, they must be implemented and without successful implementation, the organization will not obtain the results that it intended. A well-developed strategy has to be implemented if success and mandate has to be achieved. In view of this, there is need to increase research in this area to unveil the

factors associated with the implementation of organizational strategies. Electronic tax system was introduced by Kenya Revenue Authority to increase financial collection, administration, avail services to the tax payers all the time from anywhere, reduce costs of compliance and improve tax compliance. However, tax compliance levels remain low and tax collections are below the targets set by Kenya Revenue Authority. Despite the increasing need to increase revenue collection and enforcement so as to provide public services, and the introduction of electronic tax systems in most countries across the global divide, developing countries like Kenya, still face the challenges of low tax compliance and tax administration.

A study conducted by KRA, KIPPRA and the Kenyan Treasury (2016), based on 2015/2016 data revealed that VAT payment compliance was as low as 55% while return lodgment compliance was 65% (Thiga & Muturi, 2015). Similarly, the Kenya Revenue Authority (KRA) missed its target by Sh50 billion in 2017 collecting Sh1.365 trillion in the 2016/2017 financial year compared to the target of Sh1.415 trillion. The Authority, however, increased its revenue collection by 13.8 percent compared to the previous year where it collected Sh1.210 trillion. The increase was attributable to growth in the consumption taxes (VAT) that had a 21.5 percent growth attributed to enhanced compliance measures. Overall revenue for the first half of 2017/18 financial year grew by Sh62.5 billion to Sh712.2 billion from Sh649.7 billion recorded in the previous year, while Exchequer Revenue grew more strongly by 10 percent to reach Sh664.77 billion up from Sh 604.27 billion in FY 2016/17. This growth compares well with the 3-year average Exchequer Revenue growth of 10.5 percent. The overall growth, representing 9.6 percent rise was recorded against the backdrop of a depressed economic climate occasioned by the prolonged election cycle that stretched for the better part of the calendar year 2017.

The Kenya Revenue Authority plays a critical role of assessment of taxes, collection of revenue,

administration and enforcement of Laws relating to revenue on behalf of the government of Kenya. In addition, according to the Act of Parliament Cap 469, KRA is also tasked with the role of enhancing and mobilization of government revenue, providing effective administration and sustainability of revenue collection. This noble objective can only be achieved if the authority lays down effective strategies and successfully implement those strategies (KRA, 2015). This study therefore sought to address this problem by assessing the determinants of successful implementation of i-tax system as a strategy to enhance tax collection in Kenya.

## **Objectives of the Study**

The main objective of the study was to establish the determinants of successful implementation of i-tax system as a strategy to enhance tax collection in Kenya. The study was guided by the following specific objectives;

- To determine the influence of availability of resources on successful implementation of i-tax system as a strategy to enhance tax collection in Kenya
- To assess the influence of capacity building on successful implementation ofi-tax system as a strategy to enhance tax collection in Kenya
- To examine the influence of monitoring on successful implementation of i-tax system as a strategy to enhance tax collection in Kenya
- To determine the influence of user technical skills on successful implementation of i-tax system as a strategy to enhance tax collection in Kenya

#### LITERATURE REVIEW

#### **Resource Based View**

The resource-based view is a way of viewing the firm and in turn of approaching strategy. Resource Based-View (RBV) was brought about by Penrose (1959) who recommended that an association ought to be considered as a collection of physical and HR bound together in an authoritative structure. The Resource-based view was

popularized by Hamel and Prahalad in their book competing for the future (1994). The view conceptualizes the firm as a bundle of resources. It is these resources, and the way that they are combined, that make firms different from one another and in turn allow a firm to deliver products and services in the market. Hafeez, Malak, and Zhang (2007), viewed resources as physical resources and intellectual resources; Physical resources, for example, plant and hardware are effectively recognizable because of their substantial presence (Hafeezet al., 2007).

## **Stakeholders Theory**

Stakeholders' theory challenges the primacy assumption of shareholder interests and advocates that a company should be managed in the interests of all its stakeholders (Freeman, 1994). The theory is based on the assumption that values are necessarily and explicitly part of doing business and that managers need to articulate the shared sense of value they create to bring its key stakeholders together. When stakeholders get what they want from a firm, they return to the firm for more (Freeman, 1984; Freeman &McVea, 2001).

Ackermann and Eden, (2001) urged that allowing stakeholders to take part in strategy development has proven useful in implementation of balanced score card. They found that two assessments of stakeholders were important in the strategy development process. The first assessment centered on identifying key stakeholders and determining the relative power of relevant stakeholders. The second and often neglected assessment aimed at mapping the stakeholders' perception of their power relative to other groups. Both assessments added to a good understanding of the stakeholders negotiating postures and provided a good basis aligning the new strategy with the needs of the key stakeholders. Stakeholder theory is primarily a management instrument. The attributes power, urgency and legitimacy of claims define an organization's stakeholders. Power and

urgency must be attended to if managers are to serve the legal and moral interests of legitimate stakeholders. Stakeholder theory thus contains methods for identifying and managing stakeholders (Freeman, 2004).

## **Contingency theory**

The contingency theory and approach to organizational structure based on size was pioneered by Burns and Stalker (1961) who distinguished between the mechanistic structure in which organizational roles were tightly defined by superiors who had the monopoly of organizational knowledge, and the organization structure in which organizational roles were loosely defined by mutual discussion between with employees. contingency theory of organizational structure presently provides a major framework for the study of organizational design (Donaldson, 1995, 2001). It holds that the most effective organizational structural design is where the structure fits the contingencies. The contingency approach is considered a dominant, theoretical, rational, open system model at the structural level of analysis in organization theory (Scott, 1992). Organizations are unique; have contingency variables, and require different ways of managing. Contingency approach challenged the classic process and models designed by management theorists such as Taylor and Fayol.

## Diffusion of Innovation (DOI)

Rogers' (1995) Diffusion of Innovation (DOI) theory is another popular model used in information systems research to explain user adoption of new technologies. Rogers defines diffusion as 'the process by which an innovation is communicated through certain channels over time among the members of a social society' (Rogers, 1995). According to Tiago and Maria (2011) study found individual that characteristics, internal characteristics of organizational structure, and external characteristics of the organization are important antecedents organizational to innovativeness.

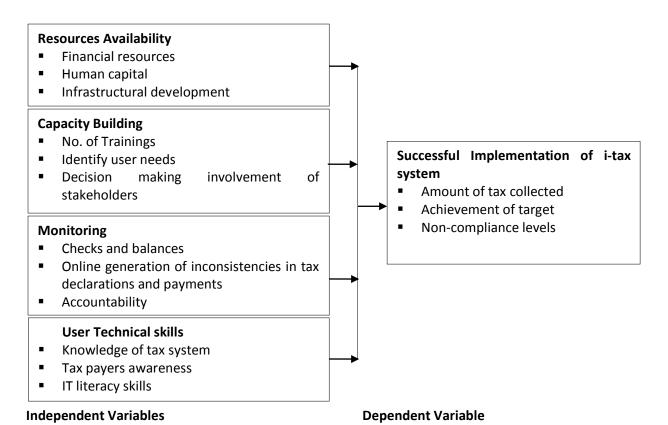


Figure 1: Conceptual Framework

## **Empirical Review**

Ochieng, Wawire, Manyasa and Thuku, (2014) in their study on Effects of Tax Reforms on Buoyancy and Elasticity of the Tax System in Kenya: 1963-2010, a study carried to examine the effect of tax reforms on tax buoyancy and elasticity estimates since 1963 up to 2010. Although the reforms analyzed had positive effect on both tax buoyancy and elasticity, the results indicate that this was not sufficient to help generate adequate revenue to finance the ever increasing government expenditure. With an inelastic tax system, the Kenya government has to re-evaluate the tax collection strategies and pursue further reforms for it to fully exploit the tax revenue potential in the economy. The study concluded that tax reforms had a positive effect on tax buoyancy and elasticity however they did not increase the revenue collection.

Ohemeng (2009) conducted a study on the Constraints in the implementation of performance management systems in developing countries. A

case study of Ghana was taken. The author noted that Social cultural norms influence public management practices and organizational decision making. In addition, the role of political authorities, as well as of administrative leadership, is also vital to the success of performance management. The author reckons that such leaders should be seen at the forefront of any reforms. The study concluded that shortage of experienced staff, inadequate remuneration, the poor morale of the public service, and unwieldy administrative systems had weakened the capacity of institutions to carry out any meaningful reform agenda.

A research study done by Rintari and Moronge (2012) investigated the influence of monitoring and control strategies on organizational performance of the Public Service Commission of Kenya. The study found that monitoring and controlling strategies through environmental scan contributes most to organizational performance. The study majorly focused on the improvement of an organization's performance through monitoring and controlling

financial indicators overlooking the non-financial indicators. This study investigated both financial and non-financial indicators. A study on the influence of monitoring and control of strategies in public schools in Webuye Constituency was conducted by Kitonga (2013) revealing that there was a positive relationship between monitoring and control of strategies and organizational performance. However, Kitonga's study focused on the monitoring and control of strategies in specific activities of the schools while the current focused on monitoring and control these strategies at all levels in the organization.

Kimweli (2013) examined the role of monitoring and evaluation practices to the success of donor funded food security intervention projects. The study established that the community was not involved in any monitoring and evaluation of the food security intervention projects. Participatory monitoring and evaluation in food security projects therefore contributes to the success of food security projects though it should be complemented with good project management skills. For PM&E to be applied to the projects, the projects implementing agencies should conduct trainings to the community to build up their capacity in understanding and participation in the monitoring and evaluation system. The study covered donor funded food security intervention projects failing to look at the effect that PM&E has on project performance.

Ndonye (2012) analyzed factors affecting revenue collection in the ministry of state for immigration and registration of persons (MSIRP). The study was guided by the following specific objectives: to establish the effect of technology on revenue collection in the MSIRP, to establish the effect of government policy on revenue collection in the MSIRP, to determine the effect of integrity on revenue collection in the MSIRP and to establish the effect of staff capability on revenue collection in the MSIRP. The study found that 65% of the respondents strongly agreed that making online applications is challenging among the people

seeking the service due to lack of technological knowledge making it a challenge to revenue collection in the ministry. Other challenges to the use of technology were: inadequacy of facilities for the use of technology, lack of knowledge and skills on the use of ICT in the collection of revenue among the revenue collection staff, resistance to change by the employees in the ministry, inadequate of ICT infrastructure in the ministry and the incorporation of the non-automated system of revenue collection. The study concluded that the use of technology, integrity, and revenue collection staff were a challenge to the collection of revenue in the ministry while government policy was not a challenge.

Muita (2010) did a related study on the factors that influence adoption and use of e-filing system among Large Taxpayers in Kenya. The study examined the skills required by the users of e-filing, the technology required and the tax authority's preparedness in enhancing the adoption of tax compliance based technology. The study found that for e-filing to effectively take off in Kenya skills, infrastructure and a conducive environment are needed. Akinyi (2010) looked at the challenges Government institutions face on public service delivery in Kenya. She found that there is a problem of lack of coordination between local authorities and extension service delivery workers of the government at the field level. She did not look at KRA which is the focus of this study.

According to Wu and colleagues (2004), strategy implementation is the process of transforming strategic intentions into actions. Implementation of the chosen strategy is by any measure one of the most vital phases in the decision making process; it embraces all those actions that are necessary to put the strategy into practice (Kiruthi, 2001). By themselves, strategies will not lead to action since they are merely statements of intent. The intent is realized by the tasks of implementation. Such tasks can be identified as resource allocation, design of functional structures and systems, policy formulation, among other tasks.

#### **METHODOLOGY**

This study adopted a descriptive survey design. A descriptive survey study approach was adopted because it was appropriate for the collection of primary data necessary to accomplish the task set out by the objectives of the study. The target population comprised of all the taxpayers and all itax employees at KRA in Nairobi. In this study primary data was collected using a structured questionnaire, since it is easier to administer, analyze and economical in terms of time and money. The study utilized both primary and secondary data. Statistical package for social science (SPSS) Version 24 was used to draw inferences from the coded data. This included descriptive and inferential statistics. The regression model used was of the following form:

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ Where:

Y = Successful Implementation iTax System

X<sub>1</sub> = Availability of Resources

X<sub>2</sub> = Capacity Building

 $X_3$  = Monitoring

X<sub>4</sub> = User Technical Skills

 $\theta_0$  = the constant term

 $\beta_i$ i= 1....4 measure of the sensitivity of the dependent variable (Y) to unit change in the predictor variables  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$ .

 $\epsilon$  = is the error term which captures the unexplained variations in the model.

## **Descriptive Statistics**

## Resource Availability and i-Tax System Implementation

The first objective of the study was to determine the influence of availability of resources on successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. 63.6% of the respondents agreed that financial resources were very essential for effective service delivery at KRA, 63.7% agreed that financial resources were necessary for effective implementation of iTax system and 61.8% of the respondents agreed that little resources would slow the process while too much funding would waste organizational resources and reduce the financial performance. In addition, half (54.6%) of the respondents agreed that human resources were critical in implementation of any strategy in an organization and 67.3% of the respondents agreed that the organization continued to allocate huge financial resources to finance infrastructure development. The mean score for responses for this section was 3.64 which indicated that majority of the employees agreed that resource availability was a key determinant of i-tax system implementation in Kenya Revenue Authority. The findings implied that the organization must have the necessary resources including financial, human technological infrastructure to ensure successful implementation of the itax system.

**FINDINGS** 

Table 1: Responses on Availability of Resources- Employees

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
Financial resources are very essential for effective service delivery at KRA.	3.6%	12.7%	20.0%	32.7%	30.9%	3.75	1.1 42
Financial resources are necessary for effective implementation of iTax system.	10.9%	3.6%	21.8%	36.4%	27.3%	3.65	1.2 36
Little resources will slow the process while too much funding will waste organizational resources and reduce the financial performance	3.6%	12.7%	21.8%	41.8%	20.0%	3.62	1.0 63
Human resources is critical in	7.3%	16.4%	21.8%	25.5%	29.1%	3.53	1.2

implementation of any strategy in an organization							74
The organization continues to allocate huge financial resources to finance infrastructure development	3.6%	18.2%	10.9%	45.5%	21.8%	3.64	1.1 28
Aggregate Score	5.8%	12.7%	19.3%	36.4%	25.8%	3.64	1.1 69

For the taxpayer's responses on availability of resources, the findings were presented in Table 2. The study findings illustrated that 80% of the respondents agreed that financial resources were very essential for effective service delivery at KRA, 72% agreed that financial resources were necessary for effective implementation of iTax system and another 72% agreed that little resources would slow the process while too much funding would waste organizational resources and reduce the financial performance. In addition, 46.7% of the respondents

agreed that human resources was critical in implementation of any strategy in an organization and 53.3% agreed that KRA continued to allocate huge financial resources to finance infrastructure development. The aggregate mean score for this section was 3.72 indicating that the taxpayers agreed to a great extent that availability of resources was necessary for successful implementation of itax system. The resources included and not limited to financial, technological and human resources.

Table 2: Responses on Availability of Resources-Taxpayers

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
Financial resources are very essential for effective service delivery at KRA.	1.3%	9.3%	9.3%	49.3%	30.7%	3.99	0.951
Financial resources are necessary for effective implementation of iTax system.	10.7%	4.0%	13.3%	24.0%	48.0%	3.95	1.324
Little resources will slow the process while too much funding will waste organizational resources and reduce the financial performance	8.0%	10.7%	9.3%	25.3%	46.7%	3.92	1.313
Human resources is critical in implementation of any strategy in an organization	18.7%	16.0%	18.7%	16.0%	30.7%	3.24	1.505
KRA continues to allocate huge financial resources to finance infrastructure development	8.0%	17.3%	21.3%	24.0%	29.3%	3.49	1.298
Aggregate Score	9.3%	11.5%	14.4%	27.7%	37.1%	3.72	1.278

# Capacity Building and i-Tax System Implementation

The second objective of the study was to assess the influence of capacity building on successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. Results illustrated that 65.5% of the respondents agreed that KRA had put in place training sessions

for taxpayers and employees to create awareness and motivate them into adopting the itax strategy, 65.5% of the respondents agreed that KRA endeavored to identify the needs of various users in order to incorporate them in the itax implementation process and 63.7% agreed that KRA had fully engaged its stakeholders in the decision making process of implementing the itax strategy.

Furthermore, 63.6% of the respondents agreed that they had been fully trained and had a working manual on procedures of how to file returns on itax. Finally, 61.8% of the respondents agreed that assessing the individual and collective actions greatly influenced itax system implementation. The

aggregate mean score for this section was 3.68 and a standard deviation of 1.117 which implies that the respondents agreed that capacity building was very crucial in ensuring the success of itax system implementation.

**Table 3: Responses on Capacity Building-Employees** 

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
KRA has put in place training sessions for taxpayers and employees to create awareness and motivate them into adopting the itax strategy	7.3%	10.9%	16.4%	40.0%	25.5%	3.65	1.19
KRA endevours to identify the needs of various users in order to incorporate them in the itax implementation process	5.5%	12.7%	16.4%	38.2%	27.3%	3.69	1.169
KRA has fully engaged its stakeholders in the decision making process of implementing the itax strategy	7.3%	23.6%	5.5%	36.4%	27.3%	3.53	1.317
I have been fully trained and have a working manual on procedures of how to file returns on itax.  Assessing the individual and	0.0%	14.5%	21.8%	32.7%	30.9%	3.8	1.043
collective actions greatly influence itax system implementation	0.0%	7.3%	30.9%	41.8%	20.0%	3.75	0.865
Aggregate Score	4.0%	13.8%	18.2%	37.8%	26.2%	3.68	1.117

For the taxpayer's responses on capacity building, the findings were presented in Table 4. Results revealed that 68% of the respondents agreed that KRA had put in place training sessions for taxpayers to create awareness and motivate them into adopting the itax strategy; another 68% agreed that KRA endevoured to identify the needs of various users in order to incorporate them in the itax implementation process and 77.3% agreed that KRA had fully engaged the taxpayers in the decision making process of implementing the itax strategy.

Sixty four percent of the respondents agreed that they had been fully trained and had a working manual on procedures of how to file returns on itax and 64% agreed that assessing the individual and collective actions greatly influenced itax system implementation. The mean score for responses for this section was 3.71 which indicates that majority of the taxpayers agreed that capacity building was a key determinant of i-tax system implementation in Kenya Revenue Authority.

**Table 4: Responses on Capacity Building-Taxpayers** 

rance is incoperious on capacity Famain,	,p.,						
Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
KRA has put in place training sessions for taxpayers to create awareness and motivate them into adopting the itax	4.0%	16.0%	12.0%	21.3%	46.7%	3.91	1.265

strategy							
KRA endevours to identify the needs							
of various users in order to	2.7%	20.0%	9.3%	40.0%	28.0%	3.71	1.16
incorporate them in the itax	2.770	20.076	3.370	40.070	20.070	3.71	1.10
implementation process							
KRA has fully engaged the taxpayers in							
the decision making process of	4.0%	10.7%	8.0%	44.0%	33.3%	3.92	1.1
implementing the itax strategy							
I have been fully trained and have a							
working manual on procedures of how	10.7%	13.3%	12.0%	53.3%	10.7%	3.4	1.174
to file returns on itax.							
Assessing the individual and collective							
actions greatly influence itax system	4.0%	13.3%	18.7%	48.0%	16.0%	3.59	1.041
implementation							
Aggregate Score	5.1%	14.7%	12.0%	41.3%	26.9%	3.71	1.148

## Monitoring and i-Tax System Implementation

The third objective of the study was to examine the influence of monitoring on the successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. The study findings revealed that 69.1% of the respondents agreed that monitoring and evaluation helped in maintaining checks and balances on the implementation process, 49.1% agreed that the rate of monitoring and evaluations helped to show where the process was at and where the process was going and 50.9% agreed that monitoring and evaluation ensured accountability on usage of resources. Fifty eight point two percent (58.2%) of

the respondents agreed that M&E showed the actual course of action during implementation and 76.4% agreed that M&E helped identify problems and offered solutions to the problems during implementation. The aggregate mean score for this section was 3.67 with a standard deviation of 1.119 which implies that monitoring was a key determinant of i-tax system implementation in Kenya Revenue Authority. The findings implied that by continuous monitoring the firm is able to identify any problems that may arise during the process and offer appropriate solutions to ensure that the process goes back to the initial track and plan.

**Table 5: Responses on Monitoring- Employees** 

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
Monitoring and evaluation helps in maintaining checks and balances on the implementation process	1.8%	14.5%	14.5%	29.1%	40.0%	3.91	1.143
The rate of monitoring and evaluations helps to show where the process is at and where the process is going	5.5%	25.5%	20.0%	25.5%	23.6%	3.36	1.253
Monitoring and evaluation ensures accountability on usage of resources	1.8%	23.6%	23.6%	29.1%	21.8%	3.45	1.136
M&E shows the actual course of action during implementation	3.6%	20.0%	18.2%	27.3%	30.9%	3.62	1.225
M& E helps identify problems and offer solutions to the problems during implementation	0.0%	5.5%	18.2%	47.3%	29.1%	4	0.839
Aggregate Score	2.5%	17.8%	18.9%	31.7%	29.1%	3.67	1.119

From the taxpayer's responses, 78.7% of the respondents agreed that monitoring and evaluation helped in maintaining checks and balances on the implementation process, 82.7% agreed that the rate of monitoring and evaluations helped to show where the process was at and where the process was going and another 82.7% agreed that monitoring and evaluation ensured accountability on usage of resources. In addition, 62.6% of the respondents agreed that M&E showed the actual course of action during implementation and 66.6%

agreed that M&E helped identify problems and offered solutions to the problems during implementation. The aggregate mean score for this section was 3.98 with a standard deviation of 1.132 which implies that monitoring was a key determinant of i-tax system implementation in Kenya Revenue Authority. The findings imply that by continuous monitoring the firm is able to identify any problems that may arise during the process and offer appropriate solutions to ensure that the process goes back to the initial track and plan.

**Table 6: Responses on Monitoring-Taxpayer** 

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
Monitoring and evaluation helps in maintaining checks and balances on the implementation process	2.7%	9.3%	9.3%	58.7%	20.0%	3.84	0.945
The rate of monitoring and evaluations helps to show where the process is at and where the process is going	1.3%	9.3%	6.7%	20.0%	62.7%	4.33	1.044
Monitoring and evaluation ensures accountability on usage of resources	2.7%	9.3%	5.3%	26.7%	56.0%	4.24	1.089
M&E shows the actual course of action during implementation M& E helps identify problems and	10.7%	12.0%	14.7%	17.3%	45.3%	3.75	1.415
offer solutions to the problems during implementation	4.0%	16.0%	13.3%	37.3%	29.3%	3.72	1.169
Aggregate Score	4.3%	11.2%	9.9%	32.0%	42.7%	3.98	1.132

## User Technical Skills and i-Tax System Implementation

The fourth and last objective of the study was to determine the influence of user technical skills on the successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. The results showed that 72.7% of the respondents agreed that they knew how the iTax System works, 69.1% agreed that they understood the tax laws and obligations of their business and 72.7% agreed that they had computer skills thus easy to use iTax system. In addition, 56.3% of the respondents agreed that they correctly calculated the taxes they should pay to KRA, 49.1% agreed that they knew how to register

their business on the iTax online system and 60% agreed that they knew how to file returns in the iTax online system. Finally, 52.7% of the respondents agreed that they knew the penalties for failure to file tax returns on the iTax online system. The aggregate mean score was 3.61 and a standard deviation of 1.160 which implies that user technical skills were key determinants of itax system implementation. The findings further imply that it is very crucial to have the employees and taxpayers with necessary skills to use the system. The organization should also ensure that the system is user friendly and easy to use to enhance 100% success rate in implementation.

Table 7: Responses on User Technical Skills- Employees

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
I know how the iTax System works	0.0%	16.4%	10.9%	40.0%	32.7%	3.89	1.048
I understand the tax laws and obligations of my business.	1.8%	25.5%	3.6%	32.7%	36.4%	3.76	1.247
I have computer skills thus easy to useiTax system	1.8%	14.5%	10.9%	34.5%	38.2%	3.93	1.12
I can correctly calculate the taxes I should pay to KRA.	0.0%	20.0%	23.6%	32.7%	23.6%	3.6	1.065
I know how to register my business on the iTax online system.	1.8%	32.7%	16.4%	25.5%	23.6%	3.36	1.223
I know how to file returns in the iTax online system.	5.5%	20.0%	14.5%	41.8%	18.2%	3.47	1.168
I know the penalties for failure to file tax returns on the iTax online system.	10.9%	20.0%	16.4%	38.2%	14.5%	3.25	1.25
Aggregate Score	3.1%	21.3%	13.8%	35.1%	26.7%	3.61	1.160

The taxpayer's responses showed that 85.3% of the respondents agreed that they knew how the iTax System works, 73.3% agreed that they understood the tax laws and obligations of their business and 72% agreed that they had computer skills thus easy to use iTax system. Additionally, 70.7% of the respondents agreed that they can correctly calculate the taxes they should pay to KRA, while 64% agreed that they knew how to register their business on the iTax online system and 69.4% agreed that they knew how to file returns in the iTax online system. Finally, 66.7% of the

respondents agreed that they knew the penalties for failure to file tax returns on the iTax online system. The aggregate mean score was 3.95 and a standard deviation of 1.158 which implies that user technical skills were key determinants of itax system implementation. The findings further imply that it is very crucial to have the employees and taxpayers with necessary skills to use the system. The organization should also ensure that the system is user friendly and easy to use to enhance 100% success rate in implementation.

**Table 8: Responses on User Technical Skills- Taxpayers** 

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
I know how the iTax System works	0.0%	10.7%	4.0%	25.3%	60.0%	4.35	0.979
I understand the tax laws and obligations of my business.	0.0%	13.3%	13.3%	32.0%	41.3%	4.01	1.046
I have computer skills thus easy to use iTax system	1.3%	10.7%	16.0%	26.7%	45.3%	4.04	1.084
I can correctly calculate the taxes I should pay to KRA.	1.3%	13.3%	14.7%	26.7%	44.0%	3.99	1.121
I know how to register my business on the iTax online system.	4.0%	18.7%	13.3%	26.7%	37.3%	3.75	1.253
I know how to file returns in the iTax online system.	9.3%	12.0%	9.3%	30.7%	38.7%	3.77	1.331

I know the penalties for failure to							
file tax returns on the iTax online	6.7%	14.7%	12.0%	28.0%	38.7%	3.77	1.29
system.							
Aggregate Score	3.2%	13.3%	11.8%	28.0%	43.6%	3.954	1.158

#### **iTax System Implementation**

The study sought to determine the level of agreement in regards to successful implementation of iTax system at Kenya Revenue Authority. 56.4% of the respondents agreed that iTax system implementation had increased revenue collection, 69.1% agreed that KRA had been meeting its targets as a result of the implementation of the itax system and 78.2% agreed that iTax system had reduced the number of non-compliance levels. In furtherance,

80% of the respondents agreed that iTax system helped save cost and time of filing taxes and 58.1% agreed that the iTax system is accessible to most taxpayers and has provided adequate simplified filing procedures for taxpayers. The aggregate mean score for itax system implementation stands at 3.71 with a standard deviation of 1.118 which imply that the respondents agreed to a moderate extent in regards to itax system implementation at Kenya Revenue Authority.

**Table 9: iTax System Implementation-Employees** 

•	• •						
Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
iTax system implementation has increased revenue collection	1.8%	18.2%	23.6%	29.1%	27.3%	3.62	1.13
KRA has been meeting its targets as a result of the implementation of the itax system	7.3%	7.3%	23.6%	45.5%	16.4%	3.56	1.085
iTax system has reduced the number of non-compliance levels	5.5%	10.9%	5.5%	49.1%	29.1%	3.85	1.129
iTax system helps save cost and time of filing taxes	5.5%	3.6%	10.9%	47.3%	32.7%	3.98	1.045
The iTax system is accessible to most taxpayers and has provided adequate simplified filing procedures for taxpayers	5.5%	18.2%	18.2%	34.5%	23.6%	3.53	1.2
Aggregate Score	5.1%	11.6%	16.4%	41.1%	25.8%	3.71	1.118

From the taxpayers responses the study findings showed that 69.3% of the respondents agreed that iTax system implementation had increased revenue collection, 72% agreed that KRA had been meeting its targets as a result of the implementation of the itax system and 72% agreed that iTax system had reduced the number of non-compliance levels. Eighty one point four percent agreed that iTax system helped save cost and time of filing taxes and

78.7% agreed that the iTax system was accessible to most taxpayers and had provided adequate simplified filing procedures for taxpayers. The aggregate mean score for itax system implementation stands at 3.97 with a standard deviation of 1.149 which imply that the respondents agreed to a moderate extent in regards to itax system implementation at Kenya Revenue Authority.

Table 10: iTax System Implementation-Taxpayers

Statement			Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	SD
iTax system	implementation	has	1.3%	18.7%	10.7%	28.0%	41.3%	3.89	1.18

increased revenue collection							1
KRA has been meeting its targets as a result of the implementation of the itax system	5.3%	14.7%	8.0%	22.7%	49.3%	3.96	1.28 9
iTax system has reduced the number of non-compliance levels	2.7%	10.7%	14.7%	26.7%	45.3%	4.01	1.13 3
iTax system helps save cost and time of filing taxes	2.7%	8.0%	8.0%	30.7%	50.7%	4.19	1.06 2
The iTax system is accessible to most taxpayers and has provided adequate simplified filing procedures for taxpayers	4.0%	14.7%	2.7%	56.0%	22.7%	3.79	1.08 2
Aggregate Score	3.2%	13.4%	8.8%	32.8%	41.9%	3.97	1.14 9

## **Inferential Statistics**

### **Correlation Analysis**

The results indicated that there exist a positive and significant (r=0.612, p<0.000; r=0.641, p<0.000) correlation between itax system implementation and resource availability for taxpayers and employees respectively. This reveals that any positive change in resource availability led to improved itax system implementation. The results also indicated that there exists a positive and significant (r=0.580, p<0.000; r=0.717, p<0.000) correlation between itax system implementation and capacity building. This revealed that any

positive change in capacity building effectiveness led to improved itax system implementation. Results further showed that there was a positive and significant relationship between monitoring and iTax system implementation at Kenya Revenue Authority. This reveals that any positive change in monitoring and evaluation led to improved itax system implementation. Finally, the results indicated that there exist a positive and significant (r=0.747, p>0.000; r=0.555, p>0.000) correlation between iTax system implementation and user technical skills. This revealed that any positive change in user technical skills effectiveness led to improved itax system implementation.

**Table 11: Bivariate Correlation** 

		iTax System Implementation- Taxpayers	iTax System Implementation- Employees
iTax System Implementation	Pearson Correlation	1	1
•	Sig. (2-tailed)		
Resource Availability	Pearson Correlation	.612**	.641**
	Sig. (2-tailed)	0.000	0.000
Capacity Building	Pearson Correlation	.580**	.717**
	Sig. (2-tailed)	0.000	0.000
Monitoring	Pearson Correlation	.690**	.531*
	Sig. (2-tailed)	0.000	0.000
User Technical Skills	Pearson Correlation	.747**	.555**
	Sig. (2-tailed)	0.000	0.000

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

**Table 12: Regression Model Fitness** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798a	0.637	0.608	0.485

a Predictors: (Constant), UserTechnicalSkills, ResourceAvailability, CapacityBuilding, Monitoring

Table 13: Analysis of Variance (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.607	4	5.152	21.901	.000b
	Residual	11.761	50	0.235		
	Total	32.368	54			

a Dependent Variable: iTax System Implementation

**Table 14: Regression Coefficients** 

Model		<b>Unstandardized Coefficients</b>		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.018	0.413		2.463	0.017
	Resource Availability	0.34	0.108	0.394	3.161	0.003
	Capacity Building	0.394	0.115	0.407	3.411	0.001
	Monitoring	0.381	0.153	0.321	2.491	0.016
	User Technical Skills	0.395	0.14	0.358	2.819	0.007

a Dependent Variable: iTax System Implementation

**Table 15: Regression Model Fitness-Taxpayers** 

Model	R	R Square	Adjusted R Square	Std. Error of the
Wiouci	N	N Square	Adjusted it square	Estimate
1	.839a	0.704	0.687	0.3812

a Predictors: (Constant), User Technical Skills, Capacity Building, Resource Availability, Monitoring

Table 16: Analysis of Variance (ANOVA)-Taxpayers

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.199	4	6.05	41.632	.000b
	Residual	10.172	70	0.145		
	Total	34.371	74			

a Dependent Variable: iTax System Implementation

**Table 17: Regression Coefficients-Taxpayers** 

Model		Unstandar	dized Coefficients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	0.111	0.32		0.347	0.729
	Resource Availability	0.195	0.073	0.217	2.667	0.01
	Capacity Building	0.199	0.092	0.185	2.161	0.034
	Monitoring	0.207	0.102	0.199	2.031	0.046
	UserTechnicalSkills	0.409	0.085	0.438	4.782	0.000

a Dependent Variable: iTax System Implementation

b Predictors: (Constant), User Technical Skills, Resource Availability, Capacity Building, Monitoring

b Predictors: (Constant), User Technical Skills, Capacity Building, Resource Availability, Monitoring

#### **CONCLUSIONS AND RECOMMENDATIONS**

The first objective of the study was to determine the influence of availability of resources on successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. The study findings indicated that resource availability influenced itax system implementation greatly. This was supported by descriptive, correlation and regression analysis. Descriptive statistics indicated that the respondents agreed on to a great extent that financial resources were very essential for effective service delivery at KRA, financial resources were necessary for effective implementation of iTax system and little resources would slow the process while too much funding would waste organizational resources and reduce the financial performance with an aggregate mean score of 3.64 and 3.72 for employees and taxpayers respectively. The findings imply that the organization must have the necessary resources including financial, human and technological infrastructure to ensure successful implementation of the itax system. Correlation and regression analysis results indicated that there was a positive and significant relationship between resource availability and itax system implementation (β=0.34, p value, 0.003; β=0.195, p value, 0.01). This implies that one unit increase in resource availability will lead to improved itax system implementation by 0.34 units and 0.195 units.

The second objective of the study was to assess the influence of capacity building on successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. Results indicated that KRA had put in place training sessions for taxpayers and employees to create awareness and motivate them into adopting the itax strategy, KRA endevoured to identify the needs of various users in order to incorporate them in the itax implementation process and KRA had fully engaged its stakeholders in the decision making process of implementing the itax strategy. Descriptive statistics indicated that capacity building was very crucial in ensuring the success of itax system implementation with a mean of 3.68 and 3.71 for employees and taxpayers respectively. The findings in furtherance imply that by organizing training sessions for tax payers and employees would create awareness on the itax system which will enhance adoption of the system fully. Correlation and regression analysis results indicated that capacity building and itax system implementation had a positive and significant relationship ( $\beta$ =0.394 p value0.001;  $\beta$ =0.199 p value0.034). This implies that a unit increase in capacity building will lead to improved itax system implementation by 0.394 units for employees and 0.199 units for taxpayers.

The third objective of the study was to examine the influence of monitoring on successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. The study findings indicated that monitoring was a key determinant of i-tax system implementation in Kenya Revenue Authority with a mean score of 3.67 and 3.98 for employees and taxpayers. This was supported by the overwhelming responses who agreed that monitoring and evaluation helped in maintaining checks and balances on the implementation process, monitoring and evaluations helped to show where the process was at and where the process was going and monitoring and evaluation ensured accountability on usage of resources. The findings imply that by continuous monitoring the firm is able to identify any problems that may arise during the process and offer appropriate solutions to ensure that the process goes back to the initial track and plan. Correlation and regression analysis results indicated that monitoring had a positive and significant relationship with itax system implementation ( $\beta$ =0.318, p value, 0.016;  $\beta$ =0.207, p value, 0.046). This implies that a unit increase in monitoring leads to improved itax system implementation at KRA by 0.318 units for employees and 0.207 units for taxpavers.

The fourth and last objective of the study was to determine the influence of user technical skills on

successful implementation of i-tax system as a strategy to enhance tax collection at Kenya Revenue Authority. The study findings indicated that user technical skills were crucial and key determinants of itax system implementation. Correlation and regression analysis results indicated that user technical skills had a positive and significant relationship with itax system implementation ( $\beta$ =0.395, p value, 0.007;  $\beta$ =0.409, p value, 0.000). This implied that a unit increase in user technical skills will lead to improved itax system implementation by 0.395 and 0.409 units. The findings further imply that it is very crucial to have the employees and taxpayers with necessary skills to use the system. The organization should also ensure that the system is user friendly and easy to use to enhance 100% success rate in implementation.

The study concluded that revenue authorities are continually implementing strategies to enhance quality of taxpayer services as well as optimize revenue collection Authority introduced the iTax system, to enable taxpayers declare tax payable by themselves at the comfort of their homes and offices. The study concludes that itax system implementation has helped in revenue collection since it has automated all the tax processes and has been adopted fully by all taxpayers though there are cases of tax evasion.

The study found that availability of resources was statistically significant in explaining itax system implementation. The study therefore concludes that resources availability is critical in ensuring successful implementation of itax system. This is because a lot of finances, human resources and infrastructural resources, technological resources are needed to ensure successful implementation. The study concludes that without these resources the firm will not be able to implement strategies to enhance revenue collection.

The study found that capacity building was statistically significant in explain itax system implementation. The study concluded that capacity building had a positive and significant influence on itax implementation. The study concluded that staff and taxpayers trainings have enhanced their skills, knowledge and professional capacity. However, tax payers have not fully applied their knowledge. Moreover, the trainings have not fully enhanced their level of understanding of various technical matters.

Monitoring was found to have a positive and significant effect on itax system implementation. The study therefore concludes that monitoring is a key determinant of itax system implementation in that it helps in monitoring activities and provides courses of action when things are not moving on as planned. M&E plays a role in supporting effective management decisions since it provides information that supports decision-making. An effective decision arising from M&E information is expected to improve the implementation process.

The study concluded that user technical skills were crucial in enhancing successful implementation of itax system. The findings indicated that the employees and taxpayers had the necessary skills to use the system, however they were not proficient enough and they encountered several challenges which were raised as the system being unfriendly. The organization should therefore ensure that the system is user friendly and easy to use to enhance 100% success rate in implementation.

The study recommended that the Kenya Revenue Authority should use effective measures to mobilize and motivate tax payers to register online for applicable tax heads in order to widen the tax base and enhancement revenue collection. The study concludes that the top management should support and improve on their involvement on itax system implementation to improve employees' attitude and also provide the resources required for implementation process. There is need for the management of the organization to continue providing the necessary exposure to the employees in terms of trainings in application software to

realize the importance or positive contribution it may have on the organization's processes.

Elaborate civic education should be conducted at the research area and beyond to ensure that the general public is aware of the new tax system, how to use it and if not able to, tax payers should be advised where they can get assistance. More training on the reforms and modernization at KRA should be offered so as to improve on the skills, knowledge and professional capacity of the employees.

Monitoring and evaluation should be undertaken in every step of itax system implementation and not a onetime event. This will help identify, loopholes and deviations from overall projects goals, and correct them early as to ensure successful quality implementation.

KRA management should focus on taxpayer facilitation through a robust system of customer relationships management, efficient complaints

resolution and ensuring that more resources are invested in user friendly online tax systems in order to realize long term benefits.

#### **Areas for Further Study**

This study was limited to Nairobi regions only, similar studies can be done in other regions in the country and the results of the findings be compared for more accurate generalization. The study sought to establish the determinants of successful implementation of itax system at KRA and focused on four factors namely; resource availability, capacity building, monitoring and user technical skills other factor such as strategy planning, user involvement and top management support should be studied. The data collection was based on questionnaires. Further research can be carried by involving the respondents (both the employees of KRA and the Tax payers) on discussions on the factors that influence the itax system implementation through interview guides and focus group discussions.

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