

Adoption of Technology and Performance of Kenya Revenue Authority

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Abstract: Kenya Revenue Authority has been missing tax targets set by the national treasury despite introducing and adoption of technology to help in tax administration. The degree of tax avoidance and evasion has also increased in tax administration. The adoption of technology will assist tax payers and the Kenya Revenue Authority staff to file and administer taxes and offer e-filing and e-payments instead of using paper based system. The general objective of this study was to establish the effect of adopting technology and performance of Kenya Revenue Authority while the specific objectives was to find out the effect of perceived usefulness of adoption of technology on performance of Kenya Revenue Authority, to determine the perceived ease of use of technology on performance of Kenya Revenue Authority, to explore the effects of perceived behavioral control of technology on performance of Kenya Revenue Authority and lastly to determine the effects of perceived security of technology on performance of Kenya Revenue Authority. Technology Adoption Model and the Theory of Reasoned Action/Theory of Planned Behavior was used to guide the study. The study adopted a survey design in order to obtain the necessary data. T-test was used to determine the degree and significance of the relationship between variables. All the questionnaires were adequately checked for reliability and verification using tables, charts and graphs. The study was carried in the Nairobi's head office with target population of 220 respondents comprising of 20 Senior Assistant Commissioners, 30 Assistant Commissioners, 50 Senior Revenue Officers and 120 Revenue Officers of head office who add up to a total 220 respondents. Israel (2013) sample determination formula was utilized to determine the sample size and stratified random sampling used to identify the particular respondents to participate in the study. The required primary data was collected using structured questionnaire. Both quantitative and qualitative analysis was done using statistical package of social sciences (SPSS) (version 20). The analyzed data was then used to make conclusions, recommendations and suggestions for further research.

Keywords: Adoption of technology, Perceived usefulness, Perceived ease of use, Perceived behavioral control and Perceived security

1. Introduction

1.1 Background to the Study

Increasing tax performance is an important objective of any government globally. Reforms in government has been a constant theme over the last three decades as Governments have sought to deliver services more effectively and at a lower cost to citizens Mwandembo, (2012). Many governments of the world are leveraging on technology to achieve increased tax administration and efficiency Lai et al, (2011). These governments have invested heavily on new technology for improved service delivery.

Booth (2010) argues that nearly 85 percent global governments support adoption of technology in tax administration as they will have sufficient funds for social amenities and development. Most organizations and associations know their organizations, and the procedures required for progress. Effective system usage requires a mix of different perspectives. As indicated by Chetty (2012), the six factors that should be considered all together for an association to effectively actualize its system are: acquiring top official duty, creating commitment at all levels, conveying an unmistakable substantial technique, falling accountabilities, choosing the best individuals to drive key activities, and the capacity to screen and tract advance.

As of late, Malaysia presented impose e-documenting (likewise alluded to as e-recording). In 2009, the fourth year after e-recording was actualized, just 1.25 million citizens were accounted for to have documented their expense form through e-recording Bernama, (2009). E-recording is a standout amongst the most critical and propelled e-taxpayer supported organizations in Malaysia, giving accommodation to citizens to charge evaluations and installment.

Kenya presented online framework called incorporated duty organization (iTax) framework in the year 2011 to be utilized as a part of assessment organization. It is a web-empowered and secure application framework that gives a completely coordinated and mechanized answer for organization of local assessments. This framework empowers citizen web based PIN enlistment, returns documenting, installment enrollment to take into consideration charge installments and status request with continuous observing of citizens' record accounts. (Every day Nation, 2015) The framework was acquainted with accomplish the accompanying targets, Simplify assess procedures and make it simple for citizens to agree, Shorten time taken to extricate information and data on income (KRA, 2012)

1.1.1 Organizational Performance

Organizational performance is composed of actual results of an organization against the set or intended outcomes, goals and objectives Richard et al., (2009). Organizational performance is composed of three areas of an organization, financial performance (profits, losses and return on investment), product performance and shareholders' wealth maximization. For any organization to achieve its goals and objectives, it must emphasize on its organizational effectiveness Etzion & Amitia, (1964). Organizational effectiveness is concerned on several key areas which are talent management, leadership development and organizational design and structure.

Performance measurement refers to how an organization can be judged to have attained its goals and objectives Jargon, (2009). It is also the process of evaluating how well organizations are managed, delivery of services to customers and shareholders' wealth maximization Neely, Adams &

Kennerley, (2002). The management is responsible in giving the direction of the organization. Performance of an organization is measured using a balanced scorecard. The scorecard is a tool that was developed by Robert Kaplan and David Norton to measure performance of organization. Balanced score card requires managers to track the performance of their organizations by analyzing the four parameters, finance, customers, internal business process and learning and growth. Kaplan & Norton, (1992). Business score card monitors how well the organization is serving customers, managing internal activities and setting a stage for organizational product and service improvements.

1.1.2 Adoption of Technology

Governments over the world have adopted technology in most of their activities and more particular, on tax administration. Technology adoption is a process of using information system to achieve a specific goal Carr, (1999). Huge investments have been made in Africa controls to achieve this global phenomenon (World Bank, 2015). Kenya in particular has also introduced technology in its tax administration by Kenya Revenue Authority (KRA, 2015).

Adoption of technology uses several theories. However, this study will only use two theories. These are, Theory of Acceptance Model (TAM) by Davis (1989), and Theory of Planned Behavior (TPB) by Fishbein and Ajzen (1975). Technology Acceptance Model (TAM) was introduced by Davis (1989) for modeling users' acceptance of information systems or technologies to explain the general determinants of computer acceptance.

Adoption of technology in Kenya for tax administration was introduced by Kenya Revenue Authority in 2011 by offering a technology namely iTax which is maintained by Tata Corporation, an Indian IT consulting firm. The technology was introduced to replace the integrated Tax Management System (ITMS) which was abandoned after users complained of its shortcomings. The adoption of technology by Kenya Revenue Authority was not well received. The technology was not user-friendly, complex, costly, unrealizable, and prone to errors, insecure (Dairy Nation, 2015). Studies have found out that positive and negative perceptions about technology affects the adoption of technology Dabholka, (1994); Mick & Fournier, (1998).

iTax was introduced to provide services to the taxpayers at all times and at any given location which is covered by internet access, improve on tax compliance, reduce costs associated on tax administration and improve on overall tax collection to meet the set targets by the National Treasury (KRA, 2015). iTax system users are able to do the following, PIN application, Pin checker, issuance of Withholding certificates, application of TCC, TCC checker, generate payment slips, electronic filing and amending returns using excel, view taxpayer account/ ledger-query, view tax returns filed, consult status of cases on compliance, debt management.

1.1.3 Kenya Revenue Authority

The Kenya Revenue Authority was established by an Act of Parliament on July 1st 1995 Cap. 469 to enhance the preparation of Government income, while giving viable

assessment organization and supportability in income accumulation. Amid its arrangement KRA united the then divisions of Income Tax, Value Added Tax, Customs and Excise which were offices from the Ministry of Finance and additionally the Road Transport Department which was from the Ministry of Transport. The Commissioner General is the Chief Executive, and reports to a free Board of Directors, in any case, the Minister for Finance is in charge of its approach heading (KRA, 2017).

The Board and Management of KRA have since its origin invested energy and assets setting up frameworks, methodology and the selection of new methodologies went for improving the operational productivity of the Authority's procedures. The duty of the legislature to back open administrations lies in this way at the core of tax assessment. Applying criteria of effectiveness, reasonableness, and straightforwardness to charge frameworks and the spending of government assets makes an upright hover of enhancing financial execution, great administration, reasonable dispersion of open merchandise and ventures, and at last reinforces state authenticity.

1.2 Statement of the Problem

The adoption of technology by KRA was done through iTax system in order to ensure that there is increased tax collection to meet the target set by the National Treasury, provide services to the taxpayers at all times and at any location of the globe, reduce tax evasion and avoidance, improve on compliance and reduce costs associated with tax administration. In the financial year 2014/2015, the target of KRA was 1,121.5 trillion, but KRA collected only 1,069.6 trillion (KRA, 2015). In the financial year 2015/2016, KRA had a target of 1,217.4 trillion, but collected 1,210 trillion (KRA, 2016) and in the financial year 2016/2017, 1,365 trillion was collected yet the target was 1,415 trillion (KRA, 2017).

1.3 Objectives of the Study

1.3.1 General Objectives

The general objective of this study was to investigate the effect of adoption of technology and performance of Kenya Revenue Authority.

1.3.2 Specific Objectives

The specific objectives was:

- i) To establish the effect of perceived usefulness of technology on performance of Kenya Revenue Authority.
- ii) To determine the effect of perceived ease of use of technology on performance of Kenya Revenue Authority.
- iii) To establish the effect of perceived behavioral control of technology on performance of Kenya Revenue Authority.
- iv) To determine the effect of perceived security of technology on performance of Kenya Revenue Authority.

1.4 Research Questions

The research was to answer the following research questions:

- i) What was the effect of perceived usefulness of technology on performance of Kenya Revenue Authority?
- ii) How does perceived ease of use of technology affect the performance of Kenya Revenue Authority?
- iii) To what extent does perceived behavioral control of technology affect the performance of Kenya Revenue Authority?
- iv) What was the effect of perceived security of technology on the performance of Kenya Revenue Authority?

1.5 Significance of the Study

The findings of this study will provide recommendations to the National Treasury on the success rate of the current strategy of adoption of technology and give directions to KRA on the improvements on tax collection. The success of tax collection strategies by KRA will consequently contribute positively to the Kenyan economy by ensuring that sufficient taxes are collected to cater for country's national budget. The study also helps in enhancing research content on KRA and effectiveness of its overall tax collection.

1.6 Scope of the Study

The study was carried at KRA head office in Nairobi City County. The population was composed of 20 Senior Assistant Commissioners, 30 Assistant Commissioners, 50 Senior Revenue Officers and 120 Revenue Officers of head office who add up to a total 220 respondents. Technology Adoption Model and Theory of Reasoned Action/Theory of Planned Behavior models was used in this study. Perceived usefulness, perceived ease of use, perceived behavioral control and perceived security are the variables used in this study.

1.7 Limitations of the Study

The specialist recognizes the real confinement of this investigation which is the dependence on the respondents' readiness to finish the polls to be furnished with genuineness in their reactions. There was no execution motivations and in this way members did not give their best exertion in thinking about their reactions. Secondly, a response rate of 100% was not expected but the researcher ensured that an acceptable response rate was achieved for the validity of the results. However, these limitations did not affect the overall objective and quality of the study.

2. Literature Review

2.1 Introduction

The chapter discusses the theoretical review and the frameworks that explain the adoption of technology and performance of Kenya Revenue Authority as well as the empirical studies that have been done on both in the private as well as the public sector. A conceptual framework was then developed from a review of existing studies.

2.2 Theoretical Literature Review

This section reviews theoretical foundations that discuss and explain the theories that assist in appreciating how various strategies affect adoption of technology and performance of Kenya Revenue Authority. The theories discussed are Technology Acceptance Model (TAM) and Theory of Reasoned Action (TRA)/Theory of Planned Behavior (TPB).

2.2.1 Technology Acceptance Model

This model by Davis (1986) is customized for displaying client's acknowledgment of data frameworks or advances. The objective of Davis' (1989) TAM was to clarify the general determinants of PC acknowledgment that prompt clarifying client's conduct in a scope of end-client processing innovations. The model is gotten from the TRA (Fishbein and Ajzen, 1975) which offers an intense clarification for client acknowledgment and utilization conduct of data innovation. TAM speculates that a person's conduct aim to receive a framework is dictated by two convictions, saw helpfulness and saw usability. Seen convenience is characterized as "how much an individual trusts that utilizing a specific framework would upgrade his or her efficiency" while saw usability is characterized as "the degree an individual trusts that utilizing a specific framework would be free of exertion" Davis, (1989). Between these two, saw usability directly affects both saw handiness and innovation utilization Adams et al., (1992); Davis, (1989).

In Malaysia, the refined TAM display was utilized by Jantan, Ramayah and Chin (2001) to ponder the different elements impacting PC acknowledgment by little and medium estimated organizations. Basyir (2000) duplicated TAM model to examine the different components related with acknowledgment of Internet shopping conduct. Fok (2001) received TAM that expressly fuses self-viability and its determinants as variables that influence apparent usability, saw handiness and the utilization of the Internet.

While there are some united outcomes from the IT acknowledgment examine, the impacts of a few determinants stay easy to refute. While most analysts have observed seen convenience to be a key determinant in IT acknowledgment, there has been blended outcomes for the apparent usability develop. This is especially confirm in the inquires about of Adams et al. (1992), Hu et al. (1999), Igbaria et al. (1995) and Ndubisi et al. (2001).

The discoveries that apparent handiness is more persuasive in deciding innovation utilize affirms past research, for example, Adams et al. (1992), Hu et al. (1999), Igbaria et al. (1995) and Ndubisi et al. (2001), which have featured that apparent handiness is more huge in clarifying PC utilization. In this way it is vital for fashioners to build up a framework that is seen to be valuable more than simple to utilize.

2.2.2 Theory of Planned Behavior

The Theory of contemplated Action and hypothesis of Planned Behavior were co-created by Ajzen and Fishbein in 1967. Amid the mid-1970s the hypothesis was amended and extended by Ajzen and Fishbein. By 1980 the hypothesis was utilized to consider human conduct and create proper

mediations. In 1988, the Theory of Planned Behavior (TPB) was added to the current model of contemplated activity to address the insufficiencies that Ajzen and Fishbein had distinguished through their examination utilizing the TPB. The improvement of the TPB started in the field of social brain research. As right on time as 1862 therapists started creating speculations demonstrating how demeanor affected conduct. Social clinicians kept on contemplating mentalities and practices between the year 1918 and 1925 saw numerous new hypotheses developing. Having their accentuation on state of mind and conduct, it can be proposed that this hypothesis became out of the nineteenth century when the field of brain science started to take a gander at the expression "mentality". Those hypotheses recommended that "states of mind could clarify human activities" Ajzen and Fishbein, (1980). Thomas and Znaniecki were the principal therapists to see state of mind as individual mental procedures that decide a man's real and potential reactions.

This hypothesis gives a system to think about dispositions toward practices. As indicated by the hypothesis, the most imperative determinant of a man's conduct is conduct plan. The person's goal to play out a conduct is a blend of mentality toward playing out the conduct and subjective standard.

On the off chance that a man sees that the result from playing out a conduct is sure, she/he will have an inspirational state of mind forward playing out that conduct. The inverse can likewise be expressed if the conduct is believed to be negative. On the off chance that important others see playing out the conduct as positive and the individual is propelled to meet the special cases of pertinent others, at that point a positive subjective standard is normal.

2.3 Empirical Literature Review.

2.3.1 Perceived Usefulness and Performance

Perceived usefulness is how much a man trusts that utilizing a specific framework would upgrade his or her profitability. As indicated by Davis (1989), there is connection between clients' convictions about an innovation's helpfulness and the state of mind and the aim to utilize the innovation. In addition, saw handiness depicts solid and more steadily association with use than different factors.

2.3.2 Perceived Ease of Use and Performance

Perceived ease is the degree an individual trusts that a specific framework would be free of exertion" Davis, (1989). Seen convenience directly affects apparent value and innovation utilization Adams et al, (1992); Davis, (1989). An individual may receive an innovation on the off chance that he or she sees as helpful, valuable and socially attractive despite the fact that they loath utilizing the innovation Saga and Zmud,(1994), coming about to a circumstance where there may be a probability of direct connection amongst convictions and goals.

Usability is more material in anticipating goal to utilize and use on clients than non-clients of a specific mechanical advancement. For this situation, saw usability gives a solid help to current clients than future clients or non-clients of

the innovation. It is seen that any framework to be produced ought to have a component of usability. In any case, the level of convenience must be improved.

2.3.3 Perceived Behavioral Control and Performance

Perceived behavioral control is an idea that was created by Ajzen (1980) to foresee and comprehend effects on individuals' conduct that are not in their control. It likewise distinguishes how and where to target set methodologies for a person's evolving conduct. Furthermore, saw social control is utilized to clarify any human conduct, for example, why a man will change from filling his KRA come back from manual to iTax and asses its suggestions.

2.3.4 Perceived security and Performance

Perceived security refers to as the degree to which a person believes that the online vender or website is secure, and is of considerable information in an online environment Lallamahmood, (2007). Several risks are associated with online system such as unauthorized access to taxpayers' data, fear of losing data, fear of the information be stolen by third parties, fear of not transacting online at all Lightner et al., (2002).

2.4 Summary of Literature Review and Research Gaps

Adoption of technology at KRA experiences several gaps which makes it to be compromised and run short of the expected standards. Dispute these gaps, the technology is able to achieve its intended purpose of enhancing effective tax collection. The following table indicates some of the gaps encountered in adoption of technology at KRA.

Table 2.1: Summary of Research Gaps

Authors	Research Topic	Research Findings	Research Gap	Focus of Current Study
Moore (1999)	Diffusion of technology On e-filing system in Kenya.	Perceived usefulness affects performance of e-filing system.	Used description statistics to draw conclusion.	To determine statistics.
Ambali(2009)	E-government: Ground issues in e-filing system in Kenya.	Perceived ease of use affects performance of E-government.	Used as an explanatory research design.	Determine research design.
Fu et al(2006)	Acceptance of electronic tax filing in Mauritius.	Perceived behavioral control affects performance of E-filing.	Used as an explanatory research design	To determine statistics.
Featherman & Pavlou, (2003)	Predicting: E-services Adoption in Malaysia.	Perceived security affects performance KRA technology system.	Used as an explanatory research design	Determine research design.

Source: Author. Literature Review (2018)

2.5 Conceptual Framework

As indicated by Kombo and Tromp (2009), an idea is a unique or general thought gathered or got from particular cases. A conceptual framework is an arrangement of wide thoughts and standards taken from applicable fields of enquiry and used to structure an ensuing introduction. Mugenda and Mugenda (2003) and Smith (2004), characterize a conceptual framework a speculated display distinguishing the model under examination and the connection between the needy and autonomous factors. Kothari (2004) characterizes an autonomous variable otherwise called the logical variable as the continued reason for the progressions of the needy variable, while a reliant variable alludes to as the variable which the specialist wishes to clarify.

Perceived Usefulness

Perceived usefulness is the prospective user's subjective probability that using a specific application system will

increase his role in job performance within an organizational context.

Perceived Ease of Use

Perceived ease of use alludes to how much the imminent client anticipates that the objective framework will be free of exertion.

Perceived Behavioral Control

Perceived behavioral control demonstrates that a man's inspiration is impacted by how trouble the practices are seen to be, and in addition the view of how effectively the individual can, or can't play out the movement.

Perceived Security

Perceived security alludes to how much a man trusts that the online seller or site is secure, and is of extensive data in an online domain.

Below is the figurative representation of the variable explored by this study.

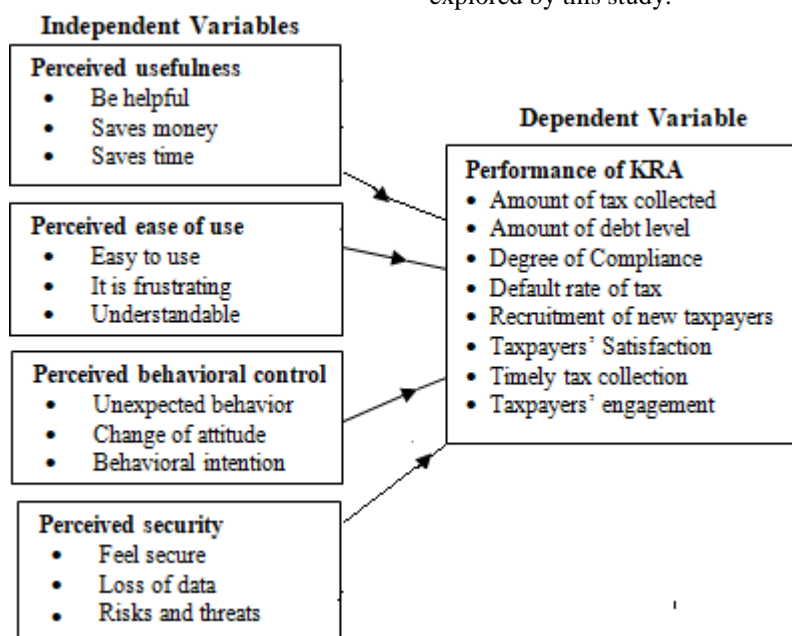


Figure 2.1: Conceptual Framework
Source: Author (2018)

3. Research Methodology

3.1 Introduction

In this section, approach that was embraced to encourage the acknowledgment the investigation destinations was clarified. The technique incorporated the outline for information gathering and also a hypothetical model that helped with distinguishing the information that was gathered, trailed by the objective populace, examining plan and test estimate. From there on, information composed and information gathering strategies, information investigation and the exploration systems utilized were clarified in a specific order.

3.2 Research Design

A research design constitutes choices taken by a researcher with respect to what, where, by how much and by what implies concerning an enquiry or a research ponder Kothari, (2007). The choice of a research design in sociologies was reliant on the researcher's assurance of the approach he or she planned to use to answer their research questions Sekaran, (2003); Saunders et al. 2009). The examination received a survey design with a specific end goal and got the essential information.

3.3 Population of Study

The population of interest for this study covered Kenya Revenue Authority management team and employees of head office. KRA has three categories, stations, MTO and LTO. The research targeted a population consisting of 20

Senior Assistant Commissioners, 30 Assistant Commissioners, 50 Senior Revenue Officers and 120 Revenue Officers of head office who add up to a total 220 respondents. Table 3.2 shows the target population.

Table 3.1: Target Population

Category	Population
Senior Assistant Commissioners	20
Assistant Commissioners	30
Senior Revenue Officers	50
Revenue Officers	120
Total	220

Source: KRA (2017)

3.4 Sampling Design and Sample Size

3.4.1 Sampling Design

As indicated by Tryfos (1996), sampling frame is the rundown from which the samples are drawn; preferably the frame ought to be the objective populace. The sampling frame for this investigation was comprised of a rundown of administration staff and care staff of head office of KRA.

Stratified irregular sampling was utilized to pick the sample sizes for the investigation. The benefit of this technique is that there will be an expansion in a sample's measurable productivity and empowered distinctive research strategies and methods utilized as a part of various strata Cooper and Schinder, (2003). The sample from the populace was chosen based on reasonableness for the goal research, as an issue of accommodation.

Israel likewise noticed that despite the fact that alternate techniques can give a valuable manual for deciding the sample measure, you may need to figure the sample estimate for an alternate blend of levels of exactness, certainty, and changeability. Israel (2013) proposed the beneath equation which was received in this examination to decide the sample size.

$$n = \frac{N}{1 + N(e)^2}$$

Where n is the sample size, N is the population size and e is the required level of precision.

Applying the formula in this research, using a precision level of $\pm 5\%$, the sample size was obtained as:

$$n = \frac{220}{1 + 220(0.05)^2}$$

= 142

Mugenda and Mugenda (2003), considers a sample size of 30% as sufficient enough. Thus the sample size was comprised of 100 management staff and 120 support staff.

Table 3.2: Sample Size

Category	Population	Sample size
Senior Assistant Commissioners	20	14
Assistant Commissioners	30	19
Senior Revenue Officers	50	33
Revenue Officers	120	76
Total	220	142

Source: Author (2018)

3.5 Data Collection Instrument

The essential information was gathered utilizing the organized questionnaire indicated in the sub-area above. As noted before, an organized questionnaire was embraced as the dependable instrument for gathering the required data. The inquiries asked in the questionnaires were founded on the research addresses that were brought up in the main part.

3.5.1 Validity of the Research Instrument

Validity can be characterized as how much a test or research device really measures what it should gauge Mugenda and Mugenda, (2003). Keeping in mind the end goal to limit the instrument's blunder happening from equivocality in the research instrument, the researcher looked for master exhortation from the boss in the assessment of the instrument.

3.5.2 Reliability of the Research Instrument

Reliability is worried about the degree to which the instrument yields similar outcomes on rehearsed preliminaries Mugenda and Mugenda, (2003). To guarantee reliability, the researcher has influenced the research to instrument as clear as conceivable by pretesting it utilizing a gathering of respondents with qualities like those of the investigation populace, yet who did not take part in the genuine examination.

3.6 Data Collection Procedure

The questionnaires designed by the researcher were based on the research questions and pre-tested to ascertain the suitability of the tool before the actual administration. This enabled the researcher to fine tune the questionnaire for objectivity and efficiency of the process. The researcher then seek an introduction letter from the university which assisted in acquiring research permission from NACOSTI. The filled in questionnaires were collected for data analysis.

3.7 Data Analysis and Presentation

Data collected was compiled, sorted, edited and coded. All questionnaires were adequately checked for reliability and verification. Descriptive statistics was employed which were involve percentage, mean and standard deviation. Inferential statistics which includes model summary and analysis of variance (ANOVA) and coefficient of regression to determine the deference between the various variables used in the study

3.8 Ethical Consideration

Blumberg et al., (2005) characterizes morals as a branch of theory which manages the direct of individuals and aides the standards and norms of conduct of individuals and their connections. The examination was done with most extreme morals. To begin with, before the respondents were given the questionnaires, the researcher was adequately short them on the motivation behind the examination so, they partook at their own assent.

4. Research Findings

4.1 Introduction

This chapter focuses on the questionnaire return rate, demographic information of the respondents, presentation, interpretation and discussion of findings. The presentations were done based on the research objectives. The purpose of this study was to investigate the effect of adoption of technology on performance of Kenya Revenue Authority.

4.2 Questionnaire Return Rate

Out of the 142 KRA staff, 76.06% were able to fill in the questionnaires sufficiently. Babbie (1990) suggested that a response rate of 60% was good while 70% was very good, therefore, the response rate obtained of 76.06% was considered acceptable and sufficient for data analysis and provision of reliable and unbiased findings.

4.3 Demographic Information of Respondents

This section deals with the demographic information of the respondents

4.3.1 Gender of the respondents

The study shows that 55.56% of the respondents were female whereas 44.44% were male.

4.3.2 Level of education.

This study shows that 100% of the KRA staff had a university degree as their minimum academic achievement and were therefore able to understand the questionnaire provided and provided the required information appropriately. The KRA staff involved in this study had shown high degree of experience as none had worked at KRA for less than a year. Moreover, the study showed that majority of the staff had adequate knowledge of the technology and had a great impact on the use of the technology.

4.3.3 Age of the respondents.

This study shows that 35.19% of the KRA staff were aged between 21 and 30 years, 33.33% were aged between 31 and 40 years, 13.89% were aged 41 and 50 years and 17.59% were above the age of 50 years. The study showed that majority of the KRA staff were young and had more energy that is needed for effective use of the technology.

4.4 Effect of Perceived Usefulness of technology on performance of Kenya Revenue Authority

The researcher sought to determine perceived usefulness on performance of Kenya Revenue Authority. This study indicated that 80.6% of KRA staff agreed that perceived usefulness had a great impact on the performance of KRA. Moreover, the study indicated that 63% of the respondents stated that perceived usefulness enabled them to analyze income tax returns with ease. As indicated by Davis (1989), KRA staff stated that there was a connection between tax payers' convictions about an innovation's helpfulness and the state of mind and the aim to utilize the technology. As per Venkatesh (1996), the participants stated that

transmitting impact of state of mind could be rejected by observational confirmation found in the demeanor component did not completely intervene the impact of apparent helpfulness on an intention to use the technology.

4.5 How Perceived ease of use of technology affect the performance of Kenya Revenue Authority

The researcher sought to establish how an individual may receive an innovation on the off chance that he or she sees as helpful, valuable and socially attractive despite the fact that they loath utilizing the technology. This study indicated that 75% of KRA staff stated that system downtime affects the performance of KRA in service delivery. However 25% of the respondents stated that the complexity of the system affects their operations negatively. Moreover, 100% of the respondents reported that perceived ease of use had a very great impact on the performance of KRA.

4.6 How Perceived behavioral control of technology affect the performance of Kenya Revenue Authority

The researcher sought to determine Perceived behavioral control on performance of Kenya Revenue Authority. This study indicated that 63% of the respondents stated that perceived behavioral control had a great impact on the performance of KRA. In addition, the study indicated that 63% of the respondents stated that perceived behavioral control had a great impact on the performance of KRA.

The findings were in line with an idea that was created by Ajzen (1980) to foresee and comprehend effects on individuals' conduct that are not in their control. It likewise distinguishes how and where to target set methodologies for a person's evolving conduct. KRA staff observed that social control was utilized to clarify any human conduct, for example, why a man will change from filling his KRA come back from manual to iTax and assess its suggestions. This study observed that participants were seen to be discerning and make utilization of accessible data and consider its ramifications of its result before they choose to draw in or not to take part in a given conduct Ajzen and Fishbein, (1980). This study found out that an action relies upon the measure of state of mind and subjective standard, a situation where a positive item shows social aim Glanz, and Lewis, (1997).

4.7 Effect of Perceived Security of technology on performance of Kenya Revenue Authority

The researcher sought to establish how the respondent rate the following aspects of perceived security in terms of their contribution to the performance of KRA. All the KRA staff (100%) agreed that perceived security of technology affects the performance of KRA. This justifies the fact that users believe the system is secure for use. All the respondents further stated that the technology is indeed secure in the filling of tax returns and payment of taxes. 78.7% of them are satisfied with the security measures that have been put in place by KRA even though there was varied opinion in terms of tax payer's personal data.

This study observed that the several risks were noted and were perceived to affect the performance of Kenya Revenue Authority Lightner et al., (2002). According to Rubin and Geer (1998), the study observed that there was security threat of taxpayers' data and its security was of paramount importance. The participants stated that they were satisfied with the security measures and were not certain of the interactions of value and intentions shaping and perception of security Ulusoy, (2003).

5. Summary of Findings, Conclusions and Recommendations

5.1 Introduction

This chapter presents the summary of the findings, conclusions, and recommendations which were based on the research objectives together with suggestion areas for further research.

5.2 Summary of Findings

This study showed that KRA staff agreed that perceived usefulness had a great impact on the performance of KRA. In addition, the study indicated that perceived usefulness enabled them to analyze income tax returns with ease. Moreover, all the respondents reported that perceived ease of use had a very great impact on the performance of KRA by increased amount of taxes collected, reduction of debt level and low rate of tax defaulters.

This study showed that perceived behavioral control had a great impact on the performance of KRA by increased degree of compliance, more engagement with taxpayers, increased new taxpayers because of adoption of technology and taxpayer' satisfaction. KRA staff stated that there was timely tax collection as a result of adoption of technology.

Moreover, the study showed that all the KRA staff agreed that perceived security of technology affects the performance of KRA. This justifies the fact that users believe the system was secure for use, then they will effect use it. All the respondents further stated that the technology was indeed secure in the filling of tax returns and payment of taxes. Majority of the KRA staff were satisfied with the security measures that have been put in place by KRA even though there was varied opinion in terms of tax payer's personal data.

5.3 Conclusion

The objectives of this study were to investigate the effect of adoption of technology and performance of Kenya Revenue Authority, to establish the effect of perceived usefulness of technology on performance of Kenya Revenue Authority, to determine the effect of perceived ease of use of technology on performance of Kenya Revenue Authority, to establish the effect of perceived behavioral control of technology on performance of Kenya Revenue Authority, to determine the effect of perceived security of technology on performance of Kenya Revenue Authority.

However, the findings showed that downtime the system affects the performance of KRA in service delivery. However complexity of the system does not affects their operations negatively.

The conclusions were based on the objectives as follows: on objective one, the conclusion was that perceived usefulness of technology affects the performance of Kenya Revenue Authority; on objective two, the conclusion was that perceived ease of use of technology affects the performance of Kenya Revenue Authority; on objective three, the conclusion was that to establish the effect of perceived behavioral control of technology affects the performance of Kenya Revenue Authority; and lastly objective four, the conclusion was that to determine the effect of perceived security of technology influences the performance of Kenya Revenue Authority.

5.4 Recommendations

Based on the findings, it was recommended that the nature of technology owned by Kenya Revenue Authority has an impact on its performance and therefore KRA should acquire and sustain stable system. Secondly, KRA should consider hiring competent IT personnel who can fast tract the implementation and use of technology on their operations. Lastly, the management should embrace the adoption of technology and develop standard operating procedures and policies for its use since they are the main initiators of new technologies and they are key to the implementation of new projects.

5.5 Suggestions for further study

Taking the limitations and delimitations of the study into consideration, the researcher makes the following suggestions for further research:

- A similar study could be done with a target population based in a different Kenyan government organization to validate the findings of the study.
- A study should be carried out to establish the acceptability and use of technology on performance of Kenya Revenue Authority.
- Another study should be done to establish the specific areas of technology whose personnel competence is crucial for the adoption of technology on tax administration in Kenya.

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