

**CRITICAL SUCCESS FACTORS AND RISK MANAGEMENT
PROCEDURES AT KENYA AIRPORTS AUTHORITY**

BY

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DECLARATION

This Research Project is my original work and has not been presented for examination in any other University.

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The Research Project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

This work is dedicated to my God who has given me blessings and endowments to complete this project. I also dedicate it to my family especially my children for their support and encouragement during the time of undertaking this research. To my friend Joash Mboga of KAA for his invaluable contribution and continuous encouragement, I say thank you. Last but not least, I wish to dedicate this work to my mother Mrs,Rosa Vugutsa Masadia for bringing me up and inculcating in me the values of hard work, patience, humility, perseverance, persistence and the need to scale great heights of academic excellence.

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ABBREVIATIONS AND ACRONYMS

Airports	Aerodrome
CEO	Chief Executive Officer
CSF	Critical Success Factors
ICAO	International Civil Aviation Organization
KAA	Kenya Airports Authority
NIST	The National Institute of Standards and Technology
RBV	Resource-Based View or Theory of the firm

ABSTRACT

In the recent past, there has been an increase in the number of airport accidents, fires and associated risks in Kenya. Unfortunately, there is no known research that has been undertaken in this area, thereby leaving a knowledge gap. It is on this basis that research in this area was desirable. This research project was a case study research design of critical success factors and risk management procedures at Kenya Airports Authority (KAA). The objectives of the study were to; identify the risk management procedures at KAA, determine the critical success factors in establishing the risk management procedures at KAA, and identify the challenges facing the implementation of risk management procedures at KAA. Data was collected using in-depth interviews by the researcher. It was analyzed and presented by way of content analysis. A total of seven out of ten top managers were interviewed. The research findings found out that KAA adopted risk management procedures in line with the provisions of The National Institute of Standards and Technology (NIST, 2004). It summarized their risks and subsequent risk management procedures into nine thematic risks including revenue generation, infrastructure and facilities, security, and safety risks. Other thematic areas include; business process automation, employee productivity and retention, environmental sustainability, customer service and corporate image, and corporate governance and political interference risks. The findings identified the critical success factors required to establish the risk management procedures at KAA as leadership and commitment, communication, organizational structure and culture, infrastructure and airport facilities, training, and technology. The challenges were found to be political interference, financial constraints, and inadequate land for expansion, leadership, technological and environmental inadequacies. The research concluded that KAA requires intensifying its efforts in establishing fool proof risk management procedures in all its thematic areas. Also strategic leadership and commitment which was found to have the greatest impact in risk management procedures requires a total overhaul especially in the appointment of the Board. In addition land for expansion was found to be inadequate for KAA. From the findings recommendations on theory and knowledge development, policy guidelines, and management practice were noted. Among these include the need to diversify revenue sources and the need to review contract periods for CEOs. This study was not without limitations. Some of the managers interviewed expressed fears in disclosing some sensitive finance, political, security and safety concerns. Hence, the data provided could have been inconclusive thereby making the applicability and generalizability not adequate across industry. The researcher therefore recommends the following areas for further research; First; security challenges posed by informal settlements to Airports in Kenya, and major political challenges facing risk management at airports and strategic responses to the same, as well as application of diversification strategy as a mitigation measure against revenue risks facing KAA

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Risk management is one of the most important aspects in aviation industry due to the nature of the industry since it is exposed to more risks compared to other industries (Chow, 2007). Risks facing the world airports today range from natural disasters, for example the recently experienced volcanic ash that engulfed Europe and disrupted flights to several airports, human errors and disasters such as terrorism. Risks around airports are comparable to major hazard sites such as chemical plant risks. Although the chance of an aircraft accident is very small, application of a risk management process is critical to determining the hazards and vulnerabilities affecting operations (Packiam, 2005). Successful implementation of risk management processes is dependent on effective application of critical success factors. The theory of CSF was first developed by D. Ronald Daniel in the 1960s. It was then popularized a decade later by John F. Rokart of MIT Sloan School of Management, and since has been used extensively to help businesses implement their strategies and projects.

The CSF theories under this study include communication theories, organization structure theories, organization culture theories and organization leadership theories. Essentially, all these CSF theories under this study are grounded on appropriated organization leadership theories for the success of organization. Airport risks are caused by a series of variable tasks such political, economic, technological, environmental and regulatory issues. Identifying the critical areas for focus on risk management will assist airports reduce exposure to financial risks, terrorism risks, ratings risks, staff turnover risk and overall customer dissatisfaction risks.

In short, experience shows that handling of crises can make or break an airport at any extreme cases (Codjia, 2010). Kenyan airports are faced with various risks which if not addressed will cause major human and financial loss.

Increasing international terrorism, local criminality and non compliance to international aviation procedures, and even business sabotage have threatened Kenya`s security systems. In fact, in the recent past airport related accidents such as the recent accident that claimed the deaths of Hon. George Saitoti and Hon. Ojode and even the plane accidents around mount Kenya region involving Uganda Army planes on their way to war in Somalia point to the need for heightened risk management procedures to mitigate against these accidents. It is in this context that the KAA needs to put in place and comply with international risk management procedures to prevent occurrence of airport mishaps in the future. If this is not done, future accidents involving planes and airport security lapses are likely to cause un-foretold suffering to the Kenyan economy given Kenya`s strategic position as East Africa`s business hub and Kenya`s airports significant role as appoint of refuel for transit planes enroute to the rest of Africa (KAA strategic plan, 2010-2014).

1.1.1 Concept of Risk Management

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. It 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). Identification of risk facing a firm is important as it forms the basis for strategic planning on risk management and risk management procedures. Such programs are geared towards risk mitigation and creation of an enabling environment to conduct business.

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 benefit of risk management to an organization is to maximize the potential of success and minimize the probability of future losses. Effective risk management suffices as being strategic if and only if it contributes to the overall creation of a competitive edge for the enterprise (Counrow, 2003). Risk management procedures involve risk assessment, risk mitigation and evaluation. 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. Risk management procedures are more strategic if the firm is able to create maximum risk management procedures in and within their employees.

1.1.2 Critical Success Factors

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. In these areas things must go right for business prosperity.

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).

Critical success factors constitute the 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 relative costs in the companies' relevant markets (Ellegard & Grunert, 1993). From these definitions, CSFs are therefore central to the good performance in key areas of the aviation industry and is indispensable for the achievement of organizational goals and accordingly for the success of the organization.

1.1.3 Risk Management Procedures

Clearly stated, risk management procedures constitute risk assessment, risk mitigation and evaluation. 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 for 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 as follows;

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).

1.1.4 Airline Industry in Kenya

Kenya is both the international and African continent aviation hub. In Africa, all international flights depend on Kenya's airports for both terminating and connecting flights worldwide. Major airlines that depend on Kenya's aviation facilities include BA, Emirates, Air France, and Gulf Air, among others. Key continental airlines operating in Kenya include Kenya Airways, Ethiopian Airlines, Egypt Air, Uganda Air, and South African Airlines, to mention but few. Key domestic industry players, include Kenya Airways, private carrier Jet link, Fly 540 / East African Safari Air and ALS (www.KAA.go.ke).

Kenya's airline industry provides the much desired transport and communication for tourism, business and horticultural industries which are so critical in the development of the economy. Kenya also hosts international organizations like UNEP, and international embassies. Consequently, the security of the airline industry in Kenya is key to their operations and continued presence in this region.

Implementation of Effective risk management procedures are key in ensuring that the airline is secure, safe, and operationally efficient in transport and communication to all the users. Good risk management provides upward assurance from business activities and administrative functions and from department to faculties.

This upward mobility can also be from to the senior management team and ultimately to the governing body. The potential benefits from risk management procedures are supporting strategic and business planning; supporting effective use of resources; promoting continuous improvement; fewer shocks and unwelcome surprises; quick grasp of new opportunities; reassuring stakeholders and helping focus internal audit programs (Chopra, 2003).

1.1.5 Kenya Airports Authority

The Kenya Airports Authority is an autonomous body established in 1991 through an act of parliament, the KAA Act, Chapter 395 of the laws of Kenya. The Authority is charged with the responsibility of providing facilitative infrastructure for aviation services. KAA is currently responsible for the management of Jomo Kenyatta International Airport, Moi International Airport, Eldoret International Airport, Kisumu Airport, Wilson Airport, Malindi Airport, Lokichogio Airport, Wajir Airport and Ukunda, Kitale, Lodwar, Garissa, Kakamega and Manda Airstrips. In addition, it manages all other airstrips within the country on behalf of government on an agency basis.

According to the act, the main functions of KAA are; to administer, control and manage aerodromes, to provide and maintain facilities necessary for efficient operations of aircrafts and to provide rescue and firefighting equipment and services. In addition to this they are also expected to construct, operate and maintain aerodromes and other related activities, 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.

Above all, KAA must ensure that the necessary risk management procedures are put in place to ensure the safety of the airports particularly now that issues of international terrorism targeting the aviation industry and plane mishaps are on the rise.

A bigger challenge to KAA 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 KAA to consider how to anticipate and manage the risks as they emerge in the sector (KAA strategic plan, 2010-2014).

1.2 Research Problem

Effective risk management is the overriding basis for wealth maximization of any firm and most importantly in ensuring that it meets its business objectives. The aviation industry today faces a number of challenges that at a first glance may seem contradictory for instance safety and security, capacity and efficiency. While increasing existing airport capacity and creating new airport capacity, the traffic demand requires constant emphasis on safety to ensure that the traffic can continue to grow without putting the traveling public at risk. Aviations impact on the environment consists of noise, solid waste, pollution from aviation fuel service providers and local air quality as major problems 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.

The aviation operates under highly standardized and well documented safety procedures. The efficiency of any airline industry in any country is determined by the level of implementation of these safety procedures. International civil aviation organization formulates and oversees implementation of these safety management systems including risk management procedures.

The need for risk management processes is to eliminate, reduce and control risks, enhance benefits, and avoid detriments from speculative exposures that airports have been exposed to in the recent past. Risk management is meant to maximize the potential of success and minimize the probability of future losses and negatively affect cost, time, quality and system performance (Anderson & Terp, 2006). Risks unless identified, analysed and eliminated threaten the viability of an organization. Effective risk management provides for the best possible conditions to meet the needs of the airport and objectives of those residing or investing in the immediate environs of the airports including legal legislations and other interest groups. To minimise risks, firms must embrace critical success factors. These are 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. Some of these critical areas include organization, communication, structure, culture and leadership.

While work place studies have been done as the basis for formulation of safety risk management procedures, there is no known research that has been undertaken on critical success factors for risk management procedures at KAA.

This leaves the knowledge gap on the subject of critical success factors for risk management procedures in Kenya in general, and KAA in particular. It is against this background that an investigation is required to find out the critical factors for and risk management procedures at KAA

So far, a few related researches have been undertaken on risk factors in the aviation industry. Chopra,(2003), carried out a study on the implementation of enterprise risk management applied research project in Texas State Government. On the other hand, Chow, (2007) researched on developing a methodology in aviation risk management based on sustainability in America. Also, Leidecker and Bruno, (1984) carried out research on the identification and usage of critical success factors in long range planning. At the same time Icharia (2009) investigated critical success factors in Kenya Certificate of Secondary Education examinations in public secondary schools in Kiambaa Division. Also Mwikamba 2010 undertook a study on challenges facing implementation of performance contracting in the ministry of finance of the government of Kenya. Anyango 2010 did a study on Critical Financial and Performance Factors in the Industrial and Arid Sectors of NSE. All these researchers shade some light on critical success factors and risks in the aviation industry elsewhere and not at KAA. This research, therefore, attempts to answer the following questions: what are the risk management procedures at KAA, what are the critical success factors in establishing the risk management procedures at KAA and what are the challenges facing the implementation of risk management procedures at KAA?

1.3 Research Objectives

The objectives of the study were:

- i) To identify the risk management procedures at KAA.
- ii) To determine the critical success factors in establishing the risk management procedures at KAA.
- iii) To identify the challenges facing the implementation of risk management procedures at KAA.

1.4 Value of the Study

The study findings identified several risk areas at KAA and their subsequent risk management procedures. These include revenue generation risks, Infrastructure and facilities risks, security risks, and safety risks. This is besides Business process Automation, Employee productivity and Retention, Environmental sustainability, Customer Service and corporate Image, as well as corporate governance and Political interference. The findings also identified various critical success factors in required to establish the risk management procedures at KAA such as Leadership and commitment, communication, organizational structure and culture. In terms of management practice, KAA management can utilize these findings to undertake competitive strategies and benchmark their 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.

The study findings also pointed out on the inability by KAA to acquire more land for expansion in the absence of favourable legislation on land.

Squatter encroachment and fraudulent airport land were also found to be a risky factors affecting KAA. Such findings are helpful to government in formulation of legislative policy on compulsory land acquisition for airport expansion and airport security. On the basis of these findings, the government and other aviation organizations could with policies and procedures that mitigate against additional costs through litigations, reduce turnover of employees and enhancing relationships with other organizations in the aviation sector. The challenge of appointing a board of directors and a CEO competitively and without political interference was found to greatly impact the performance of KAA. Political appointees with only three year tenure were found to apparently work under anxiety and duress and on the process lack the desired concentration to deliver on the five year plan of the firm.. The legislation on the selection and appointment of Parastatal chiefs requires to be streamlined especially on the tenure of office of a Chief Executive Officer and his Board. A term of say six to seven years will be relatively long enough for the Executive to formulate and implement the strategic deliverables of the firm. The KAA should embrace the concepts of strategic leadership, good corporate governance as well as competitive ICT for sustainability and superior performance.

The findings of this study pointed out the great role played by leadership and communication as critical success factors in risk mitigation. These findings are therefore of great significance to the development of theory and knowledge in the area leadership and communication theories. The research findings will form the foundations for further research in related areas to the current study as well serve as a source of literature review for future scholars. The researchers would in future utilize the study revelations to develop management theory.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will cover the theoretical foundation of this study, risk, risk management, risk management procedures and critical success factors in risk management procedures. It will also cover the importance of effective risk management procedures as well as challenges facing the implementation of risk management procedures.

2.2 Theoretical Foundations of the Study

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) 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 ensure success for an organization. This study is grounded on the Dynamic Capabilities Theory. The study also embraces some key tenets of the Resource Based View.

2.2.1 Resource Based View

The resource-based view or theory of the firm (RBV) is usually utilized by firms as the basis for the competitive edge creation. To create a competitive advantage the firm configures a combination of resources at its disposal (Barney, 1991). To create a sustainable competitive advantage these resources must have unique characteristics.

They should be heterogeneous and not perfectly mobile. This implies that the resources have to be valuable to the extent that they are neither perfectly imitable nor substitutable without great effort. Hence where the resource is knowledge-based or socially complex, causal ambiguity is more likely to occur as these types of resources are more likely to be idiosyncratic to the firm in which it resides.

Consequently, this may be the reason why firms might not be able to imitate a resource to the degree that they are able to compete with the firm having the valuable resource. An important underlying factor of inimitability is causal ambiguity, which occurs if the source from which a firm's competitive advantage stems is unknown. If these conditions hold, the bundle of resources can sustain the firm's above average performance. To be of value, these resources should not only be available but also rare. If competitors are able to counter the firm's value-creating strategy with a substitute, prices are driven down to the point that the price equals the discounted future rents resulting in zero economic profits (Porter, 1980)

Firms, therefore require capabilities and unique resources so as to effectively deliver on its mandates. According to Makadok (2001) capabilities are a special type of resource, specifically an organizationally embedded non-transferable firm-specific resource whose purpose is to improve the productivity of the other resources possessed by the firm. Resources are stocks of available factors that are owned and controlled by the organization, and capabilities are an organization's capacity to deploy resources. Essentially, it is the bundling of the resources that builds capabilities. When the imitative actions have come to an end without disrupting the firm's competitive advantage, the firm's strategy can be called sustainable.

This is in contrast to views of others like Porter (1980) who posits that that a competitive advantage is sustained when it provides above-average returns in the long run. This theory is more relevant to the current study since Kenya Airports Authority also requires to effectively utilize its resource capabilities to create a sustainable competitive edge.

2.2.2 Dynamic Capabilities Theory

Organizational leadership requires a thorough theoretical grasp of firms' growth and development so as to remain competitive in an ever changing business terrain. The dynamics capabilities theory allows for change frames of reference and accepted priorities in terms of what's important to build, own, and manage well as providing guidance in a variety of changing scenarios. It provides the intellectual infrastructure for both theoretical and applied analyses of strategic management and other issues facing business decision makers in highly hypercompetitive globalized business environments (Teece, 2007).

The theory recognizes that value can flow to the enterprise from the astute creation, combination, transfer, accumulation, and protection of intangible assets which are not naturally occurring, are harder to access and costly but depend on managerial action and, in part, on national systems of innovation (Nelson, 1993).

The highest profits flow to those who develop modern technologies, deploy them effectively and safely, and build privileged relationships with nation states and other constituencies. Accordingly, in the aviation industry, airline safety and risk management in a fundamental sense is "found" in the mind of strategic leadership capability and commitment and not in the ground.

In order to embrace new elements of competition, the Dynamic Capabilities Framework offers a comprehensive, multidisciplinary approach to managerial decision-making by identifying the factors likely to impact firms' performance. It goes beyond a financial-statement view of assets to emphasize the soft assets that management needs to orchestrate resources both inside and outside the firm. This includes the external linkages that have gained in importance, as the expansion of trade has led to greater specialization. It recognizes that to make the global system of vertical specialization and co-specialization work, there is an enhanced need for the business enterprise to develop and maintain asset alignment capabilities that enable collaborating firms to develop and deliver a joint solution to business problems that customers will value. This calls for securing access to capital and the necessary human resources, Employee motivation forging of good external relationships with suppliers, complementors, and customers (Teece, 2007). This theory is therefore, the most relevant in the current study. This is because Kenya Airports Authority just like any other firm operating under environmental turbulence requires entrepreneurial managers and leaders capable of building and deploying intangible assets as critical success factors.

2.3 Concept of Risk

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. Effective risk management procedures ensures that an organization identifies and understands the risks to which it is exposed to.

It also guarantees that the organization creates and implements an effective plan to prevent losses or reduce the impact if a loss occurs (Frame, 2003). The chance of something happening will impact the achievement of objectives (Partnerships BC, 2005). A recent survey by Deloitte Touche Tohmatsu (2000) identified the following major key risk areas as failure to manage major projects, failure of strategy, dependency on key people and business.

2.4 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). 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 of an organization.

Effective risk management provides for the best possible conditions to meet the needs of the airport and objectives of those residing or investing in the immediate environs of the airports including legal legislations and other interest groups. Airport risks are not like any other risks. Uneven ground may provide a trip and fall hazard. The operation of potentially dangerous tools, equipment, or vehicles may expose a visitor to injury.

But, airports also present some unique hazards as well. The risk of an aircraft accident or other damage to an aircraft caused by some unsafe condition on the property can expose an airport owner to significant risk.

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).

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 it 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).

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 is not the management of insurable risks. Insurance is an important way of transferring risk but most risks will be managed by other effective procedures and means. 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.

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. Accordingly, 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. This includes the uncertainty in the global economic developments and outlook. 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.

2.5 Critical Success Factors and 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) 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 ensure success for an organization. Various theories exist to guide organizations on how to achieve maximum results using the critical factors to ensure successful competitive performance.

The steps to success are to first have a thorough understanding of the theories which inform leadership management as a basis for competitive edge creation. These critical theories include those on organization communication, structure, culture and leadership. All these theories revolve around leadership theories.

Communication theories bring out the role played by effective communicating success of a firm. Among the most prominent theories of organization is the critical theory of communication in organizations. The naive notion that communication is merely the transmission of information perpetuates managerial discursive closure, and the corporate colonization of everyday life. Language is the principal medium through which social reality is produced and reproduced. Managers can further a company's health and democratic values by coordinating stakeholder participation in corporate decisions (Stanley, 1998).

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. The more disaster management requires active involvement of residents, the more vital risk information/communication/education become. Furthermore, in the case of controversial risk sources (for example the positioning of an airport or a waste incineration facility), public discussion, stakeholder participation and joint conflict resolution are required.

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, Rohrman 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 bot success factor in that the business unit needs to be aware of risks which fall into their area of responsibility, the possible impacts these may have on other areas and the consequences other areas may have on them. Communication of performance indicators allows them to monitor the key business and financial activities, progress towards objectives and identify developments which require intervention (e.g. forecasts and budgets and report systematically and promptly to senior management any perceived new risks or failures of existing control measures.

Organizational structure not only affects but also innovation. Organization informs the relevancy of organizational structure in the success of the firm.

Structural theories of innovation usually aim to specify organizational design characteristics that lead to innovation. Two sets of structural theories of innovation have been advanced. In one set, usually referred to as uni-dimensional theories of organizational innovation, the relationships between a structural variable and innovation are developed. For example, professionalism affects innovation positively because it increases boundary-spanning activity, self-confidence and a commitment to move beyond status quo (Pierce and Delbecq, 1977), or vertical differentiation affects innovation negatively because it increases links in communication channels.

This makes communication between levels more difficult and inhibits the flow of innovative ideas (Hull and Hage, 1982).

In any event, an organization typically implements a risk management strategy to ensure that employees abide by industry practices, regulatory guidelines and corporate policies when performing tasks. An adequate organizational structure increases the probability that risk management procedures will be successful (Codjia, 2010). Stank, Daugherty and Gustin (1994) believe that organizational structure involves an organization's internal pattern of relationships, authority and communication. Structure is comprised of formal lines of authority and communication and the information as well as data that flow along these lines. Thus, organizational structure defines the lines of authority and communication, serves to allocate tasks and resources and provides a means of coordination.

Hunter (2002) supports the idea that organizational structure provides the authority to predetermine the way employees work. Structure and processes of an organization are most effective when their design functions match their environment and have a positive impact upon the organization's strategies.

Hence, one of the most important aspects for effective risk management is organizational structure. Organizational structure provides the concept, guideline, direction and support to the employee that is conducted by the steering committee. They design and teach employees to share and use a common vocabulary. The employees work as a team in order to prevent a silo mentality and incorporate resistant employees in the process (Hasanali, 2002). From the definitions, setting clear objectives and guidelines is necessary for risk management.

The theoretical perspectives on culture show us how culture affects decision making and effective organizational performance. Theories such as Schein's theory organizational culture (2004) inform us that there are three major levels to consider when analyzing culture namely; artefacts, espoused beliefs and values plus basic underlying assumptions. Artefacts are the surface level of organizational culture. Espouse beliefs and values include strategies, goals shared assumptions, norms, beliefs and values installed by founders and leaders.

Basic underlying assumptions are the base level of organizational culture, and are the deeply-embedded, unconscious, taken for granted assumptions that are shared with others. Any challenge of these assumptions will result in anxiety and defensiveness. However, the most visible symbols should not be the only aspects used to interpret culture, due to the ease with which they can be misinterpreted. Focusing only on visible symbols will result in a failure to grasp the underlying basic assumptions that are fundamental to understanding the culture. Similarly, it is important to recognize that even espoused beliefs and values may only reflect the aspirations of a culture, and not the actuality. This creates a knowledge gap on the role played by organizational culture on CSFs.

A strong corporate culture 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. 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 procedure (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".

The most important critical success factor for successful implementation of risk management procedures is that of leadership and trust. Several theories of leadership exist. These include Blake and Mouton's Managerial Grid, House's Path Goal Theory, Leadership-Member Exchange (LMX) Theory, Transformational Leadership, Transactional Leadership, Continuum of Leadership Behaviour, Likert's Management System, Hersey Blanchard Model and Fiedler's Contingency Model (Northouse, 2007).

The other theory that nearly addresses successful risk management procedures is the transactional leadership which is also known as managerial leadership. It focuses on the role of supervision, organization and group performance. It assumes that people perform their best when the chain of command is definite and clear. Workers are motivated by rewards and punishment and obeying the instructions and commands of the leader is the primary goal of the followers. Rules, procedures and standards are essential in transactional leadership. Followers are not encouraged to be creative or to find new solutions to problems. However, research has found that transactional leadership tends to be most effective in situations where problems are simple and clearly-defined and it is generally considered an inefficient in complex problem situations (Krames, 2005).

Transformational leadership may be found at all levels of the organization: teams, departments, divisions and organization as a whole. Such leaders are visionary, inspiring, daring, risk-takers, and thoughtful thinkers. They have a charismatic appeal. But charisma alone is insufficient for changing the way an organization operates. For bringing major changes, transformational leaders must exhibit the following four factors; thus inspirational motivation, intellectual stimulation, individual consideration and idealized influence. Inspirational Motivation is the promotion of consistent vision, mission, and a set of values to the members. Transformational leaders guide followers by providing them with a sense of meaning and challenge. They work enthusiastically and optimistically to foster the spirit of teamwork and commitment.

Intellectual Stimulation encourages their followers to be innovative and creative. They encourage new ideas from their followers and never criticize them publicly for the mistakes committed by them. Under Idealized Influence leaders act as role models that followers seek to emulate. Such leaders always win the trust and respect of their followers through their action. In Individualized Consideration, Leaders act as mentors to their followers and reward them for creativity and innovation. The followers are treated differently according to their talents and knowledge. They are empowered to make decisions and are always provided with the needed support to implement their decisions. Critics argue that transformational leadership makes use of impression management and therefore lends itself to amoral self promotion by leaders. Also, the theory is very difficult to be trained or taught because it is a combination of many leadership theories (Northouse, 2007).

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). Leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Northouse, 2007). 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 developing project procedures.

These include the initiation stage, training programmes, establishing a project management office, support quality management and so on (Zwikael, 2008). 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 an “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. In this study, effective risk management procedures constitute the dependent on the independent variables which include technology, training, infrastructure for airports as well as communications and leadership and commitment (Krames, 2005).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology of the study. It covers the research design used to conduct the study, data collection methods used and the analysis and presentation of data in order to generate the findings of the research.

3.2 Research Design

This research utilized the case study design. It was a case study of the critical success factors for effective risk management at KAA. A case study focuses on one organization. It involves an intensive study of the particular firm under investigation.

It is on the basis that researchers are able to extract detailed data for studies involving case studies are of particular value when one is seeking help on investigating contributions in which interrelationships of a number of contributions are involved, and in which it is difficult to understand the individual contributions without considering their relationships with each other (Cooper and Schindler, 2000). This is the situation at KAA.

3.3 Data Collection

The study used both secondary and primary data. Primary data was obtained from managers of KAA by the use of an interview guide. The interview guide was used to gather data on the study topic thus assessment of critical success factors for effective risk management at KAA. Ten airport managers were targeted for the interview.

The interview guide was administered through personal interview carried out by the researcher himself which gave more room for further and extensive probing of the interviewees. The researcher was assisted by a research assistant who was charged with the responsibility of video recording of the interview and time management during the research. Secondary data for this study was obtained from the company's documented risk management strategies and company periodicals and magazines. Secondary data was also obtained through a review and analysis of the company's strategic plan on effective risk management.

3.4 Data Analysis

The data analysis was undertaken by use of qualitative techniques. The qualitative data was summarized and categorized according to common themes and presented by way of content analysis. Content analysis was used mostly to arrive at inferences through a systematic and objective identification of the specific messages.

The data obtained was also compared with existing literature in order to establish areas of agreement and disagreement in order to ascertain the facts. The use of content analysis was preferred because it allowed for both quantitative and qualitative operations and could provide valuable historical insights over time through analysis of texts.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the analysis, results and discussion of the findings of the study as per the research methodology of the study. The first objective of the study was to identify the risk management procedures used at KAA. The second objective was to determine the critical success factors in establishing the risk management procedures at KAA, while the third objective was to identify the challenges facing the implementation of risk management procedures at KAA.

The airport managers interviewed included Airport Manager JKIA, Airport Manager Kisumu Airport, Airport Manager Wilson Airport, Airport Manager Eldoret International Airport, Airport Manager Malindi Airport, and Airstrip manager, Ukunda Airstrip. The managers provided data on the critical success factors for risk management at their respective airports manned by KAA. Data obtained from the study was analyzed and presented by way of content analysis.

4.2 Bio Data of the Interviewees

The researcher captured the bio-data of the interviewees. These comprised the senior managers of Kenya Airports Authority. These were manager in charge of risk and safety management, and six airport managers thus Airport Manager JKIA, Airport Manager Kisumu Airport, Airport Manager Wilson Airport, Airport Manager Eldoret International Airport, and Airstrip Manager Ukunda. All the managers interviewed were found to hold post training in their areas of responsibility.

More than 60% of the top management team were highly experienced with a minimum experience of two years in their areas of responsibility.

4.3 Risk Management Procedures at KAA

The first objective of this study was to identify the risk management procedures used at KAA. The National Institute of Standards and Technology (NIST, 2004) to which KAA subscribes to groups the risk management procedures in three parts: risk assessment, risk mitigation and evaluation and assessment. Also, risk assessment process includes identification, evaluation of risk impact and recommendation of risk-reducing measures

Risk mitigation involves prioritizing, maintaining and implementing the appropriate risk-reducing controls for risk assessment. Lastly, evaluation and assessment emphasize the continual evaluation process and the key factors for a successful management program. Findings of the study indicate that KAA summarized their risks and attendant risk procedures into nine thematic areas upon which risk procedures were developed. The general procedures for each of these areas were to first, identify, characterize, and assess the risks, then, assess the vulnerability of critical assets to specific risks, thirdly, determine the risk for instance the expected consequences of specific types risks on the firms, and finally, identify how to reduce those risks on priority basis. The nine thematic risk areas so far identified include revenue generation, Infrastructure and facilities, security, and safety. Others include; Business process Automation, Employee productivity and Retention, Environmental sustainability, Customer Service and corporate Image, as well as Corporate governance i.e political interference.

4.3.1 Revenue and Finance Risk Procedures at KAA.

The findings indicate that the revenue and finance risks procedures had the key objective of revenue and cost management for financial stability. The key risks involved here include the fact that there is existence of rigidity of revenue inflows which are based on aeronautical only. Managers indicated that the only source of revenues for KAA was by way of aircraft landing charges and passenger sales.

So far, this traditional revenue stream of generating revenue only from passenger sales and aircraft landing charges is considered as a risk area for KAA if the recent losses running to billions are anything to go by. To mitigate these risks KAA has come up with procedures such as undertaking monthly traffic reports and the resultant revenues fetched. This is in addition to plans to build more airports such as the Greenfield Airport as a diversification strategy. Kenya Airports Authority also plans to build an airport city with all the commercial aspects of diversified revenue generation.

The second financial risk is that of dishonest concessionaires who may cook dishonest accounting books so as not to pay duty free tax. Competition from Tanzania, Kigali and Ethiopia which has new and modern airports its killing businesses meant for the Kenya airports at the same time completion from other modes of transport e.g good roads and railways take away the would be air passengers for Kenya airways thereby increasing its revenue risks. Finally, compensation by airlines which cause accidents in Kenya has been so slow. Indeed, some airlines don't even pay for the accidents they cause in Kenya which creates an addition burden to the KAA. The only procedure against this risk is to take these airlines to court or engage them out of court to settle the claims.

4.3.2 Infrastructure and Facilities procedures at KAA

To enhance the capacity of infrastructure and facilities KAA undertakes proper planning and implementation to meet traffic demand and address capacity constraints while ensuring growth and stakeholder expectations. Kenya airports were initially constructed to handle 1.5million passengers per year but as of now are handling more than 6.5 million passengers per year. Accordingly, KAA is constrained thereby operating under increased risks. Risk procedures adapted to deal with this issue are to do with expansion strategy in the number of airports as well diversified portfolio products. This calls for political goodwill because political interference has hindered and delayed expansion plans due to vested interests. The Greenfield airport city which was due for completion by 2017 and was to increase passenger handling capacity to 17 million people per year has stalled due to political interference. By 2030 airports in Kenya are projected to be handling about 21 million passengers per year as per Vision 2030 blue print.

Additional infrastructural risk includes delays in implementation of procurement, land grabbing and encroachment. A case in point is land grabbing at Syokimau. Also, there is inadequate land for expansion in Malindi. Here, the parking area for the airport has been grabbed and the case is still in court. The other risk in terms of infrastructure is that the people who are neighbours to the airport cause a security risk to the airports. A good example is that of the Kikambala hotel bombings in Mombasa. The findings also indicate that the procurement and payment bureaucratic decision making processes increases the infrastructure risks. To mitigate against these challenges KAA has come up with its own manual of security procedures in and around the airports.

The court cases to have squatters and informal settlements kept away from the airports landing and freights paths take a long time to settle and at times delayed unnecessarily using corrupt court personnel.

4.3.3 Security Management Procedures at KAA

The main objective of maintaining security procedures was to enhance security at all airports as per the national aviation security programmes and ICAO security provisions. The threat of terrorism, armed hostages and jacking at passenger terminals, attacks on aircraft landings and takeoffs as well as sneaking in of dangerous items were found to increase insecurity. The KAA has adapted training of personnel in specific security areas as a means of mitigating risks associated with insecurity at the airports.

The study findings also found out that there were risks of aircrafts from airports where prior passenger and cargo screening is not observed at take-off. To mitigate these risks, screening procedures have been put in place at the point of disembarkments from the planes. The theft of security documents eg CCTV cameras at the airside and land sites have also been at the increase at KAA. Extra vigilant procedures have been put in place to counter this. High pilferage of the cargo has also been reported as a risk at KAA .As a security procedure, tight controls have been put in place to reduce this pilferage. Finally, the informal settlements around the airports such as Mukuru and Sinai pose a really al shabaab strike danger to our aircrafts. So far, procedures on demolition and court cases have been put in place to counter this.

4.3.4 Safety Management Procedures at KAA

The fourth thematic area in the study was found to be safety. Safety procedures had the main objective of enhancing safety in all airports so as to meet the national aerodromes requirements.

Risks associated with this include aircraft accidents, power failure in the runway, natural disasters as well as bird strikes. This is in addition to fire at the airside and the land side like what happened the other day when part of JKIA was burnt down. To mitigate against this safety risks KAA has resolved to train personnel on the international aerodromes safety requirements.

4.3.5 Business Process Automation Procedures at KAA

The business process automation procedures were found to have the main objective of use of ICT to facilitate operational efficiency so as to enhance profitability and financial viability and sustainability. The risks associated with these procedures include unavailable automated systems to support the business as well as failure to align ICT to business objectives, thus the change from analogue to digital.

There is also the idea of unauthorised access to ICT systems, lack of monitoring tools for implementation of strategic plans as well as inadequate business continuity plans or migration. The study findings indicate that KAA has come up with various procedures. On these the firm is moving from analogue to digital. It is in the process of developing some continuity plans or migrations to reduce business automation security risks.

4.3.6 Employee productivity and Retention procedures at KAA

The findings indicate that this thematic area has several objectives. These include enhancement of staff capacity and welfare levels. The other objectives were to automate human resource processes and develop career and succession planning. This is in addition to implementation of performance management systems and gender and disability programmes or equity as per the constitution of Kenya. Risks associated with this were found to be poor internal communicational processes, failure to realise benefits from trained staff, inappropriate change management programmes as well as a robust performance system in the authority. This is in addition to inadequate succession planning .The key challenge here has been employee demand by other firms which keep on poaching KAA staff by offering them better remuneration. The Authority has adapted procedures such as strategic planning and enhanced compensation schemes for the staffs.

4.3.7 Environmental sustainability procedures at KAA

The findings of this study indicate that the main objective of this thematic area was to ensure implementation of green initiatives in compliance with international and the local environmental requirements. The risks in this area were found to be inadequate water and electricity resources, pollution and poor disposal waste, and lack of land for afforestation.

4.3.8 Customer service and Corporate Image Procedures at KAA

The study findings indicate that the main objective of this thematic area is to strengthen customer service delivery mechanism and enhance corporate image of the authority.

The risks here were found to be brand erosion by media misrepresentation and reputational risks of KAA based on third parties for example the Kamlesh Pattin issue. There is also lack of control of government agents eg police and immigration .Given that this group have different mandates they are likely not to be directly answerable to KAA. While a clear legislative Act is required to address matter of protocol KAA has gone an extra mile of holding stakeholder meeting as a procedure to deal with risks. The Authority has put up procedures to deal with this issue by establishing PR and media briefing on a weekly basis to put their records straight.

4.3.9 Corporate Governance and Political Interference

From the findings political interference was found to have the greatest influence on risk management procedures developed at KAA. Decisions on the appointments of the CEOs were found to be politically driven even the board of directors was found to be a political outfit. This may have had the least business and leadership drive as they attempt to please their appointment officer.

The CEO of KAA is appointed on a three year contract renewable once. This time period is too short to implement the five year strategic plans in place. The CEO is appointed on the basis of political considerations as opposed to meritocracy. Even in terms of employee upward mobility, politics rather than merit and structure is followed. The challenge here then is for Parliament to enact legislation which gives KAA some leeway in the appointment of the CEO as well as the security of tenure.

4.4. Critical Success Factors in implementing Risk Management procedures

The second objective of this study was to determine the critical success factors in establishing the risk management procedures at KAA.

From the study findings various critical success factors were found to have a great contribution in establishing effective risk management procedures at KAA. These include leadership and commitment, communication, organizational structure and culture. The other critical success factors include infrastructure and airport facilities, training and technology, among others

4.4.1 Communication as a Critical Success Factor

Effective communication is critical in aligning firm strategy with risk management procedures. It is also necessary in ensuring that all employees are reading from the same script in issue of risk management procedures. Effective communication makes possible for organizational roles and objectives on risk management to be clearly communicated to the members of staff as well as the outside world.

The findings indicate that KAA has a well established communication system right from the office into the aircraft, during landing and takeoff as well as passenger updates. Any changes which are required are communicated both horizontally and vertically within the firm. Effective communication at JKIA was found to increase employee productivity and retention procedures. At the same time communication of HR practises as well as change management programmes were found to be adequately used at JKIA.

4.4.2 Infrastructure and Airport facilities as Critical Success Factors

The findings indicate that effective risk management procedures are only possible if the infrastructure and airport facilities are adequate in good shape. The people who are in charge of those facilities should also have the necessary training and experience.

Kenya Airports Authority has facilities for effective communication and for employee comfort, safety and security which are meant to increase employee productivity and retention. The facilities at the airport were found to be inadequate to ensure comprehensive development of risk management procedures. While the airport originally designed to handle 1.5 million passengers per year is now handling 6.5 million passengers per year and projected to handle close to 21 million passengers in 2030. At this pace it will be difficult to effectively come up with an elaborate infrastructure and facilities which will form the basis for effective risk management risk procedures.

4.4.3 Technology as a Critical Success Factor

Technological advancement is now a local driver of the economics of nations and firms. The use of advanced ICT not only reduces the cost of doing business but also makes available products of quality and value to customers across continents. From the findings, KAA is in the process of automation of its duty-free system to cash in on dishonest concessionaires.

At the same time technology was found to have been used in the acquisition of the modern aircraft by Kenya airways. The use of advanced technology eg CCTV cameras around the airport at JKIA has gone a long way in boosting the security management procedure at Kenya airports. Business process automation risk management procedure was also found to be possible by use of advanced ICT.

4.4.4 Training as a Critical Success Factor

Staff training is necessary component in an organisational work life. This is because skills attained after training compliments staff experience.

This is necessary in the establishment of risk management procedures at the work place. The findings indicate that KAA sponsors her staff for relevant training in almost all the areas which require establishment of risk management procedures. It was found out that 90% of the staff at the JKIA is professionally trained. It is apparent therefore that it is the training together with the experience which has been utilised to boost security management procedures at KAA. Training of staff has also been instrumental in the establishment of technology risk management procedures.

4.4.5 Leadership and commitment as a Critical Success Factor

Leadership and commitment was found to have the greatest impact on the establishment of risk management procedures at KAA. All the policy guidelines on the aspects of technology infrastructure security and safety risk management procedures are formulated and implemented by the top management of the organisation. This is in addition to effective leadership management of revenue and finance risk management procedure at KAA. The study findings indicate that leadership at KAA plays a key role in handling competition through diversification strategies as a risk mitigation factor.

The style of leadership also determines the nature of risk management procedures to be established at KAA. The findings indicate that KAA is missing out on certain aspects of transformational leadership which is key to successful implementation of risk management procedures.

4.4.6 Organization structure and culture as a critical success Factor

The study findings indicate that organisation structure and culture play a pivotal role in the establishment of the risk management procedures at KAA.

The organisation structure at KAA was found to be centralised thereby enabling the firm not only to utilise large economies of scale but also to give standardised directives to the branches of risk management procedures. The organisation culture at KAA was also found to be one whereby the firm is a learning organisation whereby employees constantly learn and adapt environmental turbulence. Employees therefore constantly changes the risk management procedures in areas of technology, revenue management and safety risk management procedures, as and when environmental situations demand.

4.5 Challenges facing the implementation of risk management procedures

The third objective was to identify the challenges facing the implementation of risk management procedures at KAA. Implementation of effective risk management procedures ensures that the airline is secure, safe, and operationally efficient in transport and communication to all the users. It provides upward assurance from business activities. Risk management procedures support strategic and business planning and effective use of resources thereby promoting continuous improvement. The study findings identified various challenges facing implementation of the risk management procedures above.

4.5.1 Challenges of Implementation of Revenue and Finance Risk Procedures

Kenya Airports Authority faces challenges of not only raising revenue streams to levels of stability but also handling other competitors who have diversified investments thereby increasing their financial stability. At the same time to invest in diversification of products and service requires external funding of more than ksh 80 billion.

The bureaucratic red tape required to receive external funding is so enormous. The government of Kenya is unable to undertake such investments and KAA must rely on external funding, the strings attached notwithstanding.

To deal with dishonest concessionaires, the challenge for KAA is to invest more in automation. As a procedure KAA is automating its systems to beat such cartels. However, KAA does not have adequate funds to effectively invest on the same. Kenya airports Authority faces the challenge of clear marketing strategies on airline competition. As a procedure KAA is planning to diversify into low cost planes and expansion overseas so as to take competition to the competitors' home turf and on the process increase productivity. However, this also creates the implementation challenge at KAA.

4.5.2 Challenges of implementation of Infrastructure and Facilities procedures

The study findings indicate an ever increasing demand for more facilities at the airports. Kenya airports which were initially constructed to handle 1.5million passengers per year are now handling more than 6.5 million passengers per year. Risk procedures adapted to deal with this issue are to do with expansion strategy in the number of airports as well diversified portfolio products. This calls for political goodwill because political interference has hindered and delayed expansion plans due to vested interests. Challenges of land grabbing, squatter encroachment risks on airport land, and the high prices of land around the airport face implementation of risk management procedures at KAA. On land grabbing and inadequacy, KAA requires proper legislation.

4.5.3 Challenges of implementation of security and safety Procedures at KAA

The KAA faces the challenge of implementation of implementing security procedures to deal with sophisticated security issues. The firm faces financial challenges of putting advanced security and internal human surveillance procedures. Again, there are coordination challenges between the KAA security and the police security commands occasioned by unclear protocol concerns.

4.5.4 Challenges of implementation of Business process Automation Procedures

The challenge of implementation of business automation procedures lies in getting adequate financing to fast track digitalization of the airports. There is also the challenge of establishing good will and fool proof procedures on accessibility of sensitive ICT networks at the airports. The KAA was found to face the challenge of unavailable appropriate security technological hardware and software particularly in the local market

4.5.5 Challenges of implementation of Employee productivity and Retention procedures

The findings of the study indicate that KAA faces financial and leadership challenges to implement performance management. There is also senior employee disorientation in the implementation of the gender disability persons equity rule at the ports. This calls for goodwill, top management support and employee sensitization, all of which are a major challenge.

4.5.6 Challenges of implementation of Environmental sustainability procedures

The findings of this study indicate that the main challenge for KAA on implementation of environmental sustainability is the lack of the legal capacity to manage disposal wastage and acquire land as a business entity. However as part of their programmes to address some of these shortfalls, KAA has drilled several boreholes and is planning to introduce wind power as a source of green power at the Greenfield airport. All these require additional funding for KAA. Hence, provision of stable power and water remains a major challenge to KAA.

4.5.7 Challenges of implementation of Customer service and corporate image Procedures

The study findings indicate that KAA faced the challenge of enhancing corporate image of the authority due to brand erosion by media misrepresentation and reputational risks of KAA based on third parties. The lack of control of government agents eg police and immigration was found to be a major challenge. Given that this group have different mandates to restructure them to take guidance from one superior was a big task.

4.5.8 Challenges of implementation of corporate governance and Political Interference

The KAA was found to face the challenge of political interference in the appointment of the CEO and the Board. The fact that the CEO's appointing authority was political KAA found it strategically balance between the interests of a CEO only serving three year terms and the implementation of the firm's mandates as envisaged in its five year strategic plan.

From the findings political interference was found to have the greatest influence on risk management procedures developed at KAA. Decisions on the appointments of the CEOs were found to be politically driven even the board of directors was found to be a political outfit. This may have had the least business and leadership drive as they attempt to please their appointment officer.

4.6 Discussion

The findings of the study identified several risk management procedures at KAA. KAA was found to have adopted the risk management procedures as spelt out in the provisions of the literature covering The National Institute of Standards and Technology (NIST, 2004) and the International Civil Aviation Organization (ICAO) standards. The NIST has specific procedure requirements on risk assessment, risk mitigation and evaluation and assessment. The only variance from the NIST procedures is the fact that KAA has localized the NIST procedures into nine thematic areas identified under subsection 4.3, above. The risk management procedures adopted by KAA were also found to be in agreement with procedures identified in the literature of Conrow (2003) who identified the following procedural 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.

From the study findings it is evident that KAA utilizes both the tangible and the intangible assets at its disposal as critical success factors to implement risk management procedures.

The most critical of all these factors was found to be leadership and management. At the same time the interviewees also pointed out other critical success factors including the use of effective communication, an effective culture and structure as well as utilization of modern technology in safety and risk management. These findings are consistent with the literature on the Dynamic Capabilities Theory (Teece, 2007). Even though the KAA utilizes the internal capabilities for implementation of risk management procedures; this Theory utilizes the intangible and tangible resources of the firm to create a sustainable competitive advantage in the face of environmental turbulence. The study findings also agree with the literature of Barney (1991) on the use of the Resource Based Theory. In this case, the resource-based view or theory of the firm (RBV) is usually utilized by firms as the basis for the competitive edge creation. To create a competitive advantage, the firm configures a combination of resources available in an ever changing environment.

The findings of the study also point out legislative hiccups, financial inadequacies, and political interference as some of the challenges facing implementation of risk management procedures. These findings also agree with the literature of Ghani (2010) and Liu (2007) who though not talking directly on the challenge of leadership and commitment as a necessity in strategy implementation, capture organizational learning in effective risk management procedures. They point out that 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.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the summary of the study findings. It also highlights the conclusion arising from the study. The chapter brings out the recommendations together with the limitations of the study. This is in addition to the suggested areas for further study

5.2 Summary

The study findings point out that KAA has to a large extent put in place risk management procedures in accordance with the provisions of The National Institute of Standards and Technology (NIST, 2004) and the International Civil Aviation Organization (ICAO) standards to which KAA is a member. As per the provisions of these organizations, KAA reviews the risk management procedures in three parts: risk assessment, risk mitigation and evaluation and assessment.

Under risk assessment processes, KAA identifies, evaluates the risk impact and recommends risk reducing measures. In terms of risk mitigation, the Authority prioritizes, maintains and implements the appropriate risk reducing controls for risk assessment. Lastly, under evaluation and assessment, KAA emphasizes the continual evaluation process and key factors for a successful management program.

In an attempt to customize the International standards to fit the local business environment, KAA has summarized their risks and subsequent risk management procedures into nine themes.

The general risk management procedures for each of these thematic categories include: first; identification, characterization, and assessment of the risks, and then, assessment of the vulnerability of critical assets to specific risks. The third procedure is the determination of the risk for example the expected consequences of specific types of risks on the firm, and finally, identification of how to reduce those risks on priority basis. From the findings, the nine thematic risk areas and their subsequent risk management procedures so far identified include revenue generation risks, Infrastructure and facilities risks, security risks, and safety risks. The findings also identified Business process Automation, Employee productivity and Retention, Environmental sustainability, Customer Service and corporate Image, as well as corporate governance and Political interference as the other risk areas with respective risk management procedures.

The findings also identified various critical success factors in required to establish the risk management procedures at KAA. Leadership and commitment, communication, organizational structure and culture were seen as the key factors. The other critical success factors include infrastructure and airport facilities, training and technology. KAA was found to have utilized digital e-communications extensively on matters of risk management procedures. Also, KAA risk procedures are communicated both horizontally and vertically within the firm. Effective communication at JKIA was found to increase employee productivity and retention procedures.

At the same time communication of HR practises as well as change management programmes on risks were found to be adequately used at JKIA. As a critical success factor ICT usage was found to reduce the cost of doing business thereby increasing revenues and making risk management products of quality and value to customers.

From the findings, KAA is on the process of automation of its duty-free system and install more CCTV cameras around the airports. Facilities such as land for expansion and landing bays and lounges were found to be inadequate at KAA to ensure comprehensive development of risk management procedures. While the airport originally designed to handle 1.5 million passengers per year is now handling 6.5 million passengers per year and projected to handle close to 21 million passengers in 2030. Leadership and commitment as a success factor was found to greatly influence all the risk management formulation and implementation procedures at KAA.

The study findings pointed out various challenges facing the implementation of risk management procedures. The challenge of appointing a board of directors and a CEO competitively and without political interference was found to greatly impact the performance of KAA. Political appointees with only three year tenure were found to apparently work under anxiety and duress and on the process lack the desired concentration to deliver on the five year plan of the firm. Lack of adequate land for expansion coupled with airport land grabbing and inadequate finances aggravate KAA's capacity and capability to effectively implement risk management procedures. In addition, the lack of appropriate business process automation systems and related technologies poses great challenges for KAA. The other challenges posed included, rising international terrorism, inadequate facilities and infrastructure, and the safety and security of aircraft and passengers enroute various destinations not within the jurisdiction of the KAA and Kenya government jurisdiction

5.3 Conclusion

At a time like now when international terrorism, and air and airports accidents are on an upward trend the world over in general and Kenya in particular.

KAA requires to intensify its efforts in establishing fool proof risk management procedures in all its thematic areas. A general strategic review of its critical success factors is desirable. More specifically, strategic leadership and commitment which was found to have the greatest impact in risk management procedures requires a total overhaul not only at KAA, but also in all other state owned parastatals in Kenya.

The fact that the chief executive officer and the Board are political appointees only in office for three years makes them vulnerable to political rather than company interests. This is because three years is such short time for the CEO and the Board to celebrate their appointments, receive orientation, settle down, implement the current strategic plan, and plan ahead for the firm. At the end of it all the CEO is likely to operate under the clock of anxiety for consideration for the next three year tenure. In the process, such executive will probably please the powers that be and inadequately invest more of his energies towards attainment of organizational goals.

The findings also point out that land or space for expansion is not only inadequate for KAA, but whichever little land at its disposal has been grabbed by some crooked Kenyans. This is in addition to the security risks posed by un policed informal settlements surrounding the KAA facilities, thereby compounding overall security and safety of Kenya's airports.

5.4 Implication on Policy and Practice

Due to increased insecurity arising from international terrorism, the government should ensure strict adherence to risk management procedures in all its airports. Also, increased informal settlements around the Kenyan airports pose safety challenges.

This is in addition to the security challenges faced. Accordingly, the government should move fast and clear these informal settlements.

Critical success factors should also be identified and addressed. The government should come up with legislation on land acquisition for airport facilities as well as fast track provision of finance for expansion of the airports.

The legislation on the selection and appointment of Parastatal chiefs requires to be streamlined especially on the tenure of office of a Chief Executive Officer and his Board. A term of say six to seven years will be relatively long enough for the Executive to formulate and implement the strategic deliverables of the firm. The KAA should embrace the concepts of strategic leadership, good corporate governance as well as competitive ICT for sustainability and superior performance.

5.5 Limitations of the Study

Some of the managers interviewed while responding to the interview expressed fears in disclosing some crucial information on the study. Finance, political and security and safety procedures were found to be sensitive issues for discussion. It is possible therefore, that the data provided was inconclusive.

At the same time, this study was a case study on the critical success factors in establishing risk management procedures at KAA. Clearly, the applicability and generalizability of these study findings will be only limited to KAA, otherwise researches related to other Airport Authorities need to be carried out to enlighten relevant application in the aviation industry.

5.6 Areas for Further Research

Kenya airports are some of the airports surrounded by several security threatening informal settlements in Africa. A further study should be done to establish the security challenges posed by informal settlements to Airports in Kenya.

A study to establish the major political challenges facing risk management at airports and strategic responses to the same, should also, be done. The other area of further research could be the application of diversification strategy as a mitigation measure against revenue risks facing KAA.

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APPENDICES

Appendix I: Interview Guide on Critical Success Factors for Effective Risk Management at KAA

Section A: Bio-Data of the Respondents

1. (i) Position/Title
- (ii) Period in Position.....
- (iii) Educational and Professional Qualifications.....

Section B: Risk Management Procedures at KAA

2 In Relation to Culture;

- (a) Which procedures have you put in place to instill a safety culture from the top management down whereby reporting of safety hazards and occurrences is encouraged, with the intention of learning from these events and discussing solutions?
- b) To what extent have you implemented these procedures and with what results?

3. In relation to Technology, systems and equipment ICAO safety procedures-;

- a) To what extent have you implemented the following and with what results?
 - i) New lighting systems safety procedures?
 - ii) Precision approach and landing systems?
 - iii) A change from Radio-frequency guidance (ILS), to satellite Navigation?
 - iv) Surface movement radar security procedures?
 - v) Visual docking guidance systems for aircraft Parking?
 - vi) Automated meteorological systems?
 - Vii) Firefighting equipment, as well as other systems and procedures designed for Emergency situations e.g airfield emergency services and regular exercises designed to test emergency Procedures?
 - iix) advanced surface movement guidance and control systems (A-SMGCS)
Adoption for aircraft position determination and systems visual clearance to Pilots, for example through suitable taxiway lighting and stop bars?

4. In relation to Safety management systems; to what extent have you implemented the following and with what results?

- i) State regulatory oversight, and national civil aviation authority's rules and regulations to monitor airports and certificate airport operators?

- ii) Having an aerodrome manual, which sets out all the equipment and procedures in use at that airport?
- iii) Being certificated and having have a documented safety management system that replaces older notion of reliance on periodic safety audits?
- iv) Having a safety committee involving all the companies and organizations operating on each part of the airfield including, runways, taxiways and aprons to effectively deal with issues such as the prevention of runway incursions?
- v) Physical measures to reduce risk, especially at hot-spots on the airfield, changes in layout and procedures and the provision of perimeter taxiways?

5. In relation to **Safety guidance material**; to what extent have you implemented the following and with what results?

- i) Developed Industry guidance material on the elimination or reduction of major risks such as runway incursions, excursions and confusion?
- ii) Developed physical and procedural and training solutions to reduce risk?

6. In relation to Training to what extent have you implemented the following and with what results?

- i) Use of Airports Council International in active training in Various aspects of safety on airports e.g in ACI Global Safety Network courses
- ii) developed a number of safety-related handbooks for airports e.g on Aerodrome Wildlife Management and Bird, Hazard Prevention Airside Safety?

7. Which other safety procedures have you put in place in relation to; dealing with Aerodrome Design and Operations i.e. standards and recommended practices for Aerodrome physical characteristics, obstacle restrictions, visual aids, electrical systems, aerodrome services and maintenance?

8. What have you and are you looking forward to provide in excess of the ICAO Standard and in accordance with the ICAO recommended practice?

9. Which specific challenges do you face as a department or organization to effectively implement risk management procedures in your endeavor to make the ensure the safety of our airports?

9. In all the above mentioned risk management procedures, which specific improvements are desired to increase the security at our airports?

Section C: Critical Success Factors at KAA

10. a) In relation to Leadership and Commitment ; which critical aspects or core competencies does your firm or department have in the implementation of effective risk management procedures?

b) In your opinion, which gaps require to be filled so as to create new knowledge in the way of leadership and commitment of your firm to effectively manage risk procedures?

11. a) In relation to Communication; which critical aspects or core competencies does your firm or department have in the implementation of effective risk management procedures?

b) In your opinion, which gaps require to be filled so as to create new knowledge in the way of leadership and commitment of your firm to effectively manage risk procedures?

12. a) In relation to organizational structure and culture; which critical aspects or core competencies does your firm or department have in the implementation of effective risk management procedures?

b) In your opinion, which gap requires to be filled so as to create new knowledge in the way of leadership and commitment of your firm to effectively manage risk procedures?

13. a) In relation to Infrastructure and airport facilities; which critical aspects or core competencies does your firm or department have in the implementation of effective risk management procedures?

b) In your opinion, which gaps require to be filled so as to create new knowledge in the way of leadership and commitment of your firm to effectively manage risk procedures?

14. a) In relation to Training; which critical aspects or core competencies does your firm or department have in the implementation of effective risk management procedures?

b) In your opinion, which gaps require to be filled so as to create new knowledge in the way of leadership and commitment of your firm to effectively manage risk procedures?

15. a) In relation to Technology; which critical aspects or core competencies does your firm or department have in the implementation of effective risk management procedures?

b) In your opinion, which gaps require to be filled so as to create new knowledge in the way of leadership and commitment of your firm to effectively manage risk procedures?

Section D: Challenges faced in the implementation of risk management Procedures at KAA

16 a) which challenges are you facing in the implementation of revenue and finance risk management procedures at KAA?

b) What about the challenges of implementation of infrastructure and facilities procedures?

c) Which challenges are you facing in the implementation of business process automation management procedures at KAA?

d) What about the challenges of implementation of employee retention and productivity management procedures?

e) Which challenges are you facing in the implementation of security and safety management procedures?

f) Can you explain the challenges you are facing in the implementation of environmental sustainability management procedures?

g) What about the challenges of implementation of corporate governance and political interference procedures?

Thank you for committing your variable time for the interview.

APPENDIX II: LETTER OF INTRODUCTION