

**EFFECT OF RISK MANAGEMENT TOOLS ON TRADE FACILITATION: A CASE OF
KENYA REVENUE AUTHORITY CUSTOMS AND BORDER CONTROL
DEPARTMENT**

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DECLARATION

I declare that this project is my original work and has not been presented for a degree in any other University.

Signature..... Date.....

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HDB335-C016-3202/2017

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

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DEDICATION

This project is dedicated to my loving family and friends who have been patient and kind to me and for the support they have provided throughout this period.

ACKNOWLEDGEMENT

The process of formulating and designing this project has been the most challenging and involving journey of my life. I give thanks to the Almighty God for giving me a sound mind and good health to undertake this project. I owe my success to my colleagues and my supervisor for their continued support and undefined advice. Sharing ideas with them has exposed me to realms hitherto unknown to me which is something vital to attainment of my career goals. I would like to specifically thank my supervisor Mr. AbakukKasibo for without his constructive critique of my work, I would not have made it this far.

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ACRONYMS

ICT:	Information communication technology.
COSIS:	Customs oil stock information systems.
RECTS:	Regional electronic cargo tracking system.
ITMS:	Integrated tax management system.
BBC	British Broadcasting Corporation
FY	Financial year
IT	information technology
KRA	Kenya Revenue Authority
OECD	Organization for Economic Cooperation and Development
PEU	Perceived ease-of-use
PU	Perceived usefulness
SME	Small and Medium Enterprises
TPB	Theory of Planned Behavior
UTAUT	Acceptance and Use of Technology

DEFINITION OF TERMS

Compliance – Following tax rules, such as filing tax on time

Non-compliant – Failure to follow taxation rules, for example, failing to file tax on time

Perceptions – Attitudes, which could be either negative or positive

Fairness –The act of treating individuals with equity and equality, without favoring one side

Individual Taxpayer – A natural person who has attained the legal age of paying tax

Tax system – A system or approach used in the collection and administration of tax

Reforms – Changes that have legal implications

Customs -is the official department involved in administering and collecting the custom duties levied on the imported goods by the government.

Distribution of tariffs – refers to fluctuations in the duty or tax paid on a given class of exports or imports.

SPSS – statistical package for social sciences

ABSTRACT

Previously, the expanded multifaceted nature and volume of worldwide trade, powered by technological advances has altered worldwide trading practices what has thusly influenced the manner in which customs organizations complete their obligations and arrange their everyday business activities. Today, customs are not just required to give broad assistance of exchange, but also keep up authority over the universal development of products, people and methods for transport. The study investigated the effect of risk management tools in trade facilitation. Specifically, the study investigated the effect of technology growth, custom procedures and communication on implementation of risk management tools on trade facilitation. To be able to do so, the study employed Diffusion Theory, Resource-based-View Theory and Agency Theory. The study further adopted a cross-sectional survey design and used both quantitative and qualitative approaches. Main tool for data collection was by the use of structured questionnaires. The collected data was analyzed by use of the SPSS Software Version 23. The analyzed results were further presented by use of frequency tables and pie charts.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

As of late, the expanded intricacy and volume of worldwide exchange, filled by innovative advances have reformed worldwide trade practices what has thus influenced the manner in which customs organizations complete their duties and compose their everyday business activities (Gilpin, 2018). Today, customs are not just required to give broad assistance of exchange but in addition, keep up authority over the global development of merchandise, people and methods for transport. In trying to accomplish a harmony between these objectives, traditions have been moving far from customary control techniques and receiving new reasoning and ways to deal with its errands (Laudon. and Laudon, 2016).

As per Hammadiet *al.* (2018), the present custom divisions over the world are inclined to risks, for example, pirating of medications, weapons or fake that have featured the weakness of the Customs production network. In such manner, Customs organizations are progressively embracing danger the executive's strategies to figure out where the best regions of presentation to chance exist and how to adequately distribute rare assets to deal with these dangers. This has empowered the goals set for customs by government to be accomplished and the desires for the exchanging network and residents alike to be met (Slovic, 2016).

Over the world, risk management is in no way, shape or form another creation for customs and it is consistent with state that all organizations apply some type of risk management the board, either formally or casually, in their exercises. This is on the grounds that hazard in traditions setting can once in a while be brought about by minor occasions or real occasions. For this

situation, its extent decides how the risk management will be managed. Relief of these dangers is vital not exclusively to the country yet in addition the world everywhere, this is on the grounds that chance administration in the traditions store network has turned into an urgent issue to guarantee the supportability or give an upper hand to numerous performers in the business world.

In Kenya, the fight on risk management in customs is led by KRA, The taxman, in charge of income collection in the country. Throughout the years, KRA income gathering has kept on developing while polished skill in income organization has been upgraded because of monstrous advancement of the ICT framework (Muchiri, 2015).

Kenya Revenue Authority's Customs and Border Control department faces risks such as fraud, counterfeit goods, drug trafficking and illegal movement of people.

Throughout the years, tasks by KRA have seen a decrease in vulnerabilities however various procedures are as yet manual (Muchiri, 2015). Risk management board has been a noteworthy objective for the duty man, and ICT has been the blue print. It has not just observed modernization and robotization of procedures in the principle income offices in the specialist yet in addition prompted increment in income gathering (Lundu and Shale, 2015).

1.1.1 Risk Management in Customs

As indicated by Valerievna et al. (2017), risk is the likelihood of a non-certain occasion estimated regarding cost, quality and range to accomplish an objective. This definition implies that end that there is no contrast among hazard and vulnerability. Luhmann (2017) insinuated that in the sentiment of financial specialist Knight, the danger of vulnerability is recognized by the way that it likely is. As indicated by the Customs Code of the EU, chance signifies "the

probability and the effect of an occasion happening, concerning the section, leave, travel, development or end-utilization of merchandise moved between the customs domain of the Union and nations or regions outside that region and to the nearness inside the customs territory of the Union of non-Union products, which would: keep the right use of Union or national measures; bargain the monetary premiums of the Union and its Member States; or represent a risk to the security and wellbeing of the Union and its inhabitants, to human, creature or plant wellbeing, to the earth or to shoppers" (European Union, 2013).

Risk management hence includes methodical work on improvement and reasonable usage of aversion measures and dangers minimization, an evaluation of their application proficiency, and furthermore control of customs tasks commission giving nonstop refreshing, the investigation and update of data which is accessible for traditions specialists (Drobot, 2017). In progressively operational terms, custom risk management administration is a viable method for treating streams including countless, merchandise and vehicles with restricted assets and evolving dangers, without hindering the stream of authentic exchange. Then again, as per the EU code, risk management is "the precise ID of hazard, including careful arbitrary checks, and the execution of all estimates vital for constraining presentation to chance" (European Union, 2013). With respect to the idea of the traditions hazard, connected in various nations, the ways to deal with its elucidation are moderately dull, however have their national characteristics (World Custom Organization, 2013).

Hammadi, Ouhman, A. and Ibourk (2014), implied that chance administration in traditions is an orderly recognizable proof and usage of all estimates important to restrict presentation to dangers in traditions setting, can guarantee consistence with Customs law and guideline in an approach to guarantee traditions inventory network security and wellbeing. By powerful distinguishing,

breaking down, assessing and treating dangers, Customs fundamentally increment its execution and streamline its procedures and methodology. Hazard the executives thusly does include bringing up the potential dangers as well as builds up a result that may relieve the probability of hazard happening and the negative effect when it occurs (Reason, 2016).

Management of Risk is an imperative piece of the procedure of custom in traditions. Actually, Afanasieva, Ivanov and Yanushkevych (2017) trusts that the conditions inside the customs business is the thing that has come about to selection of the hazard the board and examination into training. Risk Management in customs is anyway not a static procedure, yet as an intelligent procedure in which data is always refreshed, investigated and considered for completing preventive and restorative activities. The procedure ought to along these lines "make esteem; be an indispensable system of the authoritative procedure; element into the basic process of leadership; expressly embark on vulnerability; be organized and methodical; be founded on the best data accessible; be customized to the venture; must deem variables of human; be comprehensive and straightforward; be versatile and dynamic to change; and be consistently enhanced and observed as the undertaking proceeds" (World Custom Organization, 2013).

Kenya Revenue Authority has come up with several ways of managing the risks at Customs level and they include risk profiling, equipping the border control officials with both information and equipment to counter the menace, reduction of human interaction during cargo clearance, introduction of systems which include The Simba system, ICMS, RECTS and ICT tools such as scanners and X-Ray, introduction of K9 dog unit among others

1.1.2 Trade Facilitation

The department of Customs in Kenya, with the active involvement of the government ministries and other state departments, has been working towards attaining a balance between compliance

with constitutional requirements and facilitation of trade. The Department of Customs and the World Customs Organization in Kenya are aimed at standardizing and simplifying the practices of customs within the member states, and these facilitate effective control of trade and customs. The role played by customs in the global trade is essential; for instance, the provision of effective processes of clearing and forwarding, and more importantly the implementation of effective controls to secure the revenue. Besides, the customs ensure that the national laws are adhered to, including guaranteeing protection and security to the society. These customs procedures ensure effectiveness and efficiency in influencing the nations' competitiveness in terms of economies and thriving of the international trade and global marketplace development (World Customs Organization, 2013). Moreover, unnecessary restrictiveness in trade is avoided which is faced when modern technology is applied and techniques while upgrading the controls of quality in a coordinated manner at the international level.

1.1.3 Kenya Revenue Authority

Revenue authorities are government organizations entrusted with the activity of gathering income for the benefit of their particular governments, among different jobs that they play. The Kenya Revenue Authority (KRA) is an administration organization under the Ministry of Finance. It was built up by an Act of Parliament (Cap 469) on first July 1995. The Authority is accused of the duty of gathering income to benefit the government of Kenya (Kenya Revenue Authority, 2015).

The board has its enrollment drawn from people in general and private division and its center obligation is to settle on approach choices to be executed by KRA the executives. The board's Chairman is designated by the President. The board is made out of following: Chairman to be named by the President; Commissioner-General (CG); Permanent Secretary, Ministry of Finance

or his agent; Attorney-General or his delegate; six different people named by the Minister by excellence of their insight and involvement in bookkeeping, trade, law, tax collection, business organization or open organization. (Kenya Revenue Authority, 2015)

Kenya Revenue Authority was set up with the accompanying goals as its principle order: evaluation, organization and accumulation, and execution of laws relative to the income. So as to accomplish these targets, the association has been isolated into five fragments to be specific; Support administrations, Road transport (Current National Transport and Safety Authority), Customs and Border control, Domestic and Large citizens Office. The help administrations division is entrusted with disposal of tax avoidance by rearranging and streamlining methods and improving duty administration and training in this way expanding the rate of consistence. The vehicle division is accused of accumulation of income for the legislature and to regulate and authorize composed laws or indicated arrangements of composed laws relating to evaluation, gathering and representing all incomes as per these laws. The huge citizen's unit is intended to give a one stop shop in the organization of Income Tax and VAT matters influencing expansive citizens and furthermore productive expense organization with the goal of fulfilling consistence at the least expense to the two citizens and the Kenya Revenue Authority (Kenya Revenue Authority, 2015).

1.1.4 Global Perspective of Risk management and how it affects trade

WCO Compendium, Volume 1, embarks on the organizational framework of global risk management; outlining the risk management process, whereas Volume 2 addresses assessment of risk, targeting and profiling tools that inform the criteria of selection discerning high-risk conveyances, passengers and consignments for the intervention of the customs.

Ideally, Customs enhance risk management capabilities to a ‘best practice’ level as well as to effectively and efficiently embed risk management practices in customs operation hence further affecting trade positively

1.2 Problem Statement

The study was seeking to determine the consequence of the management of risk tools on trade facilitation. For the financial year 2016 - 2017, customs execution in Kenya recorded a 0.2 percent growth from a four-year normal development of 14.7 percent to 14.9 percent (Capital Business, 2017). As per the KRA, the development was still essentially low and was being pulled down by drowsy import development and wastefulness of the customs management systems that are unfit to predict chances and alleviate them as needs be.

Customs specialists around the globe are in charge of executing an expanding scope of government approaches in regions as different as income gathering, exchange and voyager consistence, insurance of society, social legacy, licensed innovation, accumulation of measurements and natural security (Amadi, 2015). A portion of these obligations are regularly completed for the benefit of other government services and offices, through the execution of an assorted scope of concurred control routines, with traditions having duty regarding the organization and implementation of pertinent administrative necessities at the purpose of importation and exportation.

A research by Afanasieva, Ivanov and Yanushkevych (2017), saw that customs experts ought to apply present day the custom management techniques, which depend on the standards of risk-based reasoning as per the necessities of worldwide guidelines. Further, a study by Muchiri (2015) set up that ICT was a noteworthy drive to chance risk management systems mix at KRA. Also, Lubano (2015), saw that hazard assessment was done at KRA, inward risk control system

existed and yearly reports contained the interior risk evaluation reports. Regarding this, just couples of studies have explicitly been used in the research from the area of management of risk both globally and locally, thus the dire need of undertaking this work to investigate the effects of the tools of risk management on trade facilitation.

1.3 Objectives of the study

1.3.1 General Objective

To investigate the effect of risk management tools on trade facilitation in Kenya.

1.3.2 Specific Objectives

The specific objectives will include:

1. To assess the technology effect on risk management tools and their impact on trade facilitation
2. To establish the effect of customs procedures on implementation of the tools of risk management in the procedures of customs clearance.
3. To establish the effect of human resources on execution of the tools of risk management on trade facilitation.

1.4 Research Questions

1. How does technology affect implementation of risk management tools in trade facilitation?
2. To what extent do custom procedures affect implementation of the tools of risk management in trade facilitation?
3. How do human resources affect implementation of risk management tools on facilitation of trade?

1.5 Significance of the Study

The study was of significance to the following parties:

Kenya Revenue Authority (KRA) since the conclusion and recommendations made in the study addresses enhancement of KRA customs performance. The outcomes in the study provided a holistic view of the effect of risk management tools in custom trade facilitation, challenges involved and potential problems and how to adequately monitor and manage them.

Kenyan government since the findings made in the study are vital in developing policies regarding customs risk management and other regulatory requirements on the same. The policy maker gained insight on the best way to incorporate the risk management tools to ensure custom risks are mitigated effectively.

Academicians were given relevant information about tools of risk management on trade facilitation. On this regard, the study contributed to the general frame of knowledge and forms a basis research in future.

1.6 Scope of the Study

The study sought to establish the effect of risk management tools in trade facilitation. To be able to accomplish this, the study undertook at Border Control and KRA Customs department in Kenya which has approximately 8101 employees countrywide.

I specifically targeted employees in Customs Department which has approximately 2000 employees. The study targeted middle-level, top-level and even the general staff members. The study was also undertaken between the month of October 2018 and July 2019.

1.7 Limitations of the study

This study faced two major problems during the data collections process. These problems acted as limitations hence inhibiting adequate collection of data. The limitations were as follows:

1.7.1 Biasness

During the process of data collection, some of the participants were biased when answering the questionnaire. The data collected from the questionnaire was not sufficient as required hence affecting this study.

1.7.2 Time management

When conducting this study, the some of the respondents did give their feedback in time. This delayed my study and limited adequate collection of data.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter explored the effect of risk management tools on trade facilitation. Specifically, the chapter looked at the theoretical appraisal/review, conceptual framework, and existing literature critique, research gaps and the chapter's summary.

2.2 Theoretical Review

2.2.1 Diffusion Theory

Anaeto, Onabajo and Osifeso (2008) affirmed that dispersion involves the method of conveying advancement among members after some time in a social structure. According to Bittner (2003), dispersion provides a method of embracing advancement; and acknowledgement is gained by a specific network of individuals. The investigation of dissemination hypothesis is conceivably important to the field of coordination for the accompanying reasons.

Logistics is inalienably a development-based control. Huge numbers of the tasks and exercises in the Logistics division speak to radical developments in the structure, association, succession, and conveyance of guidance. A logistician who comprehends the development procedure and speculations of advancement dispersion will be all the more completely arranged to work successfully with customers and potential adopters (Benjamin, Robert and Casey, 2012).

Diffusion of innovation theory inspects how thoughts are spread among a gathering of associations. In this hypothesis the assessment chief impacts on the conduct of the adopters of the thought (Benjamin, et al, 2012). As per Khan et al, (2017), advancement isn't embraced by all people in a framework in the meantime. Rather they will in general receive in a period grouping.

Early adopters can be better educated on the new procedure and the dangers of actualizing are lower.

The hypothesis has four principle components which are correspondence channels, social frameworks and advancement. Development is depicted as a practice, thought or an undertaking that is regarded as new by other appropriation unit or by an individual. It might have been imagined sometime prior, yet on the off chance that an individual considers it as new, due to the fact that it can presently lead to development for others. Correspondence divert defines a procedure or method through which members offer and make data for achievement of a collective comprehension with each other.

Time is characterized in three variables, relative time, choice procedure development with which advancement is sustained by a gathering or an individual and advancement appropriation rate. Ultimately social structure or framework which is portrayed as set of units is interrelated units and jointly occupied by critical thinking to attain a shared goal (Schleper and Busse, 2013).

Notwithstanding, the innovation process can be embraced in the association relying upon the accompanying qualities, similarity, standpoint which is relatively preferred, discernibleness, multifaceted nature and trainability. In the relative standpoint, the association takes a gander at how much the development is seen as standpoint being superior to anything the thought it supplants. The second trait is similarity which is the extent to which advancement is perceived with the current capabilities as steady, past needs and encounters of potential past.

Next, is the third quality of unpredictability which the extent which an advancement is viewed as moderately difficult to understand and use while trainability is the extent in which development

can be tried with different things with a constrained discernibleness and premise is the degree to which the development effect is noticeable to others (Laskowska-Rutkowska, 2015). In rundown advancement offering progressively relative preferred standpoint, similarity, effortlessness, trainability and perceptibility will be received quicker than different developments.

2.2.2 Resource-Based View

The resource-view (RBV) is based upon the hypothesis that a company's prosperity is generally controlled by the assets it claims and controls (Acedo, Barrosa and Galan, 2006). Assets are regularly characterized as either resources or capacities. Resources, which might be unmistakable or elusive, are claimed and constrained by the firm. Abilities are limit with regards to a group of assets to play out some errand or action.

As indicated by Wong and Karia, (2010) an association must verify a proficient stream of the correct sort of assets from its condition so as to endure and improve its operational execution. This hypothesis lays on two key focuses. To start with, company's prosperity is to a great extent driven from assets it has and second, that the assets must be uncommon, significant, hard to mirror and non-substitutable by other uncommon assets to make an upper hand (Wong and Karia, 2010). The center premises of the RBV is that abilities and assets change crosswise, essentially over firms, and that steadiness are imminent on these distinctions (Patil, Avittathur, and Shah, 2010). In the event that the firm's capacities and assets are conveyed and blended legitimately they make the firm's upper hand (Salim, 2016).

These Theory advices organizations to recognize the asset holes and afterward distinguishing the asset base (Newbert, 2007). Taking a case of organizations that redistribute, the reason they re-appropriate is on the grounds that they do not have the profitable uncommon, supreme and sorted

out capacities and assets and consequently glance an outer supplier to defeat the shortcoming. An organization plainly equipped for knowing its abilities and its shortcomings is the best accomplishment to its development (Salim, 2016). This is so in light of the fact that it will begin concentrating on the best way to defeat its shortcomings by being progressively inventive to get the most productive and viable arrangement (Nordigarden1, et al., 2015).

Firms create dynamic abilities to adjust to evolving conditions, they grow firm-explicit assets and after that restore them to respond to changes taking place in the condition of business. As per RBV enlisting aggressive workers is an essential alternative which can e used to fill the company's assets holes; for example abilities (Seddon, 2014). What makes aggressive representatives an asset that is atypical, significant, non-substitutable and difficult to impersonate is that numerous organizations don't have sufficient experts henceforth not being completely compelling and proficient to giving quality result.

As indicated by Ganorakis and Love, (2010), coordination adaptability and effectiveness was viewed as a wellspring of upper hand. Responsibility for resources empowered an organization to build up an upper hand. They additionally discovered that the upper hand of an organization was obtained from the capacity of the organization to adventure and gather a suitable assets blend (Ganotakis and Love 2010). In their examination, Wong and Karia, (2010), affirmed that, RBV concentrated on accomplishing predominant execution and upper hand.

2.2.3 Agency Theory

The agency theory identifies with business connections that comprise of a "central" and an "operator" (Mitnick 2006). A relationship of an organization emerges at any point involving one or more people, known as principals, with other individuals known as specialists, to steer administration and later delegating to the operators the principal leadership.

An organization relationship can emerge at any point involving individual(s), known as the principal(s), employing another individual(s), known as specialist to serve some delegated basic leadership and administration expert to the operators

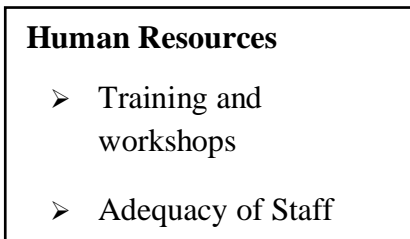
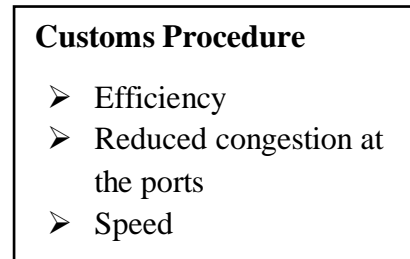
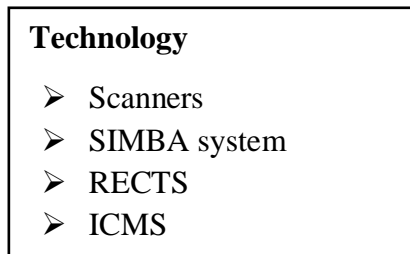
Agency Theory reveals how connections can be sorted out successfully in which the work is decided by one gathering while the other gathering executes required steps. This relationship specialist is centrally contracted to carry out the assignment or required steps that the main or principal is unable to perform (Kudla, and Klaas-Wissing, 2012).

Agency Theory ends up incapable when the main and specialist have diverse objectives for instance the self-intrigued destinations that clash and veer off with the goals of the chief are sought after by the operators; operators should solely act in their principals' enthusiasm (Siller-Pagaza, Otalora, and Cobas-Flores, 2006). The component for controlling the relationship is the agreement between the chief and the specialist and, contingent upon the circumstance, the agreement will be conduct based or result based (Plambeck, and Gibson, 2010).

2.3 Conceptual Framework

A conceptual framework is a connection model between introduction where analysts present the connection between factors in an examination and demonstrate the relationship using diagrams or graphs. A decent theoretical system gives a thought of the factors to be secured by the investigation. It in this manner helps the analyst to rapidly observe the relationship of the proposed variable (Best and Kahn, 2011).

Independent Variable



Dependent Variables

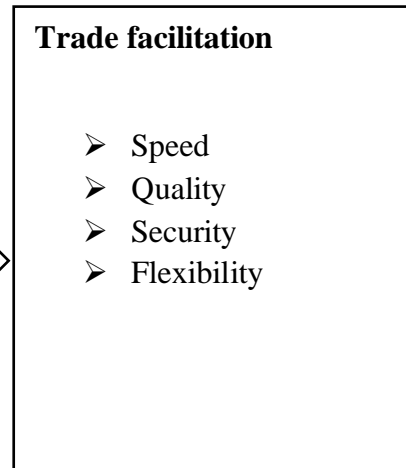


Figure 2.1: Conceptual Framework

2.3.1 Technology

Risk management can be determined by various factors and technology plays a key role. Some of the technological advances in customs include use of scanners at entry and exit points, Regional Electronic Cargo Tracking Systems, SIMBA system, and the Integrated Customs Management System. Among the factors that are influenced by the information technology comprise of risk associated with technology and internet penetration. This is one of the major risks that are changing the face of risk management practices (Martins, Oliveira, & Popovic, 2014)

Technological risk will have an adverse effect on risk management by increasing the cost of carrying out risk management process but at the end improve on trade. Technological risks take diverse structures from straightforward breakdown of PC, phis, to complex malignant act, for example, cybercrime. Associations are losing billions of dollars through digital assaults particularly money related organizations. The programs of technological management of risk are used to create controls and minimizing environmental risks. The integration of ERM caters for the numerous effects of the firm's risks. Technology risk is leading to increment of the cost associated with the practices of risk management and that only the managers with large funds can afford to implement strong implementation of IT tools for risk management. Internet penetration has led to globalization and information can be widely accessed over the globe. Internet is the key leading innovation for business success as well as increased risk environment (Wiengartenet *al.*, 2016)

2.3.2 Customs Procedures

According to Arnold (2017), customs procedure entails preparing and submitting the required documentations to foster export or import into the given country, assessment, client representation during the process of customs co-taking of cargo delivery after clearance from the customs, paying duties along with all the documentation involved.

The global convention of Customs Procedure harmonization and simplification (Kyoto Convention) also provides a plan for efficient and modern procedures of customs which should guide the border control and customs in executing their daily functions. Its main aim is to facilitate trade through provision of recommendations and standards modern techniques and procedures. The main principles guiding it include customs actions predictability and transparency of actions, simplification and standardization of declaring goods, maximal

utilization of technology and use of audit based and risk management controls, interventions coordination of other partnerships and border agencies with trade (Revised Kyoto Convention, 2012).

Thi and Huong (2018) showed that customs procedure reducing congestion of cargo, passenger, and enterprises and strengthening the goods declared periodically affects trade. They further claimed that customs procedure encouraging self-assessment of endeavors and permitting undertakings (rather than traditions) recording exchange and many key archives influencing the traditions hazard the executives. Jiang (2017) studied that customs procedure strengthening the news report and the declaration by means of electronic and advancing utilization of information systems affecting the customs risk management.

2.3.3 Human Resources

Human resource development is aimed at purveying, development and training opportunities to advance the performance of the organization through teams and individuals. To do this, developing intellectual capability and skills base are vital, especially for the organization, and ensuring availability of people with the required quality to meet the future and present organization needs (Armstrong, 1997).

Human Resource Development (HRD) is a model or framework for aiding the workers to develop organizational and personal skills, ability and knowledge. HRD involves the opportunities such as career development, training, and management of performance, succession planning, coaching, and tuition assistance, development of organization and identification of employees.

2.4 Literature Review

Thi and Huong (2018) looked to research the determinants influencing traditions chance administration. Information overviewed 200 supervisors of ventures identified with Dong Nai traditions. The reviewing time is from 9/2017 to 3/2018. Information prepared by SPSS 20.0 and technique utilized by the various straight relapse examination. For this situation, the study saw that Dong Nai traditions expected to improve the arrangement of systems, guidelines and rules on hazard the board; sort out authoritative units and units of hazard the executives at all dimensions toward organizing full-time and qualified staffs accountable for hazard the board to guarantee full usage of hazard the board assignments in the excrement.

Muchiri (2015) tried to examine Information Technology Risk Management as a Strategic Enabler in Tax Revenue Administration. For this situation, Descriptive research plan strategy was utilized in this investigation. The objective populace size of this investigation was 288 Kenyan Revenue Authority the board authorities, explicitly Information Technology and business officials of the income expert. The worthy wiggle room utilized in this investigation was 5% while the required certainty level was 95% for this examination. The investigation inferred that one of the best difficulties in recognizing and surveying dangers in duty organization data frameworks is the multifaceted nature of the Kenya Revenue Authority as an association. Moreover, it was reasoned that a successful IT hazard the executive's ability is an essential measurement in seeing how IT empowers or obliges business activities.

Correspondingly, an examination by Hammadi, Ouhman and Ibourk (2014) tried to research the Security Practice and Risk Management in the Supply Chain of Customs with Application to the Moroccan Customs, the Cross ABC Method. Through audit of the past writing, the examination built up that the most vital thought from a hazard the executives and security practice was the

standards of hazard the board which must be connected in all organizations, paying little respect to whether they work manual or robotized frameworks, and in various settings originate from traditions world so as to accomplish a suitable dimension of security, wellbeing and assistance. Likewise, the investigation built up that chance administration as orderly distinguishing proof and execution of all estimates important to restrict presentation to dangers in traditions setting, can guarantee consistence with Customs law and guideline in an approach to guarantee traditions production network security and wellbeing.

Further, Hammadiet *al.* (2015) tried to build up a hazard the board approach empowering an organized examination and a successful evaluation of the hazard in traditions setting. In such manner, Effects, A Failure Mode and Criticality Analysis FMEGA based approach was examined to evaluate and break down security worries for Moroccan Customs inventory network. As info, it was utilized to characterize vulnerabilities in the framework and it evaluates the hazard utilizing the criticality as a hazard marker. As a yield, FMECA gave a rundown of most basic dangers just as some objective alleviation activities.

Afanasieva, Ivanov and Yanushkevych (2017) looked to build up the Modern Approaches to Risk. The board and Their Use in Customs. For this situation, the paper rushed to bring up that strategies dependent on hazard the board, focus traditions control on zones, where there is the most serious hazard, permitting the main part of products and people generally allowed to pass the checkpoint at the traditions outskirts. Special consideration is paid to the standards and techniques for hazard the executives and their effect on the improvement of traditions methodology using hazard based reasoning. The paper examines the issues regarding the application and execution of present day hazard the executives' strategies in traditions

methodology theme to the prerequisites of universal measures of quality; that is, ISO, the framework of quality and hazard the executives dependent on risk-based reasoning.

2.5 Critique of the Literature Review

The study by Thi and Huong (2018) on determinants influencing traditions hazard the executives was effective in that it created techniques that would be actualized to limit hazard and improve of hazard the board. For this situation, the investigation prescribed that Dong Nai traditions expected to improve the arrangement of systems, guidelines and rules on hazard the board; compose authoritative units and units of hazard the executives at all dimensions toward the path. Nonetheless, the investigation was not embraced in Kenya and neither did it center around components affecting usage of hazard the board strategy in traditions freedom techniques.

The examination by Muchiri (2015) tried to explore Information Technology Risk Management as a Strategic Enabler in Tax Revenue Administration. As it were, the examination effectively gathered data from the KRA work force and built up that most prominent difficulties in distinguishing and evaluating dangers in assessment organization data frameworks was the multifaceted nature of the Kenya Revenue Authority as an association and that viable IT hazard the executive's capacity is an imperative measurement in seeing how IT empowers or compels business activities. Be that as it may, the examination gently addressed hazard the executives and neglected to obviously draw out the key elements impacting usage of hazard the executives' strategy in traditions leeway methods.

The examination by Ouhman and Ibourk (2014) researched the Risk Management and Security Practice in Customs Supply Chain with the Application of Cross ABC Method to the Moroccan Customs. The investigation was for sure fruitful in building up the hazard the executives and

security rehearses in the traditions production network and successfully connected them to ABC technique. In any case, the examination was not attempted in Kenya and did not utilize essential information.

An investigation by Hammadiet *al.* (2015) then again effectively built up risk management approach empowering an organized examination and a viable evaluation of the risk in traditions setting. In such manner, FMECA based strategy was utilized to distinguish chance, evaluate them and discover methods for moderating them. Be that as it may, the investigation did not depend on essential information and was never done in Kenya consequently speculation of the key discoveries was troublesome.

Afanasieva, Ivanov and Yanushkevych (2017) effectively settled the Modern Approaches to Risk Management and Their Use in Customs. From the key investigation discoveries, the examination had the capacity to talk about serious issues concerning the application and usage of present day chance administration methods in traditions techniques subject to the prerequisites of universal principles ISO for the quality administration framework and hazard the executives dependent on hazard based reasoning. In any case, the study came up short on a Kenyan point of view and was to a greater extent a companion audit other than an examination bolstered by essential information.

2.6 Summary of Literature Review

The Chapter starts by plotting the key hypotheses identified with the impact of hazard the board on administration conveyance in the third-party coordination firms. As to, key speculations talked about included: The Diffusion Theory, Resource-Based View Theory and the Agency Theory. The part proceeds to express and talk about the applied structure in the investigation

where the connection between the free and ward factors was unmistakably diagrammed. Further, the section enunciated the key exact examinations in connection to the principle factors under scrutiny. The exact survey was part as indicated by the key factors in the examination: Technology Growth, Custom Procedures and Human resources. Audit of the examinations involved investigations done both locally and universally where real discoveries were talked about. In such manner, the discoveries surveyed demonstrated concurrence of a connection between the autonomous factors (Technology Growth, Custom Procedures and Human Resources) and the needy variable (execution of hazard the executives' systems in custom leeway methods). The part finishes by giving a scrutiny to the investigations audited and a rundown of the exploration holes distinguished.

2.7 Research Gaps.

Analysis of the literature reviewed included an analysis of the local studies: Muchiri (2015) sought to investigate Information Technology Risk Management as a Strategic Enabler in Tax Revenue Administration. This study provided evidence that there was a strong link between factors such as information technology and risk management in a custom management setting. Despite this fact, there exists very few local scholarly works on risk management in Kenya and in fact none of the local studies have embarked on the aspects which have influenced the execution of the techniques of managing risks in custom clearance procedures.

The existing studies that were reviewed in this research provided the basis and a starting point for identifying the different factors that affected trade facilitation. However, no studies that specifically examined the effect of technology, customs procedures and human resource in trade facilitation. Trade has been the backbone of this country since more revenue is collected from the trade that is conducted domestically and on international level. Since trade is such essential to the

state, there was need to identify these factors and study them broadly where the previous studies have failed to do so. After identifying these major factors, trade will be conducted with ease in the country and more profits will be leaped from it. From this, it is evident that there exists a research gap in this study. The study focused on the major factors by not forgetting the minor factors identified in the previous studies which will provide beneficial literature on this study and also try to cover the gap on this research topic. After successfully conducting this study, it will serve as a reference point to other scholars and experts who wish to carry studies on similar subject.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the method used in the research. It provides a brief description of the design, the study population outline, techniques of sampling, sample size, instruments and sources of data, procedures of collection and analysis of data, and methods of presentation.

3.2 Research design

As indicated by Flick (2018), design of a research entails arrangement used in collecting and resorting to the information with the goal that the ideal data is obtained. Cooper (2018) characterized research design as a structural arrangement of examination considered in order to acquire answer to inquire about inquiries and to control changes. It is additionally characterized as an outline, structure or plan for an investigation that controls collection and examination of data derived from both essential and auxiliary sources.

Both the qualitative and quantitative methodologies were utilized in the study, including the cross-sectional study plan. Quantitative methodology emphasizes on estimation and dissecting information in a numerical structure to give a depiction that is exact. Mugenda and Mugenda (2003) implied that the logical or quantitative methodology has been customarily regarded as the method of presenting request both in assessment and research. The accentuation of the quantitative methodology is placed strategy, techniques and measures of facts to make expectations and testing speculation. According to Yin (20156), qualitative research aids in disintegrating the data for efficiency to arrive at some valuable suggestions and resolutions on the social context and the people who portray those attributes.

3.3 Target Population

Bernard (2017) elucidated a research population as a very much characterized cluster of individuals known to have comparable attributes. In this re4search the population targeted was representatives working in the Customs department in KRA who comprised of 80 employees. A sample population on the other hand, can be defined as sample is a group of things, objects, or people that are taken from the entire population for estimation (Burns et al. 2014). The sample should be illustrative of the populace to guarantee that the researcher can generalize the findings from the examination test to the populace all in all. For this situation, appropriate sampling techniques were utilized to touch base at a final sample population.

3.4 Sample Size and Sampling Technique

Best and Kahn (2016) argued that sampling can be defined as a determination of a subject of individuals from inside a populace of making expectations dependent on factual derivation. Sampling is a strategy utilized in choosing a reasonable delegate from a defined population to decide the qualities of the whole population (Ott and Longnecker, 2015). The reason for inspecting is to verify an agent populace that will give the data focused on. Descombe (2014) implied that a decent sample should be genuinely illustrative of the population, result in a small sampling error, practical, prudent and orderly. Sampling makes it conceivable to draw legitimate deductions or speculations based on cautious perception of variables with a relatively little proportion of the population.

The sample size was computed using the Schindler and Cooper's formula provided below, where N represents the population size, e is the error 95%, the level of significance is 5% and n the sample size.

Formula:

$$n = N / (1 + N (e)^2)$$
$$= 80 / (1 + 80 (0.05)^2)$$

=67 respondents

3.5 Data Collection Instruments

The questionnaire structure was used as the instrument of collecting data, which included gathering both qualitative and quantitative data.

Using questionnaire structure was preferable for its capability to provide the high rate of response and that large information can be collected within a short time from a large sample. The method is easier to understand and being self-administered even without the researcher present (Denscombe, 2014). The questionnaire was administered to all respondents and the questions consisted of both close-ended questionnaires and open-ended questionnaires. A Likert scale was used with options ranging from strongly disagreed to strongly agreed, on a scale consisting of 5-points. The questionnaire was categorized into two segments; that is, questions on general information of the respondents and questions regarding the study's dependent and the independent variables.

3.5.2 Secondary Data Instruments

Secondary data was obtained from the documented files in Customs Department at KRA offices and the school's library.

3.6 Data Collection Procedures

Upon approval of the research proposal, an introductory letter was obtained from JKUAT University. Thereafter, the researcher requested for an appointment with the KRA management to obtain approval for the research to be conducted in the organization.

The researcher visited the selected employees of the authority and administered the questionnaires. The instructions on how to fill the questionnaires were carefully explained to the respondents. A period of two weeks was then allowed to the respondents to ensure accuracy and completeness of the questionnaires. After this period, the researcher retrieved the questionnaires for analysis.

3.7 Pilot Test

Mackey and Gass (2015) defined a pilot study as "a small study for planning a further corroborative investigation". A pilot study is critical in research for it tests the examination systems, gauges the enlisted tests of legitimacy and the rates of the information accumulation apparatuses and enables the specialist to assess the parameters, for example, difference of the result. On this note, a pilot study was carried out two weeks ahead of the real gathering of the information. The thumb rule as contended by Lai and Kwok (2015) was used to decide the quantity of the respondents to be used in the pilot test. The pilot study was done in the Customs and Border Control Department.

For this situation, just 2 respondents were engaged in the pilot test since as indicated by the thumb rule, 1% of the population sample ought to comprise the pilot test (Lai and Kwok, 2015). Cronbach's Coefficient Alpha for every individual thing in the survey will be registered and contrasted with different items in the research instrument to decide how these sample items

correspond with one another (Csikszentmihalyi and Larson, 2014). The after effects of this unwavering quality test were additionally dissected and used to improve the surveys that were utilized to gather information in this examination.

3.7.1 Validity Test

Validity tests investigate the research instruments ability to make the intended measurements. According to Bell, Bryman & Harley (2018) construct validity is a function of whether the concept elements or dimensions have been captured. In this case, he further articulated that data collected by a researcher must satisfy the topic in question for it to be said to be accurate. In this study, the researcher first ensured that the recorded information in the questionnaires was correct by issuing questionnaires that could be easily understood by the respondents. The questionnaires were then submitted to a panel of supervisors in the University for Evaluation. According to Bernard (2017), if the content under scrutiny receives support from at least three members of the panel, then it is assumed that the content validity of the study is significant.

3.8 Data Analysis and Presentation

Completed questionnaires were first checked for consistency and completeness of the responses. The data from the fully completed questionnaires were then extracted from the questionnaires and coded into the SPSS Software version 23. The researcher used the statistical packages for the social sciences (SPSS) Version 23 since it has the capabilities of computing both descriptive and inferential statistics (Leech, Barrett, & Morgan, 2014). Quantitative data was to be computed for both inferential and descriptive statistics and the results presented in tabular forms. Descriptive statistics entailed mean, standard deviations and percentages for the different items of the research. On the other hand, the qualitative data was first grouped appropriately into sub-groups as per the responses given by the respondents and re-coded back into the SPSS software for

descriptive statistics. Also, the study results were interpreted using the part of this quantitative data.

3.9 Regression Analysis

Effect of risk management tools on trade facilitation was regressed against four independent variables (technology, custom procedures, human Resources and organizational structure).

The regression equation was expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = Trade facilitation

β_0 = Constant (coefficient of intercept)

X_1 = Technology

X_2 = Custom Procedures

X_3 = Human resources

$\beta_1 \dots \beta_3$ = Regression coefficient of the variables.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter embarks on analysis of data, interpretation of data and presentation of the outcomes. The objective of this study was to establish the effects of risk management tools on trade facilitation, a case study of KRA border control and customs department.

The study sampled sixty-seven respondents within KRA border control and customs department and the interpretation of data was done following the research questions.

4.2 Questionnaire Response Rate

According to Mugenda and Mugenda (2003) a 50% response rate is adequate, 60% good and above 70% is rated very good.

Table 4.1 Response Rate

Questionnaires	Frequency	Percent (%)
Responded	58	86.56 %
No response	9	13.44 %
Total	67	100 %

As shown in table 4.1 above, a response rate of 86.56 % was achieved with majority of respondents returning their questionnaires in time. This translates to 58 respondents in total.

Therefore, the researcher was contented that the data collected was sufficient to carry out data analysis for the respondent's opinions on the effects of risk management tools on trade facilitation.

4.3 Discussion of the Findings from the Respondents

The study found it necessary to establish the demographic information of KRA customs and border control department.

The demographic information of the respondents is divided into two parts:

- i. Part one entails the risk management practices.
- ii. The effects of risk management tools on trade facilitation.

4.3.1 Increase of risk management practices in the last 10 years

The research sought to find out the awareness of the respondents about the extent of increase of risk management practices over the last 10 years. There was use of a five-point Likert scale (where 1 = Strongly Disagree, 2 = Disagree; 3 = Neither Disagree or Agree(Neutral); 4 = Agree and 5 = Strongly Agree).

Table 4.2 has there been increase in risk management practices in the last 10 years?

Respondents	Frequency	Percentage %
49	Strongly agree	73.13 %
7	Agree	10.45 %
2	Neutral	2.99 %
0	Disagree	0 %
0	Strongly Disagree	0 %
9	No response	13.43 %
TOTAL 58		100 %

The data in table 4.2 indicates that 73.13 % (49) respondents strongly agree that there has been an increase in risk management practices within KRA customs and border control department in the last 10 years. 10.45 % (7) respondents agree that there has been a slight increase while 2.99% (2) respondents are not certain whether there has been an increase or not, that is they're neutral about it.

4.3.2 Expectation from effective risk management techniques on custom procedures?

The researcher sought to determine the expectations from effective risk management techniques on custom procedures: -

Table 4.3 what are the expectations from effective risk management techniques on custom procedures?

Statements		Rankings									
		Strongly Agree	%	Agree	%	Neutral	%	Disagree	%	Strongly Disagree	%
a	Reduced financial cost	19	32.75%	7	12.07%	14	24.14%	12	20.69%	6	10.34%
b.	Improved efficiency	25	43.10%	12	20.68%	7	12.06%	9	15.52%	5	8.62%
c	Improved quality	9	32.76%	26	44.83%	4	6.90%	8	13.80%	1	1.72%
d	Increased speed	16	14.3%	20	47.6%	11	26.2%	5	9.5%	6	2.4%

As shown in table 4.3 on what are the expectations from effective risk management techniques on custom procedures in regards to whether it has led to reduced financial cost; 32.75% (19) respondents strongly agreed, 12.07% (7) respondents agree, 24.14% (14) respondents are neutral, 20.69% (12) respondents disagree and 10.34% (6) respondents strongly disagree.

Also 43.10% (25) respondents strongly agreed that effective risk management techniques in custom procedures has led to improved efficiency, 20.68% (12) respondents agree, 12.06% (7) respondents are neutral about the idea, 15.52% (9) respondents disagree while 8.62% (5) respondents strongly disagree that it has led to improved efficiency.

4.3.3 Has risk management practices led to increased organizational returns?

The study sought to find out whether the risk management practices have led to increased organizational returns. There was also limited use of a five-point Likert scale (where 1 =

Strongly Disagree, 2 = Disagree; 3 = Neither Disagree or Agree (Neutral); 4 = Agree and 5 = Strongly Agree).

Table 4.4 Increase in organizational returns

Respondents	Frequency	Percent
36	Strongly Agreed	62%
9	Agree	16%
2	Neutral	3%
4	Disagreed	7%
7	Strongly Disagreed	12%

According to table 4.4 above majority 62% (36) respondents indicated that they strongly agreed that increase in risk management practices have led to increased organizational returns. 16% (9) respondents agree, 3% (2) respondents neither disagree or agree (neutral), 7% (4) respondents disagree while 12% (7) respondents strongly disagree that the risk mitigation measures have led to increase in organizational returns.

4.3.4 Increase in internal organizational use of technology.

The respondents were requested to respond on whether there has been an increase in internal organization technology use over the last 10 years. Below is an illustration of their response.

Table 4.5 Increase in the firm's use of technology

Respondents	Frequency	Percentage
43	Strongly Agreed	74.1%
7	Agreed	12.1%
3	Neutral	5.2%
4	Disagreed	6.9%
1	Strongly Disagreed	1.7%

Results in table 4.5 below shows that majority 74.1% (43) of the respondents strongly agreed that there has been an increase in the firms use of technology, 12.1% (7) respondents agreed, 5.2% (3) respondents are neutral about it, 6.9% (4) respondents disagreed with the increase in the firms use of technology while 1.7% (1) respondent strongly disagreed with it.

4.3.5 Increased internet penetration and use both to the organization and clients

The study sought to determine whether there has been an increase in internet penetration to both the organization and the clients.

Table 4.6 Showing internet penetration and use to both the organization and clients

Respondents	Frequency	Percent
Yes	52	89.7%
No	6	10.3%
Total	58	100

As per the table 4.6 above, majority of the respondents agreed to the fact that there has been a great increase in internet penetration and use to both the organization and its clients with 89.7% (52) respondents agreeing and 10.3% (6) respondents being against that fact.

4.3.6 Does custom procedures affect implementation of risk management tools?

The research sought to determine if the custom procedures affect the implementation of the tools of managing risks. Below is an illustration of the same.

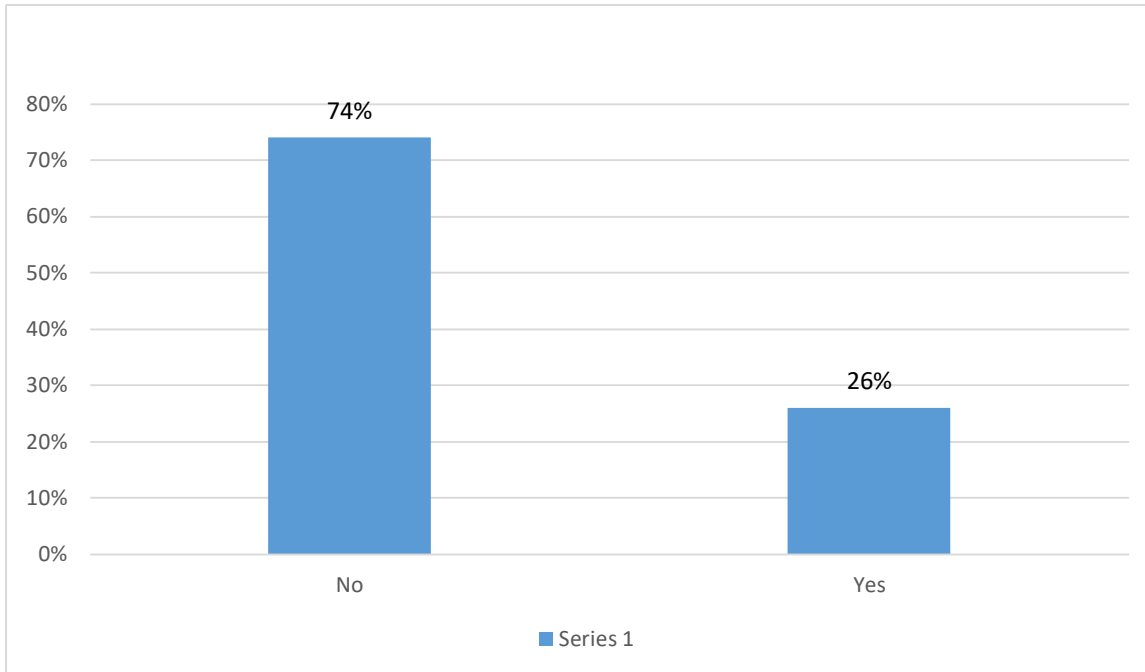


Figure 4.1 showing how customs procedures affect implementation of risk management tools

According to the graph above we see that 74% (43) respondents didn't agree that custom procedures affect the implementation of risk management tools, 26% (15) respondents agree to the fact that customs procedures do affect the implementation of tools of management of risk.

4.3.7 Establishment of procedures for keeping up to date and informed with changes in regulation.

The research sought to determine whether the organization has well set and established method for updating and informing the regulation changes.

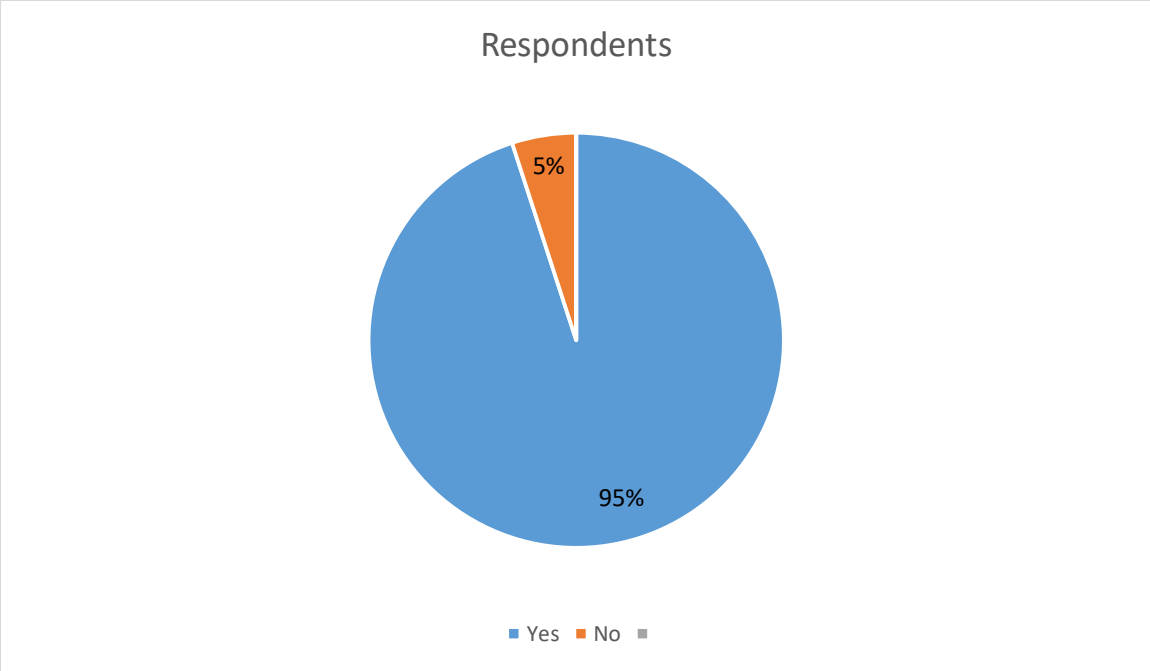


Figure 4.2: Showing the establishment of procedures for keeping up to date and informed with changes in regulation

As per the pie chart above we see that majority 95% (55) respondents agree that the organization has established methods for updating and informing the regulation changes while 5% (3) respondents were against it. According to the respondents the organization has well set procedures to effect any changes in the regulation. The organization has flexible procedures that cannot accommodate changes in the regulation.

4.3.8 Are customs and border control staff adequately trained on emerging risk issues

The study sought to determine if the KRA customs and border control staff adequately trained on emerging risk issues.

Table 4.7 Do you agree staff at Customs are adequately trained on emerging risk issues?

Respondents	Frequency	Percentage
28	Strongly Agreed	48.27%
22	Agreed	37.93%
3	Neutral	5.2%
4	Disagreed	6.9%
1	Strongly Disagreed	1.7%

As shown in table 4.7, majority of the respondents at 48.27% (28) respondents strongly agreed that customs and border control staff are adequately trained on the emerging risk issues. 37.93% (22) respondents agreed, 5.2% (3) respondents were neutral about the issue, 6.9% (4) respondents disagreed while 1.7% (1) respondent disagreed that the staff are adequately trained on the emerging risk issues.

4.4 Regression Analysis

4.4.1 Model Specification

A multiple linear regression analysis was done to find out the linear relationship between dependent and independent variables. The dependent variable was trade facilitation. There were three independent variables in this model which were: customs procedures, technology and human resource. The following model would best describe the linear relationship among the variables:

$$\gamma = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

4.4.2 Results of the Regression Analysis

a) Descriptive Statistics

The descriptive statistics for the variables in the model are presented in Table 4.4.2.1

Table 4.4.2.1: Descriptive Statistics for Dependent and Independent Variables

Variable	Mean	Std Dev	N
Trade facilitation	10.2540	3.39396	58
Technology	22.5873	3.44852	58
Customs procedures	15.5000	2.53850	58
Human resource	34.7778	4.37244	58

Table 4.4.2.1 shows the mean, standard deviation of the dependent variable and the independent variables in the model

b) Correlations between variables in the model

The Pearson correlation coefficients showing the correlations among the independent variables and between the independent and dependent variables are shown in Table 4.4.2.2

Table 4.4.4.2: Correlations among Variables in the Regression Model

		1	2	3	4
1	Trade facilitation	1.00			
2	Technology	0.0412	1.00		
3	Customs procedures	0.0353	0.027	1.00	
4	Human resource	0.0214	0.039	0.022	1.00

*sig < 0.05

Table 4.19 shows the correlations among the variables in the model. There is significant correlation between the technology ($r = 0.0412$, $P < 0.05$), customs procedures ($r = 0.0353$, $P < 0.05$) and human resource ($r = 0.0214$, $P < 0.05$).

c) Summary of the Regression Model

Table 4.4.2.3 shows the ANOVA for the regression model

Table 4.4.2.3: ANOVA of the Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	0.2564	4	0.0641	0.0472	.000
Residual	71.9767	53	1.3581		
Total	72.2331	57			

As shown in Table 4.4.2.3, the regression model comprising of technology, customs procedures and human resource was significant ($F (0.0852) = 0.0472$, $P < .05$). The summary of the regression model is shown in Table 4.4.2.4

Table 4.4.2.4: Regression Model Summary

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	β	Std. Error	Beta		
(Constant)	8.92	0.287		2.472	0.04
Technology	0.59	0.341	0.572	1.491	0.03
Customs procedure	0.21	0.402	0.206	1.391	0.03
Human resource	0.16	0.153	0.137	1.104	0.01

The predictive model derived from the analysis was:

$$\gamma = 8.92 + 0.572X_1 + 0.206X_2 + 0.137X_3 + e$$

This means that: A unit change in technology; the level of trade facilitation will change by 0.59 units. For a unit change in the customs procedures, the level trade facilitation changes by 0.21 and for a unit change in the human resource, trade facilitation will change by 0.16 units

Technology appear to have more impact on trade facilitation as compared to the customs procedures which have slightly lower effect on trade facilitation. Human resource is seen to have very minimal effect on trade facilitation than compared to technology and customs procedures.

The regression model had $R^2 = 0.243$ and this means that the model only accounts for 24.3% of the variations in trade facilitation

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings, discussion, conclusions and recommendations for the effects of risk management tools on trade facilitation drawn in relation to the study objectives in addition to suggestions for further study.

5.2 Summary and Discussions of the Findings

The main finding of the study and which tends to answer the research aim was that to enquire on the effects of risk management tools on trade facilitation, a case study of the Kenya Revenue Authority customs and border control department.

In order to fill some of the literature gaps, the study analyzed the relationship between a variety of factors (technology, custom procedures, and human resource) on trade facilitation.

The general objective for this study was to establish the effects of the risk management tools on trade facilitation.

5.2.1 Technology

The KRA built trust using technology which was enabled by facilitation. The ICT department of KRA operates in an environment that significantly relies on automation due to advancement of telecommunication and IT, which is facilitated by an enabling regulatory and legal

build trust through facilitation using it as a business enabler. Information and Communication Technology Department in KRA operates in an environment that demands significant reliance on automation as a result of advances in IT and telecommunication that is facilitated by an enabling

legal and regulatory country's framework. KRA ICT plays a role of support the business objectives of KRA and serving as a "change enabler" in the modernization of the systems of support and business operations. The IT infrastructure of KR is centralized providing a platform of secondary and Primary Data Center. The offices in different regions are connected through an infrastructure of Wide Area Network (WAN) to the Data Centers. The major IT applications of KRA are the Integrated Tax Management (iTAX) for operations of Domestic Taxes and Simba Systems for operations of Customs. Through ICT department the KRA committed in providing services focused on customers by managing the ICT services effectively. ICT serves as an enabler of improvement of business operations and processes of the Authority. The major objective of the KRA ICT department is to attain effectiveness and efficiency in delivering services.

5.2.2 Customs Procedure

Recently, the public had an opportunity to interact with KRA at its booth set up at KICC, Nairobi, during the Kenya Trade Week. Cabinet Secretaries Henry Rotich (National Treasury) and Adan Mohamed (Industry, Trade and Cooperatives) accompanied by Trade Principal Secretary Dr Chris Kiptoo were among the dignitaries who visited the KRA booth. The government officials commended KRA for a job well done in facilitating trade through the various mechanisms put in place such as automation of processes to enhance efficiency.

KRA has taken an integrated and comprehensive approach aimed at improving its systems, especially in customs operations. Transformation began by ensuring that challenges relating to processing of import and export cargo are reduced to make local and international business efficient. The integrated and comprehensive approach is likely to benefit the government,

manufacturers, traders and consumers. The approach focuses on infrastructure, such as One-Stop Border Posts and information technology.

KRA is focused on ensuring compliance with standards, adoption of best practices and procedures to improve competitiveness of Kenyan products both locally and across the borders.

KRA is focused on ensuring compliance with standards, adoption of best practices and procedures to improve competitiveness of Kenyan products both locally and across the borders

In the past, Kenyan businesses have been challenged by many trade restrictions both locally and internationally. Transactions previously took longer to conclude because of lengthy procedures.

KRA has put in place mechanisms to ensure local businesses and cross-border trade thrive. In addition, KRA has automated its systems to eliminate Customs challenges that hampered cross-border trade.

KRA has enhanced the pre-arrival program at the port to ensure compliant clearing agents, transporters and importers are issued with Authorized Economic Operators (AEOs) certificates.

This is part of risk profiling supported in iCMS and aimed at ensuring 70 per cent clearance of cargo at the port as stipulated in the Port Charter. This will not only be of great benefit to the importers, but also the consumers as they will receive their goods much faster.

As the goods leave the port, another automated system which provides real-time monitoring (tracking) of cargo from the port (or manufacturer in case of local goods meant for export) to its final destination picks up the operation. The system, Regional Electronic Cargo Tracking System (RECTS), has reduced the number of days taken to deliver goods to their destination along the Northern Corridor.

RECTS has also helped curb tax evasion and improved efficient management of transit goods in the region. The system has enhanced the safety of transit cargo as it allows seamless tracking to the destination.

KRA is among government organizations which has enforced international laws. In this regard, most of the cargo destined for export through all the ports is subjected to scanning. This builds trust as it facilitates taxpayers to foster compliance with Customs and tax legislation.

5.2.3 Human Resources

Human resource development is concerned with provision of development, training and learning opportunities to improve the performance of the organization and that of the team. To do this it is essential to develop the skills base and intellectual capital the organization required as well as availing the right quality of staff to meet the organization needs in present and in future (Armstrong, 1997). Recently we have also seen KRA employ new staff members to the organization to help them achieve their vision, mission, goals and strategies.

Human Resources Development provides a framework for aiding employees to develop organizational and personal knowledge, abilities and skills. HRD provides opportunities such as training, career development of the employees, development and management of performance, succession planning, and identification of key employees, coaching, organization development and tuition assistance.

Prime opportunity is provided by training to expand the base of employees' knowledge; however, in this climate many employers find opportunities of development expensive. The employees also miss work-time when they attend the training sessions, which delay the project's completion. Despite the drawbacks of such kind, training and development of employees

provides both the organization and the employees the benefits worthwhile investment, because it improves the return on investment.

The study sought to determine the benefits of training, development and workshops which include improved satisfaction of employees, improved performance and morale, addressing consistency, weaknesses, adherence to quality standards, increased productivity, increased innovation, reduced turnover of employees, innovation of new products and strategies, improved company profile and reputation.

According to Hall and Associates (1986), career development involves outcomes emerging from the interaction between the processes of institutional career management and individual career planning. The notion of development and career planning initiatives fostering effectiveness of the organization depends on the ability of the organization to transform employees from an expectation of traditional pattern to an improved responsibility for their own career development and growth (Martin, Romero, Valle & Dolan, 2001).

5.3 Conclusions

Administrations of Customs operations in global economy in modern days are faced with several challenges. The principle objective remains revenue collection and protecting the society; however, these tasks must be performed efficiently and effectively, while facilitating legitimate flow of goods.

Risk management is a systematic and logical method of analyzing, identifying and managing risks. The method is associable with any function, process or activity within the organization and will enable the organization to minimize losses and while taking advantage of opportunities. Minimization of human factor in the control of customs through implementing non-intrusive equipment of inspection is very useful.

The administration of customs arrives at targeting figures for products by refining and testing constantly the process of risk management including assessing the resources and intelligence available. The cyclical nature of the framework of managing risks allows administration of testing accuracy of the targeted figures, including through inspecting randomly to ensure protection of Kenya's revenue and borders.

Risk management is an efficient way of administering customs to deal with large volumes of trade when risks are changing and limited resources. Trust is required when implementing tool of managing risks in customs. Risk management fosters facilitation and trade security because it enables administration of customs to focus its resources on trade opportunities with high-risks.

Customs risks management cannot rely entirely on domestic cooperation but also on the international component. Working across the borders with other enforcement and intelligence agencies enhance management of risks by improving collection of information and enforcement of other options. Targeted and effective customs cooperation assists the administration in mitigating risks. Similarly, developing international tools such as the World Organization Risk Management Compendium aid in establishing predictable and consistent global approaches.

The border and customs control administration generates several benefits by adopting management of risks, including increased efficiency and protection of staff and processes. Customs officers are not obligated to carrying out inefficient inspections but their work has an objective of achieving the positive results and increasing job satisfaction. The assets required are few; also staff members are adequate and these lower the costs. Finally, risk management systems and processes enable administration of customs to adjust quickly to changes in the environment of work and legislation, including the trends of employment.

5.4 Recommendations of the study

Based on the findings, Kenya Revenue Authority should allocate more funds to Customs and Border Control department for further implementation of risk management tools which will further improve clearance procedures yet improve on compliance and revenue collection from traders.

5.5 Suggestions for Further research

The study established that other revenue generating departments within Kenya Revenue Authority, such as Domestic Taxes Department, can also implement the use of technology in order to collect revenues, determine risk areas and further enhance compliance of citizens. Human Resources is also a key element in performance and Kenya Revenue Authority should invest more on the internal customer for positive outcomes which will motivate employees in collecting revenue and curbing Tax evasion

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Moses Muiruri Njoroge,
P.O. Box 10245- 00200,
Nairobi.

To The Station Manager,

Kenya Revenue Authority, ICD Embakasi,
P.O Box 48240-00100,
Nairobi, Kenya.

Dear Respondent,

RE: LETTER OF INTRODUCTION

I am a student at Jomo Kenyatta University undertaking a research project on the **EFFECT OF RISK MANAGEMENT TOOLS ON TRADE FACILITATION**. This is in partial fulfilment of my academic requirement for the award of my Post Graduate Diploma in Customs Administration. The study is being conducted purely for academic purposes. It is not meant to evaluate your opinion or demean the Authority in any way whatsoever. Your response will be strictly confidential, and will be used to provide insight into the issues under study; and thereafter suggest possible solution to them. Your identity and responses will be treated with utmost confidentiality. I therefore wish to kindly request you to fill the questionnaire attached. Please respond to all the items in the questionnaire, being as truthful as possible.

Yours faithfully,

Moses Muiruri

APPENDIX II: QUESTIONNAIRE

The purpose of the questionnaire is to establish the effect of risk management tools on trade facilitation. The questionnaire should take no more than 10 minutes. Your answers will be of great help.

The questionnaire is subdivided into two sections:

The risk management practices and determinants of risk management.

(Tick appropriately).

SECTION 1: RISK MANAGEMENT PRACTICES

Do you agree risk management practices in the firm for the last 10 years have increased?

Strongly Agree Agree Neutral Disagree Strongly disagree

Does your organization use risk management software?

Yes No

If YES does the use of software reduce cost of undertaking risk management?

Strongly Agree Agree Neutral Disagree Strongly disagree

Do you agree that implementation of risk management tools is affected by the following?

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Technology growth	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Custom procedures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Human Resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What is your expectation from effective risk management techniques on custom procedures?

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Reduced time in risk management practice					
Low cost of risk management					
Reduced financial cost					
Increased speed					
Improved quality					
Improved efficiency					
Reduced risk exposure					

What is your expectation from effective risk management tools on trade facilitation?

(Explain).....

Do you agree risk management practices will lead to increased organizational returns?

Strongly Agree

Agree

Neutral

Disagree

Strongly disagree



SECTION 2: EFFECT OF RISK MANAGEMENT TOOLS ON TRADE FACILITATION

A. Technology

Do you agree use of technology in the firm for the last 10 years has increased?

Strongly Agree Agree Neutral Disagree Strongly disagree

Is information technology important for effective risk management?

Strongly Agree Agree Neutral Disagree Strongly disagree

Do you agree there is increased internet penetration both to the organization and clients?

Yes No

If YES does it have an impact on risk management practices?

Strongly Agree Agree Neutral Disagree Strongly disagree

Do you agree there is increased technological risk in the firm?

Strongly Agree Agree Neutral Disagree Strongly disagree

B. Custom Procedures

Do you agree Custom Procedures affect implementation of risk management tools?

Yes No

How often does your organization provide training courses on custom procedures?

Never

Less than 1 time per year

1 time per year

2 times per year

More than two times a year

Does your organization have established procedures for keeping up to date and informed with changes in regulation?

Yes No

If YES do you agree they have any implication on the risk management practices?

Strongly Agree Agree Neutral Disagree Strongly disagree

C. Human Resources

Do you agree KRA Customs department has enough employees?

Strongly Agree Agree Neutral Disagree Strongly disagree

Do you agree staff at Customs are adequately trained on emerging risk issues?

Strongly Agree Agree Neutral Disagree Strongly disagree

Do you agree that the KRA customs department has channeled more resources to the department to try and mitigate risks in the department?

Yes No

If YES, do you think that the channeled funds are enough manage risks so as to facilitate trade in the department?

Strongly Agree Agree Neutral Disagree Strongly disagree