THE RELATIONSHIP BETWEEN CRITICAL SUCCESS FACTORS AND THE LEVEL OF EFFECTIVE RISK MANAGEMENT PROCEDURES IN KENYA: A CASE OF MANAGEMENT OF KENYA'S AIRPORTS

 \mathbf{BY}

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D61/P/8491/2003

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF
MASTER OF BUSINESS ADMINISTRATION (MBA), UNIVERSITY OF
NAIROBI

NOVEMBER 2012

DECLARATION

This proposal is my original work and to the best of my knowledge has not been
submitted for examination or a degree award in any other university.
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DATE
BY UNIVERSITY SUPERVISOR
This project has been submitted for examination with my approval as the university supervisor.
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ACKNOWLEDGMENT

I would like to acknowledge the contribution of: My family for their support and patience during the study period; My university supervisor Mr. Joseph Barasa for his guidance and advice; My data collection and research assistant team led by Sospeter and Kepha for their assistance in data collection and input and analysis respectively; and the General Manager, Kenya Airports Authority, and all the respondents from the various Airports for their cooperation and valued contribution and input without which the study would not have been finalized within the stipulated time.

DEDICATION

I would like to dedicate this study to,

My dear wife,

Racheal Mwangi

And

My lovely chidren,

- Bernice Mwihaki
- Prescott Mwariri
 - Jeff Thiong'o

(that you may excel beyond this).

ABSTRACT

Today's airports constitute complex operations where economic, social and now environmental systems interact. Effective airport planning is faced with the challenges right from designing and managing the various systems and processes to produce positive business results. Kenya Airports face numerous challenges the greatest of which is security, safety and efficiency of operations of Kenya's airspace to match increased demand for service delivery. It is against this background that an investigation was required to find out the critical success factors for effective risk management procedures at airports. The overall purpose of this study was to evaluate the relationship between the critical success factors and the level of risk management procedures in Kenya's airports. The specific objectives of the study were: To evaluate the relationship between critical success factors and the level of risk management procedures in Kenya's airports and to assess the relationship between the human resource management and the level of risk management procedures in Kenya's airports. The findings of this study will enable airports management to undertake benchmarking of the risk management procedures with other world airports for crucial planning on aspects such as employee capacity building, development of new revenue product lines, service standards and safety measures among others.

This research utilized the cross sectional survey design of the relationship between the critical success factors and the level of risk management procedures in Kenya's airports. This study targeted all the 53 airports in Kenya. Purposeful sampling was used to select the sample of the respondents to the questionnaire. A total number of 212 top level airport managers; 4 managers from each of the airports was selected to fill the questionnaires to the study. Both primary and secondary data was collected. The data collected was analyzed using descriptive statistics, correlations, and linear regression analysis. The output was presented in form of tables and figures. Multivariate regression analysis resulted in a prediction equation that describes the relationship between the dependent variables and independent variables.

The findings indicate that the authority to establish risk management in most cases is mandated to the executive management team and the board/committee. Organizations or airports in this case, have a manual for effective risk management procedures. The champions of risk management are consultants who were willing to offer services on risk management and risk reduction, the government and the airports management through various strategic planning governing the management of airports in Kenya and the ministry of finance which bears responsibility for the management of very substantial government assets and liabilities, and for the management of many large value transactions, probably much more than any other government ministry or agency , the airports' management operations being one of them. Employees are also seen to have a part to play in championing for effective risk management in their organizations.

It can be concluded that authority to establish risk management in most cases is mandated to the executive management team and the board/committee. Having employees with the right skills and training as well as the relevant education is important for any effective risk management procedures in the organizations. It can be recommended from the study that besides this significant model explaining the variation in the relationship between the critical success factors and the level of risk management procedures in Kenya's airports, this research is informative because some of the findings are consistent with intriguing findings of limited prior research regarding the critical success factors and the level of risk management procedures.

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ABBREVIATIONS

CSF: Critical Success Factors

KAA: Kenya Airports Authority

KCA: Kenya Civil Authority

LRMP: Level of Risk Management Procedures

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

1.1.1 Concept of Risk Management and Critical Success Factors

Effective risk management suffices as being strategic if and only if it contributes to the overall creation of a competitive edge for the enterprise. Equally, effective risk management procedures are more strategic if the firm is able to create maximum risk management procedures in and within their employees such that these employees will not only put their maximum productivity for the firm but they will strive to work for the firm at all times and at all levels. In any event it is the employees of any given firm who in actual fact play the midwife of any strategy- be it at the formulation or at the implementation levels (Counrow, 2003).

The Risk Management Strategy, which sets out the organization's approach to risk, is the procedure document which provides detailed guidance to managers regarding the operation of the risk management procedure systems outlined in the Strategy. It highlights the processes/procedures to be followed and the responsibilities of the managers and staff involved. The procedures are intended to ensure compliance with the Risk Management Strategy and facilitate a consistent approach to risk across the organization. Risk management is part of every manager's day to day responsibilities – it should inform judgments about the appropriateness of policy options or service delivery methods and as such should be integral to both strategic and operational management. Risk in this context is intended to encompass all risks facing airports, including organizational, financial, environmental, regulatory and political issues (Neil, 1986).

Critical success factors (CSF) refer to the limited number of areas in which results, if they are satisfactory, will ensure successfully competitive performance for the organization. They are the few key areas where things must go right for the business to flourish. If results in these areas are not adequate, the organization's efforts for the period will be

less than the desired (Rochart, 1979). It considers those characteristics, conditions or variables that, when properly sustained, maintained, or managed, can have a significant impact on the success of a firm competing in particular industry (Leidecker and Bruno, 1984). It includes qualification or resource that a company can invest in, which in turn, accounts for a significant part of the observable differences in perceived value and/or relative costs in the companies' relevant markets (Ellegard and Grunert, 2001). From these definitions, CSFs are therefore central in the mitigation of the level of risk management procedures in the country's airports. A reduction in the number of risks at the airports is key to the good performance in key areas of the aviation industry. Hence, it is indispensable for the achievement of organizational goals and accordingly for the success of the organization. Effective risk management procedures are particularly significant to both the employees and the organization in being central in the generation of the sales volumes and performance of the firm.

1.1.2 Context of Risk Management in the Aviation Industry

One of the key issues of concern in the aviation industry is risk management. This has been occasioned by particularly the recent developments of international terrorism threats arising from Kenya's participation at the war front against Alshabaab in Somalia. This and many other risks create a high incidence of vulnerability of airports compared to other industries (Packiam, 2005). International airports are faced by a diversity of risks including natural disasters such as volcanic eruptions which impair air travel, human errors and disasters such as Al-Qaida threats. In addition, there is human error especially pilots and engineers in their judgment on plane navigation and serviceability. The result has always been untold financial suffering, human and property destruction whenever accidents take place. This has led to huge financial losses to the concerned nations which are home to such planes or airports. Risks around airports are comparable to major hazard sites such as chemical plant risks. An evaluation of the management process is thus critical to determining the hazards and vulnerabilities affecting operations (Chow, 2007).

External environmental variables for example the social, economic, technological,

environmental and regulatory issues also affect the security of global airports. Organizations must therefore identify the essential areas of activity that must be performed well if they are to achieve the mission, objectives or goals for the business. These will assist the organization in concentrating on the core areas. Identifying the critical areas for focus on risk management will assist airports reduce exposure to financial risks, terrorism risks, compensatory risks, ratings risks, staff turnover risk and overally customer dissatisfaction risks. In short, experience shows that handling of crises can make or break an airport at any extreme cases (Codjia, 2010). Ideally, all risks facing airports carry with them a higher financial burden which if not mitigated could easily lead to financial suffocation of the firm. While financial management strategies reduce risk such as portfolio asset investment may be used to spread firm risks, this may not provide prevention of risk in the long run. It is therefore important that risk diversification through portfolio management and other mitigation measures be put in place to reduce the causes and effects of risk in airports.

Risk arises because users are consciously aware the information is of uncertain quality and that relying on poor information, knowledge, or the documents they produce (Chopra, 2003). Risk management therefore gives comfort to stakeholders such as customers, shareholders, employees, suppliers, civil society and other interested groups including government that the business is being effectively managed and help the organization confirm its compliance with corporate governance requirements. It is fundamentally about making better decisions.

Globalization of world economies and exchange of consumer information has created global consumers with taste for high quality products or services and this has pushed airports to rethink and refocus their service delivery towards meeting these varied consumer needs. Entities in the aviation industry must therefore be able to meet the ever changing customer demands through the improvement of customer service, security and safety, environmental sustainability, employee productivity and retention and improvement of infrastructure and facilities. This is only possible if the firms employ not only qualified and competent employees but strategically attempt to have in place

effective risk management procedures.

1.1.3 Airports in Kenya

The airports in Kenya are managed by the Kenya Airports Authority (KAA)an autonomous body established in 1991 through an act of parliament. The Authority is charged with the responsibility of providing facilitative infrastructure for aviation services. KAA is currently responsible for the management of the airports in Kenya on behalf of government. In addition, it manages all other airstrips within the country on behalf of government on an agency basis. It administers controls and manages aerodromes, to provide and maintain facilities necessary for efficient operations of aircrafts and to provide rescue and firefighting equipment and services besides constructing, operating and maintaining aerodromes and other related activities (www.kenyaairports.co.ke).

Its main functions are to: administer, control and manage aerodromes, provide and maintain facilities necessary for efficient operations of aircrafts, provide rescue and firefighting equipment and services and construct, operate and maintain aerodromes and other related activities. Other functions include construct or maintain aerodromes on an agency basis on the request of any Government Department, provide such other amenities or facilities for passengers and other persons making use of the services or facilities provided by the Authority as may appear to the Board necessary or desirable; and approve the establishment of private airstrips and control of operations thereof (www.kenyaairports.co.ke). It is therefore within its core functions that KAA is mandated to provide for critical success factors for effective risk management procedures within all the facilities that it manage.

1.2 Statement of the Problem

Top echelons in the aviation industry the world over are more concerned about how well to manage the ever increasing business risks as a basis for wealth maximization. Today's airports particularly constitute complex operations where economic, social and now environmental systems interact. Successful development in the aviation sector now requires solid and sustainable foundations. Effective airport planning is faced with the

challenges right from designing and managing the various systems and process to produce positive business results (Frame, 2003). Airports have not been left out of this challenges the greatest of which is security, safety and efficiency of operations of Kenya's airspace to match increased demand for service delivery. The air crash that recently killed internal security ministers Prof Saitoti and Hon Ojode in addition to the one that killed Hon Kones and Laboso four years ago clearly indicates the need for airport risk management.

Aviation industry's impact on the environment consists of noise, solid waste and pollution from aviation fuel service providers on local air quality. These elements pose a major problem for the populations living around airports, and its emissions contribute to climate change. Aviation employees also require specific training especially on aviation security and heavy aviation engineering equipment which is mostly unique to airports. A bigger challenge to airports today is actually from airport customers such as travelling passengers, airlines, catering service providers, government agencies who must be provided with world class services through facilities, security, customer service and general safety. These different challenges and concerns are making airport authorities like airports to consider how to anticipate and manage the risks as they emerge in the sector (KAA strategic plan, 2010-2014).

Various studies have been undertaken on the same; for example Manab et al (2006) did a study on organizational risk management an Employee Benefits Management Practices in Malaysia. At the same time Kassim et al (2008) did a paper on Enterprise-Wide Risk Management (EWRM) Implementation and Compliance among Public Listed Companies (PLC) in Malaysia. Paper presented at the Asia-Pacific Risk and Insurance Association (APRIA) 10th Annual Conference, 30 July – 2 August 2008, Meiji University, Tokyo, Japan. Other related studies are also captured in Appendix II.

It is against this background that an investigation is required to find out the critical success factors for effective risk management procedures at airports. Although some researches' have been carried out in the recent past the time variance in relation to the

changes in the business environments in previous years Vis -a- Vis the current situation clearly justifies this research. It is also worth noting that most of the researches that have already been done have no specific reference to airports. Given the above, what then is the relationship between the critical success factors and the level of risk management procedures in Kenya's airports?

1.3 Objectives of the Study

The overall purpose of this study was to evaluate the relationship between the critical success factors and the level of risk management procedures in Kenya's airports.

1.3.1 Specific Objectives

The specific objectives of the study were:

- 1) To evaluate the relationship between critical success factors and the level of risk management procedures in Kenya's airports.
- 2) To assess the relationship between the human resource management and the level of risk management procedures in Kenya's airports.

1.4 Value of the Study

The findings of this study will be important to the following groups. The findings of this study will enable airports management to undertake benchmarking of the risk management procedures with other world airports for crucial planning on aspects such as employee capacity building, development of new revenue product lines, service standards and safety measures among others. This study will provide useful information to other aviation organizations in order for them to develop useful strategies for effective risk management for increase in productivity, come up with policies and procedures that mitigate against additional/unwanted costs through litigations, reduce turnover of employees and enhancing relationships with other organizations in the aviation sector.

The findings of this study will also enrich existing knowledge and hence will be of interest to both research and academicians who seek to explore and carry out further

investigations. It will provide issues for further research. Airports are currently not just offering a service but are also faced with high security and safety risks. Through this study, the government being the overall regulator will use it as a source of information to assist during the formulation of various regulatory frameworks for aviation industry.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter related literature on what previous scholars have undertaken on the research topic is covered. The chapter covers risk management and critical success factors for effective risk management. There are also case studies at the end of the chapter which point out areas of weakness in risk management. Finally, there is a conceptual framework in the chapter.

2.2 Theoretical Literature Review

2.2.1 Risk Management Overview

Over the last few years, risk management has become an area of development in aviation industry. Airport business sector is currently affected by conditions of uncertainty since it is exposed to a large number of risks. The risk of owning an airport can be handled by risk avoidance/mitigation and risk transfer. Risk avoidance/mitigation involves engaging in activities that expose one risk and or/establishing rules and procedures to minimize risk. Minimization of risk may be achieved through such actions as restricting access to the airport and proper facilities upkeep is obviously important to eliminate hazards. The point of focus here is controlling the situation and reducing the risk of loss as much as possible. At the point where an airport operator has reduced the risk through avoidance/mitigation and the owner is still not comfortable with the risk, he or she can employ the risk transfer technique by way of an insurance policy. The airport operator must consider the specifics of the situation when deciding on the mix of avoidance and transfer (Rhodes, 2007).

Risk is the possibility of a loss or other adverse event that has the potential to interfere with an organization's ability to fulfill its mandate, and for which an insurance claim may be submitted. While effective risk management procedures ensures than a organization identifies and understands the risks to which it is exposed it also guarantees that the

organization creates and implements an effective plan to prevent losses or reduce the impact if a loss occurs. An effective risk management procedure doesn't have to be expensive or time consuming; it may be as uncomplicated as answering these three questions of what can go wrong?, what will we do, both to prevent the harm from occurring and in response to the harm or loss? And if something happens, how will we pay for it? (Frame, 2003). Risk is a function of the likelihood of something happening and the degree of losing which arises from a situation or activity. Losses can be direct or indirect. For example, an earthquake can cause the direct loss of buildings. Indirect losses include lost reputation, lost customer confidence, and increased operational costs during recovery. The chance of something happening will impact the achievement of objectives (Partnerships BC, 2005).

As stated by Deloitte Touché Tohmatsu (2000), "September 11th was the most destructive instance to date of a new reality increasing threats of business interruption from a growing list of less predictable, often manmade, risks". The same source further states that several long-term trends that have generated important benefits have also made business operations more complex and vulnerable to disruption. A recent survey by Deloitte Touché Tohmatsu (2000) identified the following major key risk areas: failure to manage major projects, failure of strategy, and dependency on key people, business interruption/continuity and failure to manage key external service providers/alliances. Others areas identified were economic conditions (including Interest/exchange risk), information security, failure to innovate, political risks, legal risks and availability of capital/funding. Equally, occupational health and safety, failure to introduce new products/services, E-business – getting it wrong, E-business – missing the opportunities, new competitors, and merger/Acquisition Risk were identified as the key areas.

2.2.2 Risk Management

Risk management can be defined as a process that should seek to eliminate, reduce and control risks, enhance benefits, and avoid detriments from speculative exposures. The objective of risk management is to maximize the potential of success and minimize the probability of future losses. Risk that becomes problematic can negatively affect cost,

time, quality and system performance (Anderson & Terp, 2006). Enterprise risk management is a process, effected by an entities board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives" (Committee of Sponsoring Organizations, 2004)

Annex 14, published by the International Civil Aviation Organization (ICAO), includes standards and recommended practices (SARPs) that address the risk of a bird strike and a potential increase of the bird strike risk due to the presence or development of bird-attractant features on, or in the vicinity of, an aerodrome. According to ICAO, risk management is the identification, analysis and elimination (and/or control to an acceptable level) of the hazards, as well as the subsequent risks that threaten the viability an organization.

2.2.3 The Risk Management Procedures

The National Institute of Standards and Technology (NIST, 2004) reviews the risk management procedures in three parts: risk assessment, risk mitigation and evaluation and assessment. The risk assessment process includes identification, evaluation of risk impact and recommendation of risk-reducing measures. Secondly, risk mitigation involves prioritizing, maintaining and implementing the appropriate risk-reducing controls recommended by the risk assessment. Lastly, evaluation and assessment emphasize the continual evaluation process and the key factors for a successful management program.

For the most part of organizations, these methods consist of the following elements, performed, more or less, in the following order which is; Firstly, identify, characterize, and assess threats, secondly, assess the vulnerability of critical assets to specific threats, thirdly, determine the risk for example the expected consequences of specific types of

attacks on specific assets, fourthly, identify ways to reduce those risks and lastly prioritize risk reduction measures based on a strategy (Conrow, 2003)

According to the International Organization for Standardization (ISO/DIS 31000, 2008) the process of effective risk management procedure consists of several steps as follows: Identification of risk in a selected domain of interest, followed by planning the remainder of the process. The next step should be mapping out the following: the social scope of risk management, the identity and objectives of stakeholders and the basis upon which risks will be evaluated, constraints. The other step is defining a framework for the activity and an agenda for identification, developing an analysis of risks involved in the process and lastly mitigation or solution of risks using available technological, human and organizational resources.

2.2.4 Principles of Risk Management

The International Organization for Standardization (ISO) identifies the following principles of risk management: Risk management is a broad field encompassing numerous specializations such as enterprise risk management, financial risk management and operational risk management to name but a few. While the tools and methods for measuring and treating exposure to risk differ somewhat by specialization, the principles of risk management are the same in all. The principles of an effective risk management procedure according to Mark (2007) are a set of practices utilized by business to manage its exposure to risk, reach its objectives and goals, and to guide its conduct to meet expectations and concerns of the public interest, labor relations, human safety, the environment, and the laws governing business practices. The principles of effective risk management procedures are risk assessment and risk control. Where risk assessment identifies, quantifies and prioritizes exposure to risk whereas risk control manages exposure to risk on a continuous basis. Part of risk control, naturally, is an ongoing assessment of risk exposure that assures business its plans are correct for the most current risk climate. The principles of risk management have been firmly established as an essential set of management functions. Clearly, assessing and controlling exposure to risk

minimizes the adverse impact of risk on the organization's resources, earnings and cash flows. An effective risk management procedure according to Conrow (2003) should: create value, be an integral part of organizational processes and be part of decision making. Also it should explicitly address uncertainty, be systematic and structured, be based on the best available information and be tailored. On the other hand it should take into account human factors, be transparent and inclusive, be dynamic, iterative and responsive to change and be capable of continual improvement and enhancement.

2.2.5 Internal Control Policy and Effective Risk Management Procedures

The board is ultimately responsible for the internal control framework and effective risk management procedures of the company and for regularly reviewing its effectiveness.

The principle aim of the system of internal control is the management of business risks, with a view to enhancing the value of shareholders' investments and safeguarding assets. Although no system of internal control can provide absolute assurance that the business risks will be fully mitigated, the internal control systems have been designed to meet the company's specific needs and the risks to which it is exposed. Annually, the board is responsible for identifying the risks facing the company, assessing the risks and ensuring that there are controls for these risks, which are to be designed to ensure that any identified risk is reduced to an acceptable level (Narayan, 2004).

The Board will review and discuss strategic risks and opportunities arising from changes in the company's business environment regularly and on an as need basis. The board may delegate some of the above mentioned responsibility to committees of the board but maintain the overall responsibility for the process. The Board should establish an Audit Committee, which operates under a charter approved by the Board. It is the Board's responsibility to ensure that an effective internal control framework exists within the entity. This includes internal controls to deal with both the effectiveness and efficiency of significant business processes (Narayan, 2004). This also includes the safeguarding of assets, the maintenance of proper accounting records, and the reliability of financial information as well as non-financial considerations. The Board has delegated this

responsibility for the establishment of a framework of internal control for the management of the consolidated entity to the Audit Committee. The Committee also provides the board with additional assurance regarding the reliability of the financial information for the inclusion in the financial reports.

The Remuneration Committee should be responsible for determining and reviewing the compensation arrangement for the Directors themselves. The above committees are required to report to the Board. During the year the Board should be responsible for reviewing the effectiveness of the company's system of internal control for the financial year. This review is to include financial, operational and compliance and risk controls. For any control which is not operating effectively, the Board is responsible for ensuring that the control issue is corrected and that the risk has a mitigating control which will reduce any risk to an acceptable level. Each financial year, the Managing Director and Chief Financial Officer (or equivalent) are required to provide formal representations to the Board confirming that that in all material respects and to the best of their knowledge and belief: the Company's financial reports present a true and fair view of the Company's financial condition and operational results are in accordance with relevant accounting standards; and the Company's risk management and internal control systems are sound, appropriate and operating efficiently and effectively (Narayan, 2004).

Every employee has a responsibility for ensuring that any known breach of an internal control is reported to the appropriate level such that it can be dealt with accordingly. Further, every employee is encouraged to identify and report to their manager any potential business risk. The manager is then responsible for ensuring that the business risk is mitigated by establishing appropriate controls and monitoring the effectiveness of controls. Any significant control defects should be reported to the board level. This may be achieved through the reporting of defects first to the Audit Committee (Narayan, 2004).

2.2.6 The Importance of Effective Risk Management Procedures

Effective Risk management procedures in an organization are an important part of an organization as it seeks to achieve its objectives as well as fulfill the company vision and mission. These procedures are important to positive business performance because they provides a clear and structured approach to identifying risks that an organization is likely to face in course of carrying out its business functions. This enables an organization to have a clear understanding of all risks and allows it to measure and prioritize them and take the appropriate actions to reduce losses. Effective risk management procedures aid an organization by providing them with the following benefits, including: Saving organizations resources such as time, assets, income, property and people which are all valuable, protecting the reputation and public image of the organization, preventing or reducing legal liability and increasing the stability of operations and protecting people from harm both internally and externally (Frame, 2003).

On the other hand, effective risk management procedures help the organization in protecting the environment, enhancing the ability to prepare for various circumstances, reducing liabilities and assisting in clearly defining insurance needs. Effective risk management procedures are important for organizational managers because it helps them to design an integrated and comprehensive risk management system that helps them focus on the most important risks in an effective and efficient manner. Therefore, an effective risk management procedure helps to protect the organization from undesirable surprises downside risks, and enable it to take advantage of opportunities up-side risks (Frame, 2003).

Good and effective risk management procedures: Integrates into an organization's operations a set of systematic processes for identifying, measuring, and monitoring many different types of risk to help management keep an eye on the big picture. The procedures will be important to an organization because it will be able to use a continuous feedback loop between measurement and monitoring, internal controls and reporting, and involves active oversight by senior managers and directors, allowing more rapid response to

changes in internal and external risk environments; it will be in position to considers scenarios where risks interact and can exacerbate one another in adverse situations; it elevates responsibility for risk management and preparedness to senior management and the board; it encourages cost-effective decision-making and more efficient use of resources and it creates an internal culture of self-supervision that can identify and manage risks long before they are visible to outside stakeholders or regulators. Risk being an integral part of the day-to-day activities of an organization it must therefore be well thought of and this can only be done through the use of well coordinated and effective procedures in this case in the form of a risk management department (Conrow, 2003).

An effective risk management procedure is a process which provides assurance that: objectives are more likely to be achieved; damaging things will not happen or are less likely to happen and beneficially things will be or are more likely to be achieved. It is not a process for avoiding risk. The aim of effective risk management procedure is not to eliminate risk, rather to manage the risks involved in all the aviation industry activities to maximize opportunities and minimize adverse effects. Effective risk management procedure provides upward assurance from business activities and administrative functions, from minor department to major departments, to the senior management team and ultimately to the governing body in this case the Ministry of Transport (Fone &Young, 2006).

According to Banks (2005) effective Risk Management procedures will be important to an organization because it will be involved in fact finding mission and this will support organizational planning and development of a risk management strategy. Managing risk is a complex task for any organization but risk management is an essential element of long-term success, which cannot be sidestepped therefore the need for organizations to have this very important department. Rather than focusing on current or historical organizational performance, risk management department managers will be able focus on an organization's ability to identify and manage future risks as the best predictor of long-term success.

2.2.7 Challenges Facing Risk Management Procedures

Cultural considerations inhibit proper implementation of risk management procedures in any organization. The perception and attitude of employees also, play an important role in developing risk management. An organizational learning of proper risk management procedures must be designed and proposed as an organizational learning process through collaborative teamwork to improve risk management procedures and create a learning organization in matters relating to risk management procedures (Liu, 2007). Ghani (2010) points out some of the challenges that are facing organizations in relation to effective risk management procedures. The past two years have been a tumultuous journey for players in the global arena including the aviation industry.

Risk-resilient organizations understand how to effectively align business processes to minimize compliance risks. Aviation service providers must understand the increased scrutiny occurring in a new wave of regulatory activity. Increasingly enterprise-wide assessments are indicating the need for integrated compliance programs that drive down risk while increasing value. So for example, billing compliance remediation leads to more travelers' revenue, and preparation for recovery audit contractor reviews leads to operational and quality improvement.

2.3 Theories

2.3.1 The Travel Decision Model

Moutinho (2000) underlines the fact that, to understand exactly how tourists reduce vacation risks, it is necessary to consider the major types of perceived risks: Functional risk, that is, the risk that the product will not perform as expected, physical risk, where the risk is that the tourist product will be harmful and financial risk or the risk that the product will not be worth the cost, either in time or in money. Social risk, the risk that a poor product choice may result in embarrassment before others and psychological risk, that is, the risk that poor product choice will harm the consumer's ego. To assist the tourist, operators in the tourist industry will have to consider the various types of perceived risks. In a buying situation, perceived risks will include uncertain buying goals, lack of purchasing experience, peer influence and financial considerations. Although the

travel decision model relates to how the individual tourist decides whether to travel or not, it has a direct influence on the tourism industry and is therefore relevant in terms of a number of risks to the industry.

The tourist's decision is based on a number of perceptions created in his/her mind by, for example, the effectiveness of destination advertising, the facilities and type of accommodation available, and perceived value for money. Therefore, not knowing or understanding the individual's needs and expectations will constitute a risk, the risk that the business may lose a customer. This applies at local (business) level, and at provincial and national levels also, which implies that the town, province and country must advertise and project images that show that all expectations and needs can be catered for. Bluntly, not knowing and understanding what motivates a tourist represents a risk to the business.

For the risk assessment to have meaning, it should be a study of the risk variables that comprise past tourist behaviour and the learning processes towards travel-related concepts. These must include intrapersonal characteristics and the information sources used both before and after the tourist product purchase. To assist the tourist, Moutinho (2000) believes that several risk reduction strategies should be used, such as: expecting less from the product or service, regularly purchasing the same product and acquiring tourist information. Others are the purchasing the most expensive product, relying on travel reports and relying on tourist guarantees. The vacation tourist should consider the analysis of the cost/benefit equilibrium level against the price paid. The tourist has in mind the type of product consistency expected and this will play an important role in the destination ,,sold to the tourist.

2.3.2 The Rational Decision-Making Model

Nieman and Bennett (2002) are of the opinion that successful decisions are a combination of well-constructed processes and include situation analysis and proper planning. Success, however, is reliant on a systematic approach of identifying the problem and of

developing and selecting the most appropriate alternate situation to solve the problem. The advantages and disadvantages offered by the alternative selection are then compared. The solutions should include details of feasibility, cost, quality, acceptability, access and safety. This all-inclusive process could, perhaps, be considered as a rational decision-making model.

Edwards and Bowen (2005) believe that everyone manages risk to some extent, be it in either a business or private capacity. They are of the opinion, and many risk managers support this, that risk management is more of a people issue than it is a mathematical conundrum. One of the important aspects is getting people to understand risk in general. However, encouraging them to adopt a formal approach to identifying and dealing with a specific risk is another matter entirely. The suggested formal approach to risk identification and dealing with risk is one way of encouraging the use of a risk management model.

Baranoff (2004) elaborates on risk when he adds perils and hazards to the criteria to be considered. Perils are presumed to be the immediate causes of loss. The environment is filled with perils that surround people, such as floods, death, sickness, theft, accidents, tornadoes, fires and lightning. Baranoff further breaks down perils into two categories, natural and human perils. Natural perils are perils over which people have little control, such as hurricanes, volcanoes or even lightning. Managing risk within the aviation and tourism industry seems to demand little attention and to be of little consequence. However, when all the elements that affect tourism are taken into account, together with the effects risk can have not only on the industry but on the economy as well, the significance of these risks obviously needs to be considered. For instance, terrorism is one risk recognized throughout the world as a scourge. This, however, is almost never in the minds of the tour wholesaler or travel agent when recommending a destination.

2.4 Critical Success Factors for Effective Risk Management Procedures

Critical success factor is defined as the limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization.

They are the few key areas where things must go right for the business to flourish. If results in these areas are not adequate, the organizations efforts for the periods will be less than desired (Rochart, 1979, p.84). Boynton and Zmud (1984) discusses CSF methodology, defines CSFs and reviews a range of uses of the CSF method in the first part of their article.

2.4.1 Leadership and Commitment

Leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2007, p3). Leadership is therefore a process by which a person influences others to accomplish an objective and directs the organization in a way that makes it more cohesive and coherent. Infinedo (2008) investigates the impact of contingency factors such as leadership support, business vision, and external expertise. The results show that leadership support influences the success level of the organization system.

According to the U. S. Army (2008), factors that affect leadership include the Leader, followers, communication and situation. Leadership is therefore critical in creating a clear vision of the desired outcomes of the risk management strategy. This will describe how the organization will operate; more than just describing how the risk management procedures and systems will themselves work. Leadership stakeholders must also be engaged and involved to ensure that there is support at all levels in the organization.

It is argued that an organization uses risk management to anticipate the probability of a negative impact and that risk management needs top-level management and leadership support. Risk management requires the acknowledgement that risk is a reality and the commitment to identify and manage risk (Galorath, 2006). The high importance of leadership and management support is considered to be among the critical success factors for risk management. It is also important to emphasize effective top management support for different project scenarios. Critical top management support includes a broad range of activities in an organization, including developing project procedures that include the

initiation stage, training programmes, establishing a project management office, support quality management and so on (Zwikael, 2008).

Krames, (2005) the characteristics that are shared by exceptional leaders include energy, energizers, edge and execution. Energy provides the manager with the drive to energize others and to embrace change. Energizing is all about inspiring others which is key to effective leadership. He further explains that leaders with and "edge" are the competitive type. These are leaders who don't hesitate to make what Peter Drucker calls the "life and death" decisions. Execution is about delivering results and consistently performing for results. The above concepts therefore demonstrate clearly the highly needed support of leadership and approval from top management for risk management. The essence of commitment and support of the top leadership supports the essence of effective decision-making process in order to manage risk. Leadership commitment and support is important in every kind of management and it is thus an important factor for risk management in aviation industry.

Leadership also incorporates prompt and effective communication. Any population exposed to hazards - natural ones such as earthquakes, hurricanes, wildfires or floods; or technological ones, such as explosions, chemical spills, train crashes and so on - wants and needs to be optimally informed about risk characteristics, preventative measures, and appropriate behaviors during emergencies. Authorities have to compose pertinent planning, prepare coping strategies and communicate the relevant information effectively to residents, people in the workplace and communities as a whole. All these situations involve social processes which are usually subsumed under the (umbrella) term "risk communication", and the exchange of risk information between interested parties such as individuals, groups, institutions is at the core of it (Fischhoff et al 1997, Lundgren & McMakin 1998, Rohrmann 2000).

Different levels within an organization need different information from the risk management process. According to Risk Management Standard, (2002), Risk communication should be to both internal and external stakeholders. Internal

stakeholders who include the board of directors the business units level managers and individuals in the organization must be provided with first hand information on risk management. The leadership of an organization also requires to effectively communicate to external stakeholders.

Cole (2004), who found out that a strong leadership requires a strong corporate culture which has a greater contribution to the performance of the firm. Culture facilitates control of employee performance, commitment and determination to surpass the firm's target and the reduction of risks. In essence, culture of a firm also improves risk management procedures positively. Organizational culture is totality of the firm's shared symbols, behaviors, values and assumptions which makes it possible for the group members to approximate events in a similar fashion (Cole, 2004).

Organization culture is the pattern of shared assumptions which were learnt by the organization over time and which assumptions were used to solve problems over a sustainable period of time, to a level that they worked well and need to be replicated over time to solve similar or related problems (Boxallah, 1992). Culture is what the organization is known to be, for example a firm's culture may be that of being understood and perceived as high performing and being keen on customer satisfaction.

An effective risk management procedures culture, for example, is one with greatly efficient and effective employees who work tirelessly with less top management supervision. Such culture of effectiveness, efficiency and hard work to excel is normally embedded in employees and this forms the basis of employee creating an effective risk management procedures. (Greenberg & Barron, 2003). Another definition of culture is described by Hasanali (2002): "Culture is the combination of shared history, expectations, unwritten rules, and social customs that compel behaviors. It is the set of underlying beliefs that, while rarely exactly articulated, are always there to influence the perception of actions and communications of all employees". In any situation where cooperation is important to solve a crisis, culture is the key factor for willingness to learn from mistakes and to exchange best practice within organizations.

2.4.2 Infrastructure and Facilities for Airports

Successful infrastructure planning is essential to delivering a functional and appealing airport project. One of the crucial elements of infrastructure design is the construction of roads and access to public transport and parking facilities. Airport engineers should work alongside architects and planners to deliver carefully planned outside spaces and facilities, including utilities provision, pedestrian access and parking. In addition to creating access to terminal buildings for passengers, the experts must also be able to design infrastructure schemes for operational functions, including aircraft pavements, taxiways and runways. Careful planning of infrastructure within terminal buildings is also a key element of airport design. With the increasingly high numbers of passengers moving though check-in facilities every day, it is essential that elements such as baggage handling facilities, baggage screening systems and crowd management strategies are highly effective. With all this in place there will definitely be an effective risk management procedure which will go a long way in improving on wealth and profitability and reducing all types of risks associated with airport facilities and infrastructure. (*Patankar* & Taylor, 2004)

The airport infrastructure is highly complex, with countless potential weak links that are subject to security breakdowns. Airport security should reflect the risk status and financial resources of an airport. Smaller airports have limited funding and have to plan their security projects with an eye toward simplicity and manageable cost (Thales, 2008).

2.4.3 Human Resource Management

The strength of firm is highly dependent on the nature of employee training and development. Employees' who are well trained are a key competitive asset to the firm. Training refers to the process of passing along the skills, knowledge, and attitudes or 'know-how', through carefully selected methods according to a well conceived plan, by competent and well-prepared people, in a suitable learning environment to help equip a trainee for his assigned job or responsibility (Chelule, 2009). The purpose of any training programme is to deliver results. People must be more effective after the training than

they were before. What do they know now that they didn't before? What can they now do that they couldn't? How have their feelings and attitudes changed and/or improved as a result? (Pike, 1994).

Training employees does have a significant role in modern business era. Not just to equip them with latest tools the organization has implemented, but rapid technological innovations impacting the workplace have made it necessary for employees to consistently update their knowledge and skills, employee have to work in multidimensional areas and which usually demand far more from their area of specialization. Also, the change in the style of management, non-practical collage education, lack of proper and scientific selection procedure, for higher motivation and productivity, for employee motivation and retention, to improve organizational climate, prevention of obsolescence, to help an organization to fulfill its future manpower needs and to bridge gap between skills requirement and skills availability (Vizdom, 2003).

Training has an in-depth utility if organizations are able to understand the components of training. Before jumping into the components organizations need to know/understand the meaning of training. Training is a process of learning that involves the acquisition of knowledge, sharpening of skills, concepts, rules, or changing of attitudes and behaviors to enhance the performance of employees. In today's competitive business it is not only important to have knowledge but an organization need to sharpen his/her skills much before then it is required. Identification of the training need is the most crucial and critical activity for an organization to carry out before conducting any type of training. Each stage of training from planning to effectiveness has its own significance and challenges which cannot be ignored or neglected at any cost (Khindria, 2009).

2.5 Empirical Literature

As the starting point, the definition of Critical Success Factors (CSFs) are introduced by Rochart (1979, p.84). He defines Critical Success Factors as "The limited number of areas in which results, if they are satisfactory, will ensure successful competitive performance for the organization. They are the few key areas where things must go

right for the business to flourish. If results in these areas are not adequate, the organization's efforts for the periods will be less than desired". Boynton and Zmud (1984) discuss CSF methodology, define CSFs and review a range of uses of the CSF method in the first part of their article. They regard Critical Success Factors as one of the few things that ensures success for an organization. Critical success factors are maintaining a high performance for an organization's currently operating activities and its future.

Moreover, Freund (1988) explained the CSFs concept as the most important for overall organizational objectives, mission and strategies. Critical Success Factors which are appropriate to each unit of business and overall organization aim to fulfill the organization's objectives. A great number of factors are extremely difficult to focus on and therefore only five to ten should be indicated. The following review of Critical Success Factors will discuss Critical Success **Factors** for effective management. There are a number of papers on Critical Success Factors contributing to risk management. Grabowski and Roberts (1999) examine the problem of risk mitigation and suggest a process designed to support the high level of performance in an organization. They identify the four important factors as: organizational structuring and design, communication, organizational culture and trust. Galorath (2006) focuses on the importance of risk management, the essence of risk management and assesses the processes to implement risk management.

He argues that risk management requires five activities, which are as follows: Top-level management support, an integral part of the entire program management structure and processes, the participation of everyone involved cultural imperative and a pattern of measurement. Carey (2001) reviews the Turnbull's approach for risk management. He describes the Turnbull report and how to apply this approach in order to manage risk. The approach can be summarized in the nine main issues which are: the importance of sound judgment, identification issues, keeping control of your reputation, assessing the importance of risks and verifying your judgment. Others are changing

management, embedding risks, cultural challenges and remuneration issues.

Hasanali's paper (2002) is related to management in an organization. This study maintains that the success of knowledge management depends upon many factors. In the point of view of the authors, there are some interesting factors which should be adopted to risk management. We need to identify and examine these factors for our study. Hasanali's critical success factors can be categorized into five categories of leadership, culture, structure, roles, responsibilities, information technology infrastructure and measurement. Risk management should include: ensuring appropriate commitment to risk management, setting clear objectives and guidelines for risk management, allocating adequate resources, training staff appropriately and implementing systems for monitoring and reviewing risks.

Different sets of critical success factors have been presented by different authors, as illustrated in **table 2.1** below on the comparisons between the authors' proposed critical success factors and the other studies.

Table 2.1 Comparisons between the authors' proposed critical success factors with other authors

Critical Success Factor	Grabowski and Roberts (1999)	Galorath (2006)	Carey (2001)	Hasanali (2001)	Dept of State (2005)
Top MGT Commitment		Top level mgt support		Leadership	
Communicatio n	Communicati on		Verifying judgments		
Culture	Organization al culture			Culture	
Organizational structure	Organization al structuring and design		Change mgt	Structure & ,roles	Setting clear objectives for risk mgt
Training			developing risk training course		Training staff
Information Technology				IT infrastructure	
Trust	Trust	•			

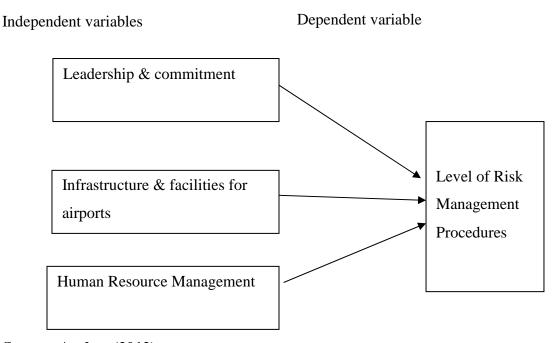
Other empirical studies that govern this study are discussed further in appendix ii.

2.6 The Conceptual Framework

Effective risk management is not a result of any one variable but a variety of variables. In this study, level of risk management procedures, therefore, is the dependent variable. This variable is influenced by several critical factors which are the independent variables. These independent variables include leadership and commitment, infrastructure and facilities for airports and human resource management.

This is illustrated by **Figure 2.1.** below:

Figure 2.1 Conceptual Framework



Source: Author (2012)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covered the research design, population of interest, sample population, sampling method, types of data, data collection methods, data collection procedures, instrument for pretesting, data analysis, reliability and validity and summary of the chapter.

3.2 Research Design

This research utilized the cross sectional survey design. It was a survey of the evaluation of the relationship between the critical success factors and the level of risk management procedures in Kenya's airports. The main reason for the use of a cross sectional survey design is the aim to provide as much information on the entire population under study in relation to the organizational culture. This provided some data and perceptions of the population and they may support inferences of cause and effect on the topic under study. The design is also justified for this study because it focused on a set of organizations carrying out similar business ventures in this case aviation related business.

It involved an extensive study of the particular firms under investigation. Survey designs are of particular value to researchers seeking help on investigating and analysis interrelationships of a number of factors involved, and in which it is difficult to understand the individual factors without considering their relationships with each other (Cooper & Schindler, 2000). This is the situation at airports in Kenya. A cross sectional survey design therefore, enabled the researcher to collect in depth data on the population that was studied and allowed the researcher to be more focused in giving specific and relevant recommendations.

3.3 Target Population

This study targeted all the 53 airports in Kenya. Since the population is relatively small all these airports were covered in the study (appendix I)

3.4 Sampling of the Respondents

Purposeful sampling was used to select the sample of the respondents to the questionnaire. A total number of 212 top level airport managers 4 managers from each of the airports was selected to fill the questionnaires to the study. These include the general managers, operations managers, security managers, and strategy managers. This is because these managers are best qualified to give correct responses on security and risk arrangement at airports.

3.5 Data Collection Methods

During the study the researcher expected to collect both primary and secondary data. Secondary data was obtained from already existing reports at the Kenya Airports Authority. The envisaged reports included the management annual reports, risk management manuals, and the current organization strategic plan. The following instruments were used to collect data primary. In view of the wider geographical location of the various airports, the researcher expected to use research assistants to help in data collection and input from 53 various airports.

3.5.1 Questionnaire

A self-completion questionnaire is one of the most cost-effective ways of collecting data (Kent, 2007). Semi-structured questionnaires were used to collect both quantitative and qualitative data. The questionnaire lowered costs, reduce biasing error since it is a very concise pre planned set of questions designed to yield specific information about a particular topic, which is uniformity of questions yielding data more comparable than information. Questionnaires allowed for confidentiality of the respondents to be kept. Other methods of data collection included observations and interviews. All these were for purposes of collecting detailed data.

3.6 Pilot Testing

The questionnaire that was used needed to be effective through the process of pilot testing. A representative of the sample was used in the pilot testing. Five employees participated in the pilot test. Pilot testing is necessary for unforeseeable corrections to be undertaken before the final questionnaire is released to the respondents. It also ensured correct wording, formatting, typographical errors and the nature of the questions are rectified in advance.

An effective questionnaire for pretesting was required to have both open-ended and closed questions. This was required for purposes of easier statistical analysis of the collected data.

3.7 Data Analysis and Presentation

The data collected was analyzed using descriptive statistics, correlations, and linear regression analysis. This was achieved through the use of Statistical Package for Social Scientists (SPSS) and Microsoft Excel. The analysis sought to answer research questions and explain the associations and dependencies between the variables of the study. The output was presented in form of tables and figures. Multivariate regression analysis resulted in a prediction equation that describes the relationship between the dependent variables and independent variables (Gujarati, 2000). The model is as explained below;

$$Y = \beta_0 + \beta_{ij} X_{ij} + \epsilon$$

Where Y-dependent variable- Level of risk management procedures; β_0 -is the constant (y intercept); X_{ij} - measure of independent variable i for the role of critical success factors j; B_{ij} -regression coefficient i for variable j; ϵ -the stochastic error term

In relation to the objectives of the study the researcher used STATA to estimate the following multivariate regression analysis:

$$N0 = \beta 0 + \beta 1LC + \beta 2HRM + \beta 3AF + \epsilon$$

Where N0: Level of risk management procedures; LC: Leadership and commitment activities witnessed; HRM: Employee qualification and training on risk management; AF: Development and maintenance of airport facilities; β 0 is the intercept; and reflects the constant of the equation; β 1 is the sensitive coefficient of each independent variable $(i=1,2,3,4,5).\epsilon$ is the error term.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

This chapter deals with data analysis and presentation of the findings. It covers the response rate, critical success factors for effective risk management procedures and the regression results.

4.2 Response Rate

The study was carried out to find the relationship between critical success factors and the level of effective risk management procedures in Kenya the case of management of Kenya's airports and a total number of 212 top level airport managers: 4 managers from each of the airports in Kenya including the general managers, operations managers, security managers, and strategy managers, were selected to fill the questionnaires to the study. A total of 160 managers responded to the questionnaires representing 75% response rate. Of the respondents who responded the study findings indicate that 2% had form four as their highest level of education, 4% of the respondents had A level education while 12% were diploma certificate holders. On the other hand 63% were degree holders while the rest 19% had masters' degrees, post graduate diplomas and some had PhD degrees in different fields. The **figure 4.1** below best illustrates these facts.

Level of Education

Form Four A level Diploma Degree Others

19% 2% 4%
12%
63%

Figure 4.1 Level of Education

Source: Author (2012)

From the study findings it can be concluded that most managers at the airports in Kenya had a university degrees and above as their highest levels of education and they are likely to make and promote effective risk management procedures and rules which was not the case.

The study sought to establish the duration the respondents have been able to work with risk management. The findings indicate that 10 of the respondents had worked in the risk management aspects for less than 1 year while 40 respondents had worked for a duration of 1-2 years. Equally, 45 respondents had worked with risk management for a duration of 3-5 years and 65 respondents had been with risk management operations for a period of more than 5 years. The **figure 4.2** below best illustrates these facts.

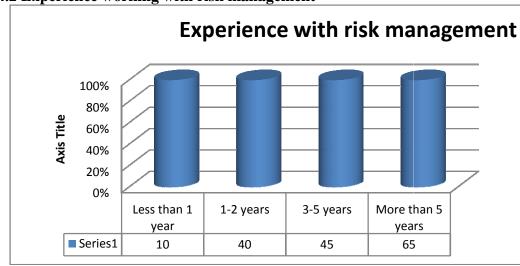


Figure 4.2 Experience working with risk management

Source: Author (2012)

From the findings it is clear that majority of the respondents had more than 5 years of experince with risk management and it can be deduced that they are in a better position to come up with effective risk management procudures which can be beneficial to the airports in Kenya.

4.3 Critical Success Factors for Effective Risk Management Procedures

The study sought to find out who had the authority to establish risk management. The findings indicate that 10 respondents feel that the authority to establish risk management was purely by the chief executive officer, 10 respondents stated that the authority to establish risk management was on the chief finance officer while 40 respondents felt that the Board/Committee had the authority to establish risk management in their organizations. Equally, 90 respondents stated that the power or authority to establish risk management was with the executive management team. This is as opposed to 8 and 2 respondents who stated that the mandate or authority to establish risk management was with the internal auditor and staff respectively. The table below best illustrates these findings.

Table 4.1 Authority to establish risk management

Authority to establish risk	Frequency	Percentage
management		
Chief Executive Officer	10	6%
Chief Finance Officer	10	6%
Board/Committee	40	25%
Executive Management Team	90	57%
Internal auditor	8	5%
Staff	2	1%
Total	160	100%

Source: Author (2012)

The findings indicate that the authority to establish risk management in most cases is mandated to the executive management team and the board/committee. This is as stated by the majority of the respondents.

The study also sought to establish whether the organizations have a manual for effective risk management procedures. The findings indicate that 75% of the respondents stated that their organizations or airports in this case, have a manual for effective risk management procedures. This is as opposed to 25% of the respondents who stated that their airports did not have a manual for effective risk management procedures. The study also wanted to assess the extent to which employees who have a manual for effective risk management understand it. From the findings it is clear that majority 80 respondents of those who have the manual for effective risk management understand the manual to a great extent while 15 respondents of those who have the manual understand it to a least extent. On the other hand 10 respondents feel employees in their organizations understand the risk management manual to the greater extent and greatest extent while 5 respondents feel that employees in their organizations do not understand the manual and thus does not have an influence.

The study also sought to find out the extent to which those employees who had the risk management manual apply the same to reduce risks at the airports. The findings indicate that majority or 69 of the respondents feel that employees apply the manual to reduce risks at the airports to the least extent. This was followed by those 17 respondents who felt that employees in their organizations did apply the manual to reduce risks at the airports to a great extent. On the other hand 14 respondents feel employees in their organizations apply the manual to reduce risks at the airports to a greater extent while 12 felt employees applied the manual to reduce risk at the airports to the greatest extent. Equally, 8 respondents felt that employees` application of the manual to reduce risks at the airports had no influence.

The study also sought to find out the champions of risk management in their organization. The findings indicate that the champions of risk management were consultants who were willing to offer services on risk management and risk reduction, the government and the airports management through various strategic planning governing the management of airports in Kenya and the ministry of finance which bears

responsibility for the management of very substantial government assets and liabilities, and for the management of many large value transactions, probably much more than any other government ministry or agency, the airports` management operations being one of them. Employees were also seen to have a part to play in championing for effective risk management in their organizations.

The study did seek to find out the extent to which the level of education and training negatively impacts on risk management procedures. In relation to this, the findings indicate that majority 65 of the respondents feel that that their level of education and training negatively impacts on risk management procedures to the greatest extent while 45 of the respondents feel that their level of education and training negatively impacts on risk management procedures to a greater extent. Apart from this, the findings indicate that 25 of the respondents felt that their level of education and training negatively impacts on risk management procedures to the least extent whereas 20 of the respondents felt that their level of education and training negatively impacts on risk management procedures to the least extent. 5 respondents feel that there is no influence between their level of education and training and the risk management procedures.

According to the respondents the level of education and training is a major factor in any effective risk management procedures. Having employees with the right skills and training as well as the relevant education is a plus for any effective risk management procedures in the organizations. The benefits that accrue with having the right people for the job in relation to effective risk management procedures is that risk management procedures can easily be understood and can easily be managed and reduced. In addition to this if employees have the relevant training the capacity to handle all issues to do with risk management avoidance and reduction since responsibility among employees is improved.

The study wanted also to establish the extent to which critical success factors in their organization could improve on the risk prevention and reduction. The study sought to

establish the extent to which critical success factors improve on the risk prevention and reduction. The findings indicated that majority, 120 of the respondents feel that employee training as a critical success factors has the greatest extent of influence to improve the risk prevention and reduction in their organization. This was followed by employee attitude which was stated by 110 respondents who feel it has the greatest extent of influence to improve on the risk prevention and reduction. The factor that has the greater extent of influence was leadership training and development with 87 respondents followed by communication with 84 respondents who feel that these two factors have a greater extent of influence to improve on the risk prevention and reduction. The **table 4.2** below best illustrates these facts.

Table 4.2: Extent to which critical success factors improve on risk prevention and reduction

Critical	No	Least	Great	Greater	Greatest extent
factors	influence	extent	extent	extent	
Leadership	1	23	15	87	16
training and					
development					
Infrastructure	1	10	12	13	100
development					
Employee	14	20	75	26	11
compensation					
Communicati	2	13	30	84	22
on					
Organizationa	1	23	90	25	10
1 culture					
development					
Employee	2	6	8	15	120
Training					
Employee	1	5	16	7	110
attitude					

Source: Author (2012)

From the study findings it is clear that employee training on issues to do with risk to the greatest extent influence risk prevention and reduction.

The study also inquired whether the organizations have clear policy to support the development of risk and management. The findings indicate that most respondents representing 89% of the total respondents feel that their organizations have a clear policy to support the development of risk management this is as opposed to 11% of the respondents who feel that their organizations do not have a clear policy to support the development of risk management. The study also sought to find out the extent to which the organization supports its risk management policy. The findings in relation to this is that majority or 100 respondents indicated that their organization supports its risk management policy to a greater extent by allocating adequate resources and to a great extent through setting up risk management teams. While on the other hand 15 respondents feel that their organization supports its risk management policy to the greatest extent by allocating adequate resources. The table below best illustrates these facts.

Table 4.3 Extent to which the organization supports its risk management policy

Support	No influence	Least extent	Great extent	Greater extent	Greatest extent
Allocating adeqate resources	4	5	10	100	25
Clearly allocating risk management responsibilities	3	40	80	40	13
Setting up risk management teams	10	64	100	21	5
Regularly revising risk management plans	12	26	54	60	14
Listening to problems from employees	29	80	33	10	10
Strictly obeying risk management policy	5	20	67	20	13
Empowering risk champions	7	50	53	26	17

Source: Author (2012)

From the findings it is clear that allocation of adequate resources is supported to the greater extent.

The study also sought to find out the extent to which the organization effectively communicates to reduce risk. The findings indicate that most 90 of the respondents feel that the organization effectively communicates to reduce risk by fast and sharp communication between management team and stakeholder which was to the greater extent; this was followed by creating clear and trustworthy information at 89 respondents which was viewed to a great extent. **Table 4.4** best illustrates this.

Table 4.4 Extent to which the organization effectively communicates to reduce risk

Communication	No	Least	Great	Greater	Greatest
	influence	extent	extent	extent	extent
Creating clear and trustworthy	1	22	89	32	13
information					
Developing understanding between	2	20	67	29	21
management team and employee					
Fast and sharp communication	3	10	17	90	18
between management team and					
stakeholder					
Regularly communicating among	1	11	20	26	69
management and staff					
Creating and maintaining a clear	1	21	63	57	42
communication					

Source: Author (2012)

From the findings, fast and sharp communication between management team and stakeholder is the organization's way of effectively communicating to reduce risk.

The study sought to find out the degree to which the respondents agree/disagree with various statements. The findings indicate that most 25 of the respondents agree with the statement that 'collaboration within an organization comes from a strong culture', 27 strongly agree that their 'organization does not hesitate to change the old culture for its development of risk management' while the highest number of those who were neutral went with 'collaboration within an organization comes from a strong culture' and 'change in culture is not resisted here if they are good for the organization'. On the other hand the most 27 of the respondents disagreed with the statement 'change in culture is not resisted

here if they are good for the organization' while 13 of the respondents strongly disagree that their 'organization does not hesitate to change the old culture for its development of risk management'. The **table 4.5** below illustrates the above.

Table 4.5: Agreement/disagreement with statements

Statement	Strongly	Disagree	Neutral	Agree	Strongly
	disagree				Agree
Collaboration within a organization	11	22	50	70	25
comes from a strong culture					
Communication technique and	10	31	26	58	22
information management are the					
most important things with which					
organizations should be involved					
Your existing organizational culture	8	10	32	42	23
helps you know how to develop risk					
management strategies					
Your organization does not hesitate	13	26	23	64	27
to change the old culture for its					
development of risk management					
Change in culture is not resisted	8	27	50	63	20
here if they are good for the					
organization					

Source: Author (2012)

The findings from the table above indicate that most respondents strongly agree that their organization does not hesitate to change the old culture for its development of risk management which is a good show to ensure that there are effective risk management procedures in the organization.

The study also sought to establish how often the organizations change their guidelines or policies to manage risks. Majority 66 of the respondents indicated that their organizations changed its guidelines and policies to manage risks once per year while 3 of the respondents indicated that their organizations change its guidelines or polices to manage risks once per 2 years. On the other hand 50 respondents indicated that their organizations changed their guidelines or policies to manage risks once in more than 2 as

opposed to 12 respondents who indicated that their organization never changes its guidelines or polices to manage risks. The **figure 4.3** below best illustrates these facts.

Change of Guidelines or Policies

Never
8%

Once in more than 2 years 31%

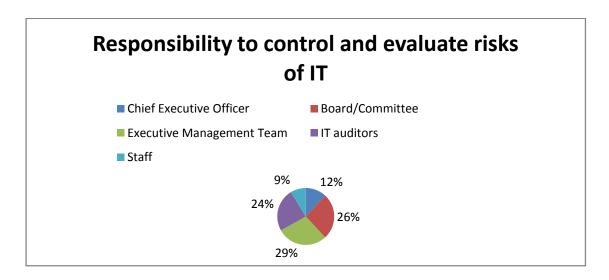
Once per two years 20%

Figure 4.3 Change of Guidelines or Policies

Source: Author (2012)

The study also sought to find out who had the responsibility to control and evaluate the risks of IT. The findings indicate majority 46 of the respondents feel that the Executive Management Team is the one who is responsible with the control and evaluation of the risks of IT; this was followed by 42 respondents who feel that the responsibility to control and evaluate the risks of IT was with the Board/Committee while 39 felt that the duty to control and evaluate the risks of IT was with the IT auditors. On the other hand 19 and 14 of the respondents feel that the responsibility to control and evaluate the risks of IT relied on the Chief Executive Officer and the staff respectively. **Figure 4.4** below best illustrates these facts.

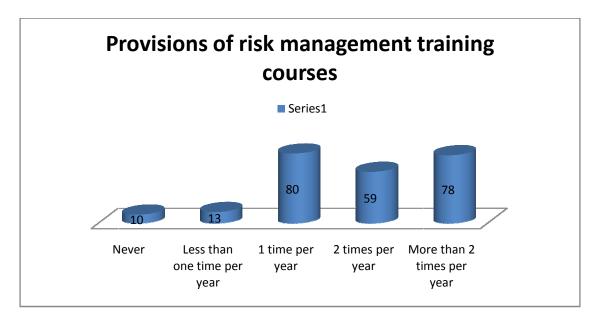
Figure 4.4 Responsibility to control and evaluate the risks of IT



The study findings indicate that the responsibility to control and evaluate the risks of IT at the airports is on the executive management team working on information from the IT departments. This is seen not to be in line with the earlier assumptions that the responsibility to control and evaluate risks of IT were on the IT auditors.

The study also sought to establish how often the organization provides risk management training courses. In relation to this the findings most 80 respondents stated that the organization provides risk management training courses 1 time per year followed by 78 respondents who stated that their organization provided risk management training course more than 2 times per year. The **figure 4.5** below best illustrates this.

Figure 4.5 Provisions of risk management training courses



In relation to the provision of risk management training courses by organizations the findings indicate that the organization provides risk management training courses 1 time per year.

The study sought to find out the degree to which the respondents agree/disagree with various statements. The study findings indicate that majority 91 of respondents agree with the statement that they can trust most of the colleagues while 39 respondents strongly agree with the statement that they can trust their subordinates. This is as opposed to the majority 20 who strongly disagreed with the statement that they can trust their superiors while 37 of the respondents disagree with the statement that they feel confident to give their opinions. The findings of this are further elaborated in the **table 4.6** below.

Table 4.6 Agreement/Disagreement of statements

Statement	1-Strongly	2-	3-	4-	5-
	disagree	Disagree	Neutra	Agree	Strongl
			1		y Agree
I can trust most of my colleagues	8	29	26	91	22
I can trust my superiors	20	30	36	63	27
I can trust my subordinates	7	18	24	87	39
I feel confident to give my	18	37	40	37	22
opinions					
Changing in culture is not resisted	3	12	12	68	37
here if they are good for the					
organization					

The study sought to rate the importance of various critical success factors in the management of risks. The findings indicate that majority or 122 of the respondents rate the importance of commitment and support from top management as very important while 89 of the respondents rate the importance of training as important. The critical success factors that were rated as not being very unimportant include infrastructure and facilities for airports e.g. IT with 9 respondents followed by trust with 7 respondents. The findings are further elaborated in the **table 4.7** below.

Table 4.7 The importance of various critical success factors in the management of risks

Critical success factors	Very	Unimportant	Neutral	Important	Very
	unimportant				impor
					tant
Commitment and support	3	6	6	23	122
from op management					
Communication	2	10	10	80	32
Organization structure and	6	12	20	87	29
culture					
Training	3	8	15	89	40
Leadership and commitment	1	5	19	56	79
Infrastructure and facilities	9	31	23	63	28
for airports e.g. IT					
Trust	7	13	43	61	26

The study sought to find out other critical success factors for effective risk management procedure at the airport. The respondents stated that critical success factors should define key areas of performance that are essential for the organization to accomplish its mission. Managers should implicitly know and consider these key areas when they set goals and as they direct operational activities and tasks that are important to achieving goals. The key areas of performance should provide a common point of reference for the entire organization. Thus, any activity or initiative that the organization undertakes must ensure consistently high performance in these key areas; otherwise, the organization may not be able to achieve its goals and consequently may fail to accomplish its mission.

Managing security across an enterprise is one of the many business problems that organizations must solve in order to accomplish their missions. Regardless of what organizational assets are to be secured information or technical assets, physical plant, or personnel the organization must have a security strategy that can be implemented, measured, and revised as the business climate and operational environment change. In the long run, the effectiveness of the security strategy depends on how well it is aligned with and supports the organization business drivers: mission, business strategy, and critical success factors.

The findings indicate that the suggestions the respondents stated to assist management in the reduction of risks at the airports include: mandatory airport licensing including a requirement to establish, maintain and ensure adherence to an integrated safety management programme, mandatory collection of data on ground-based incidents, with appropriate emphasis on organizational and corporate culture factors. Other proposed measures include mandatory inclusion of third party risk in Environmental Impact Statements for airports, the establishment of common methods and tolerability criteria for third party risk, the safety aspects of new technologies such as enhanced and synthetic vision systems.

4.4 Regression Results

In relation to the objectives of the study the researcher used STATA to estimate the following multivariate regression analysis:

$$N0 = \beta 0 + \beta 1LC + \beta 2HRM + \beta 3AF + \epsilon$$

The fitted regression model from the study findings is presented as follows:

In relation to the study findings the coefficients' *R*-values are given in the parenthesis. In all the estimated model coefficients of this study, the R-values were less than .05 (i.e. 0.5>R). This can be implied to mean that the variables tested or the critical success factors tested have a relationship with the level of risk management procedures at the airports at 5% significance level. From the findings it is clear that the coefficient for leadership and commitment activities witnessed (LC) and employee qualification and training on risk management (HRM) have a positive relationship. The meaning of this relationship is that leadership and commitment activities witnessed and employee qualification and training on risk management positively relates to the level of risk management procedures, for example, the higher the (LC) and (HRM) within the airport, the lower the level of risk management procedures at the airports and vice versa. This

was as opposed to the critical factor of the development and maintenance of airport facilities (AF) which had a negative relationship.

The fitted model was diagnosed and found that the regression was statistically significant at 5% significance level (regression R-value= .05 >. 032671). This shows that the combination of these factors (explanatory variables) significantly affect the response variable (level of risk management procedures). Further, R-square = 67.426%, implying that the explanatory variables accounted for 67.426% of the response variable.

Leadership and commitment activities witnessed in a firm affect the level of risk management procedures adopted by organizations. If an organization has a strong leadership culture integrated with commitment from all the stakeholders then there is the likelihood that the level of risk management procedures is higher in order to reduce the number of risks that the firm might be faced with. This being the case therefore an organization with a strong leadership and commitment to a common goal and objective culture positively influences the level of risk management procedures adopted. Within the study period a unit change in leadership and commitment activities increased the level of risk management procedures by 3.0026445.

Employee qualification and training on risk management during the period of the study influenced the level of risk management procedures positively. In the period under study employee qualification and training on risk management were improved greatly. More and more employees were expected to attend and train risk management courses and procedures to enable them reduce risks within their environment of work. Within this period there was a positive increase of 0.5290620 of employee training and qualifications which is equivalent to 52.90620% of the levels of risk management procedures within the airports.

The development and maintenance of airport facilities as a variable negatively impacted on the level of risk management procedures. Expansion of the airport facilities such as the construction of roads and access to public transport and parking facilities, operational functions, including aircraft pavements, taxiways and runways impacted negatively on the level of risk management procedures which was against the anticipations of the researcher. In the study period the development and maintenance of airport facilities decreased the level of risk management procedures by 5.07068.

All together the effects of explanatory variables captured in the model are significant, and these findings are informative, as they intrigue significant questions regarding the relationship between the critical success factors and the level of risk management procedures in Kenya's airports. On the basis of these findings, an effective risk management procedures culture with a clear leadership structure, for example, is one with greatly efficient and effective employees who work tirelessly with less top management supervision. Such culture of effectiveness, efficiency and hard work to excel is normally embedded in employees and this forms the basis of employee creating an effective risk management procedures.

This is supported by Cole (2004), who found out that a strong leadership requires a strong corporate culture which has a greater contribution to the performance of the firm. Culture facilitates control of employee performance, commitment and determination to surpass the firm's target and the reduction of risks. In essence, culture of a firm also improves risk management procedures positively. Organizational culture is totality of the firm's shared symbols, behaviors, values and assumptions which makes it possible for the group members to approximate events in a similar fashion. The regression output showed R-square value of 67.426%. This implies that there could be other critical success factors that contribute to the remaining 32.574% in explaining the variation in the level of risk management procedures in Kenya's airports

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the finding and discussions of the study. It also covers the recommendations for further studies on related issues on the study not well covered as well as recommendations on the relationship between critical success factors and the level of effective risk management procedures in Kenya's airports. The study finally addresses the limitations of the conclusions of this study.

5.2 Summary of Findings

It can be summarized from the study findings that most managers at the airports in Kenya had degrees and above as their highest levels of education and they are likely to make and promote effective risk management procedures and rules which was not the case. Majority of the respondents or the managers had more than 5 years of experince with risk management and it can be deduced that they are in a better position to come up with effective risk management procudures which can be beneficial to the airports in Kenya. The authority to establish risk management in most cases is mandated to the executive management team and the board/committee. This is as stated by the majority of the respondents.

The findings indicate that the champions of risk management were consultants who were willing to offer services on risk management and risk reduction, the government and the airports management through various strategic planning governing the management of airports in Kenya and the ministry of finance which bears responsibility for the management of very substantial government assets and liabilities, and for the management of many large value transactions, probably much more than any other government ministry or agency, the airports` management operations being one of them. Employees were also seen to have a part to play in championing for effective risk management in their organizations.

The findings indicate that the suggestions the respondents stated to assist management in the reduction of risks at the airports include: mandatory airport licensing including a requirement to establish, maintain and ensure adherence to an integrated safety management programme, mandatory collection of data on ground-based incidents, with appropriate emphasis on organizational and corporate culture factors. Others proposed measures include mandatory inclusion of third party risk in Environmental Impact Statements for airports, the establishment of common methods and tolerability criteria for third party risk, the safety aspects of new technologies such as enhanced and synthetic vision systems.

Leadership and commitment activities witnessed in a firm affect the level of risk management procedures adopted by organizations. If an organization has a strong leadership culture integrated with commitment from all the stakeholders then there is the likelihood that the level of risk management procedures is higher in order to reduce the number of risks that the firm might be faced with. This being the case therefore, an organization with a strong leadership and commitment to a common goal and objective culture positively influences the level of risk management procedures adopted.

Employee qualification and training on risk management during the period of the study influenced the level of risk management procedures positively. In the period under study employee qualification and training on risk management were improved greatly. More and more employees were expected to attend and train risk management courses and procedures to enable them reduce risks within their environment of work. The development and maintenance of airport facilities as a variable negatively impacted on the level of risk management procedures. Expansion of the airport facilities such as the construction of roads and access to public transport and parking facilities, operational functions, including aircraft pavements, taxiways and runways impacted negatively on the level of risk management procedures which was against the anticipations of the researcher.

All together the effects of explanatory variables captured in the model are significant, and these findings are informative, as they intrigue significant questions regarding the relationship between the critical success factors and the level of risk management procedures in Kenya's airports. On the basis of these findings, an effective risk management procedures culture with a clear leadership structure, for example, is one with greatly efficient and effective employees who work tirelessly with less top management supervision. Such culture of effectiveness, efficiency and hard work to excel is normally embedded in employees and this forms the basis of employee creating an effective risk management procedures

5.3 Conclusion

This study evaluated the relationship between the critical success factors and the level of risk management procedures in Kenya's airports. The fitted model was diagnosed and found that the regression was statistically significant at 5% significance level (regression *R*-value= .05 > .032671). This shows that the combination of these factors (explanatory variables) significantly affect the response variable (level of risk management procedures). Further, R-square = 67.426%, implying that the explanatory variables accounted for 67.426% of the response variable. Within the study period a unit change in leadership and commitment activities increased the level of risk management procedures by 3.0026445. Within this period there was a positive increase of 0.5290620 of employee training and qualifications which is equivalent to 52.90620% of the levels of risk management procedures within the airports. In the study period the development and maintenance of airport facilities decreased the level of risk management procedures by 5.07068.

Since majority of the respondents or the mangers had more than 5 years of experince with risk management and it can be deduced that they are in a better position to come up with effective risk management procudures which can be beneficial to the airports in Kenya. It can be concluded that authority to establish risk management in most cases is mandated to the executive management team and the board/committee. Having employees with the

right skills and training as well as the relevant education is a plus for any effective risk management procedures in the organizations. The benefits that accrue with having the right people for the job in relation to effective risk management procedures is that risk management procedures can easily be understood and can easily be managed and reduced. In addition to this if employees have the relevant training the capacity to handle all issues to do with risk management avoidance and reduction since responsibility among employees is improved.

Managing security across an enterprise is one of the many business problems that organizations must solve in order to accomplish their missions. Regardless of what organizational assets are to be secured information or technical assets, physical plant, or personnel the organization must have a security strategy that can be implemented, measured, and revised as the business climate and operational environment change. In the long run, the effectiveness of the security strategy depends on how well it is aligned with and supports the organization business drivers: mission, business strategy, and critical success factors.

5.4 Recommendations

It can be recommended from the study that besides this significant model explaining the variation in the relationship between the critical success factors and the level of risk management procedures in Kenya's airports, this research is informative because some of the findings are consistent with intriguing findings of limited prior research regarding the critical success factors and the level of risk management procedures.

Although this research is to some extent Kenyan-specific, the findings help clarify preceding empirical studies on the critical success factors and the level of risk management procedures. It is recommended that the critical success factors should define key areas of performance that are essential for the organization to accomplish its mission. Managers should implicitly know and consider these key areas when they set goals and as they direct operational activities and tasks that are important to achieving goals. The key

areas of performance should provide a common point of reference for the entire organization. Thus, any activity or initiative that the organization undertakes must ensure consistently high performance in these key areas; otherwise, the organization may not be able to achieve its goals and consequently may fail to accomplish its mission.

5.5 Recommendations for Further Research

- (i) To establish the environmental factors influencing the level of risk management procedures in Kenya's airports.
- (ii) To assess the relationship between leadership and commitment and the level of risk management procedures in Kenya's airports.
- (iii) The impact of government interference on the operations of the airports on the level of risk management procedures in Kenya's airports.

5.6 Limitations of the Study

The study was faced by various limitations. Time was a limiting factor for the researcher since he is in full time employment and therefore did not have adequate time especially in the collection of data thus the study objectives were not conclusively covered. On the other hand data from the airports was insufficient to be used to answer the research objectives sufficiently. Equally, limited resources on the part of the researcher were another limitation. The research lacked adequate funding for conducting the research since the researcher was self-sponsored in the Masters programme.

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APPENDIX I: QUESTIONNAIRE

BACKGROUND INFORMATION

1.	What is your highest level of the	duc	cation? (Ti	CK)		
	Form four ()					
	A Level ()					
	Diploma ()					
	Degree ()					
	Other (specify)					
2.	How many years of experience	do	you have	working v	vith risk managem	nent?
	Less than 1 year ())				
	1-2 years ()					
	3-5 years ()					
	More than 5 years ()					
	CRITICAL SUCCESS	FA	CTORS	FOR	EFFECTIVE	RISK
	MANAGEMENT PROCEDU	JRE	ES IN KE	NYA` AI	RPORTS	
1.	Who has the authority to establ	lish	risk mana	gement in	your organization	1?
	Chief Executive Officer	()			
	Chief Finance Officer	()			
	Board/Committee	()			
	Executive Management Team	()			
	Internal auditor	()			
	Staff	()			

Other		(Pleas	se	specify)
2 a. Does your procedures?	our organiza	ntion have a n	nanual for effec	 ctive risk management
Yes()				
No()				
, ,	swer to (a)	above to wha	at extent is the	manual understood by
employees?	, ,			•
Use the scale 1-	-5 as shown b	elow and tick th	e correct extent.	
1	2	3	4	5
No	Least	great	greater	greatest
Influence	extent	extent	extent	extent
	-		e manual to redu	ce risks at the airports?
1	2	3	4	5
No	Least	great	greater	greatest
Influence	extent	extent	extent	extent
			ions in your org	anization?
d ii. To what e	extent do yo	u think their le	 vel of education	and training negatively

impacts on risk management procedures?

Use the scale 1-5 as shown below and tick the correct extent.							
1	2	3	4	5			
No	Least	great	greater	r greate	est		
Influence	extent e	extent	extent	extent	Į		
d iii. Provide additional reference notes of d ii above							
	•••••						
3. Indicate the exte	ent to which	critical su	ccess factor	rs in your o	organization		
improve on the risk	prevention and	d reduction	n. Use the so	cale 1-5 as sl	hown below		
and tick the correct	extent.						
					╗		
1	2	3	4	5			
No	Least	great	greater	greate	est		
Influence	extent	extent	extent	extent	Ì		
Critical factors	No	Least	Great	Greater	Greatest		
	influence	extent	extent	extent	extent		
Leadership trainin	g						
and development							
Infrastructure devt							
Employee							
compensation							

Communication			
Organizational culture development			
Employee Training			
Employee attitude			
Others(Please specify)			

4 a. Does your organization have a clear policy to support the development of risk management?

Yes()

No()

b. Indicate the extent to which your organization supports its risk management policy. Use the scale 1-5 as shown below and tick the correct extent.

1	2	3	4	5
No	Least	great	greater	greatest
Influence	extent	extent	extent	extent

Support	No	Least	Great	Greater	Greatest
	influence	extent	extent	extent	extent
Allocating adequate					
resources					

Support	No	Least	Great	Greater	Greatest
	influence	extent	extent	extent	extent
Clearly allegating					
Clearly allocating					
risk management					
responsibilities					
Setting up risk					
management teams					
Regularly revising					
risk management					
plans					
Listening to					
problems from					
employees					
Strictly obeying risk					
management policy					
Empowering risk					
champions					

5. Indicate the extent to which your organization effectively communicates to reduce risk. Use the scale 1-5 as shown below and tick the correct extent.

1	2	3	4	5
No	Least	great	greater	greatest
Influence	extent	extent	extent	extent

Communication	No	Least	Great	Greater	Greatest
	influence	extent	extent	extent	extent
Creating clear					
and trustworthy					
information					
Developing					
understanding					
between					
management					
team and					
employee					
Fact and sharp					
Fast and sharp communication					
between					
management					
team and					
stakeholder					
Regularly					
communicating					
among					
management and					
staff					
Creating and					
maintaining a					
clear					
communication					

Communication	No	Least	Great	Greater	Greatest
	influence	extent	extent	extent	extent
Others(Please					
specify)					
1 7/					

6. Please rate the degree to which you agree/disagree with the following? Use a five point scale, where:

1= Strongly disagree, 2= Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree.

Statement	1	2	3	4	5
Collaboration within an organization					
comes from a strong culture					
Communication technique and					
information management are the most					
important things with which					
organizations should be involved					
Your existing organizational culture					
helps you know how to develop risk					
management strategies					
Your organization does not hesitate to					
change the old culture for its					
development of risk management					
Change in culture is not resisted here if					
they are good for the organization					

7. How often does your organization change its guidelines or polices to manage risks?

Once per year	()
	63

Once per 2 years	()	
Once in more than 2 years	()	
Never	()	
8. Who has the responsibility to o	control and evaluate the risks of	f IT?
Chief Executive Officer (CEO)	()	
Board/Committee	()	
Executive Management Team	()	
IT auditors	()	
Staff	()	
Other	(Please	Specify?
Other 9. How often does your organizate		
9. How often does your organizat	tion provide risk management t	
9. How often does your organization. Never	tion provide risk management t	
9. How often does your organization. Never Less than one time per year	tion provide risk management t	
9. How often does your organizate. Never Less than one time per year I time per year	tion provide risk management t () () ()	

 $1{=}\;Strongly\;disagree\;,\;2{=}\;Disagree\;,\;3{=}Neutral\;,\;4{=}Agree\;,\;5{=}Strongly\;Agree\;.$

Statement	1	2	3	4	5
I can trust most of my colleagues					
I can trust my superiors					

I can trust my subordinates			
I feel confident to give my opinions			
Changing in culture is not resisted here if they are good for the organization			

11. How would you rate the importance of the following critical success factors in the management of risks?

Use a five point scale, where: 1= Very unimportant, 2= Unimportant , 3=Neutral , 4=Important , 5=Very important .

Critical success factors	1	2	3	4	5
Commitment and support from top management					
Communication					
Organization structure and culture					
Training					
Leadership and commitment					
Infrastructure and facilities for airports e.g. IT					
Trust					

12.	What other	critical	success	factors	would	you	like to	mention,	for	effective
risl	k managemer	nt proce	dure at y	our air <mark>ı</mark>	ort?					

i)	 	
ii)	 	
;;;)		

v)
)
3. What other relevant comments or suggestions can you give on this topic to ssist management in the reduction of risks at the airports.

Thank you for participating in this study

APPENDIX II: MBA RESEARCHES ON RISK MANAGEMENT

Author	Title	Objective	Method	Findings
Njuguna J	Role of	To assess the	Descriptive	Assessment
(2007)-	Enterprise risk	role of	survey of	of risks,
JKUAT	management	enterprise risk	MFIs in	identification
	strategies in the	management	Nairobi	of risks and
	growth of MFIs	strategies in		prioritization
	in Kenya	MFI growth.		of risks.
Macharia	Risk management	To investigate	Descriptive	Strategies
J.W	strategies and	risk	survey of	identified
(2011)-	returns by	management	pension funds	include:
UoN	pension funds in	strategies by		Avoidance
	Kenya	pension funds		Reduction,
		in Nairobi		Sharing and
				Retention
Ochieng	Strategic risk	To examine	Descriptive	Prioritizing
D.A(2008)-	management	risk	survey of state	the risk
UoN	practices among	management	corporations in	management
	state corporations	practices by	Kenya	processes,
	in Kenya	state		Proper
		corporations in		assessment
		Kenya		of risks
Talel L	A survey of risk	To assess of	Descriptive	Selection of
(2010)-	management	risk	survey of	appropriate
UoN	practices adopted	management	banking	controls or
	by banking	practices	institutions in	countermeas
	institutions in	adopted by	Kenya	ures and
	Kenya	banking		planned
		institutions in		methods for
		Kenya		mitigating
				the effect of
01 11	A C : 1	TD 11 .10	C C	the risks
Okello	A survey of risk	To identify	Survey of	alignment of
P.O(2010)-	management	risk	Nairobi	strategic risk
UoN	practices by	management	SACCOs	management
	SACCOs in	practices of		with a
	Kenya	SACCOs in		strategy;
		Nairobi		evaluating
				business
				strategy of SACCOs
Bowen, M;	Management of	To identify	A Descriptive	Risks
Morara, M	Management of business risks	risks and	A Descriptive Survey of	identified
&	among SMEs in	challenges	Survey of SMEs in	
Mureithi,	Nairobi Kenya	SMEs face	Nairobi	were insecurity,
S. (2009)-	ranoui Kenya	SIVILS TACE	Manou	competition,
Daystar				credit
Daystai				Cicuit

University				defaults, debt collection
Thiongo J (2012)- UoN	The relationship between the critical success factors and effective risk management procedures in Kenya.: A case of management of the Kenya Airports	To evaluate the relationship between level of risk management and critical success factors for effective risk management procedures at KAA	Case study of Kenya airports	Leadership and commitment activities witnessed in a firm affect the level of risk management procedures adopted by organizations

APPENDIX III: LIST OF AIRPORTS IN KENYA

Amboseli Airport	Kitale Airport	Mtito Andei
Bamburi Airport	Manda Airport	Airport
Bungoma Airport	Lewa Airport	Jomo Kenyatta International
Bura East Airport	Lodwar Airport	Airport
Busia Airport	Loitokitok Airport	Wilson Airport
Eldoret International	Lokichogio Airport	Naivasha Airport
Airport	Lokitaung Airport	Nakuru Airport
Eliye Springs Airport	Loiyangalani Airport	Nanyuki Airport
Embu Airport	Mackinnon Road Airport	Narok Airport
Garba Tula Airport	Magadi Airport Makindu Airport Malindi Airport Mandera Airport Kisima Airport Marsabit Airport Keekorok Airport Mara Serena Airport	Nyeri Airport Samburu Airport
Garissa Airport		
Hola Airport		Voi Airport
Homa Bay Airport		Wajir Airport
Isiolo Airport		Moi Air Base
Kakamega Airport		
Kalokol Airport		
Kericho Airport		
Kilaguni Airport		
Kimwarer Airport	Mulika Lodge Airport	
Kisii Airport	Moi International Airport	
Kisumu Airport	Moyale Airport	
Kiwayu Airport		