

# EFFECT OF RISK MANAGEMENT STRATEGIES ON FINANCIAL PERFORMANCE OF JOMO KENYATTA INTERNATIONAL AIRPORT

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**Abstract:** Over the past three decades, risk management strategies have been an integral part for business continuity in many profit-oriented organizations. To achieve financial sustainability and increase profitability Organizations are obligated to review risks and plan for addressing, or mitigating, each of those risks to an acceptable level. In some cases, risks are accepted as is; in other cases, risks are transferred, and in still other cases, risks are minimized to a level acceptable to the organization. The impact of risk on the business environment deals with the level of understanding of cause effect relationships. The impact of a given state of events may cause uncertainty for a firm or business environment. By incorporating risk management into airport operations, JKIA is better equipped to exploit its resources; thereby enabling the organization to transform an expenditure activity into one that can yield a positive return. A risk management strategy is about achieving corporate goals. For many aviation organizations, dual goals exist such as the social and economic perspectives. The general objective of this study was to analyze the effect of risk management strategies on financial performance of JKIA. The study was guided by the following specific objectives: to find out the effect of risk reduction strategy on financial performance of Jomo Kenyatta International Airport, to investigate the effect of risk mitigation strategy on financial performance of Jomo Kenyatta International Airport, to determine the effect of risk assessment strategy on financial performance of Jomo Kenyatta International Airport and finally to establish the effect of risk transfer strategy on financial performance of Jomo Kenyatta International Airport. The study was based on portfolio theory, Stakeholder theory, Agency theory and Profit maximizing and competition-based theory. A descriptive research design was adopted. The target population of this study comprised of 400 respondents across all the departments and staff ranging from senior managers to junior staff attached at JKIA. Yamane's formula (1967) was employed to determine the sample size to 120 staff members. Questionnaires were administered randomly to a sample of 120 respondents across the departments in the organization after a pilot study involving ten heads of sections in JKIA. The statistical package for social sciences, SPSS (version 24.0) was used for data analysis. Both descriptive statistics and inferential statistics were used to analyze the quantitative data. Stratified simple random sampling procedure will be used. Pearson's correlation analysis was used to explore the relationships among the variables. This study established that risk reduction strategy significantly and positively influences financial performance of Jomo Kenyatta International Airport. The study also established that risk mitigation strategy was major and a positive influence on the financial performance of Jomo Kenyatta International Airport. The study further established that risk assessment strategy had a significant and positive impact on the financial performance of Jomo Kenyatta International Airport. Risk monitoring had significant and a positive effect on financial performance of Jomo Kenyatta International Airport as established in the study.

**Keywords:** risk reduction strategy, risk mitigation strategy, risk assessment strategy and risk avoidance strategy.

## 1. INTRODUCTION

### 1.1 Background of the study

Risk management strategy has emerged as a new paradigm for managing the portfolio of risks that face organizations, and policy makers continue to focus on mechanisms to improve corporate governance and risk management. Approaches such as strategic management and risk management are being adjusted to these new paradigms (Rahnamaye et al, 2011). Risk can be seen as the possibility of economic or financial losses or gains, as a consequence of the uncertainty associated with pursuing a course of action (Richards & Manfredi, 2007). Developing scientific risk attitude towards risk management and introducing the processes and techniques thoroughly and scientifically will lead to systematic codification and application of risk management strategies in companies (Sheikh & Sobhiye, 2012). According to (Nyangah, 2014) RM strategies has been developed and adopted in a lot of fields, such as environment, healthcare, public safety, and within enterprise management. Aviation industry not exceptional require the adoption of a risk management strategy and methodology, because they lack adequate resources to respond promptly to internal and external threats, leading to potentially huge losses that seriously threaten their survival (Vargas-Hernandez, 2011) Recognition of risk management as a separate managerial function entails many advantages and the inclusion of risk management as a strategy in the general management function helps to enhance a firm's value (Suranarayana, 2003), stakeholders' confidence as well as provider platform for ensuring that duty of loyalty by managers exist and that managers will efficiently and effectively strive to maximize the performance (Kihumba, 1999). The current background of business is exemplified by the many turbulences and cutthroat competitive forces. These turbulence and competition are said to be triggered by a change in technology, globalization, increasing demands from customers and uncertainties which are at level high enough to make management of organizations more challenging than previous times (Sammy, Iravo, & Omwenga, 2016)

### 1.2 Statement of the Problem

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. Air transport has been in operational for the past three decades, and the sector has been rapidly evolving, However setbacks have been on the rise in terms of:-Terror attacks, Customer Dissatisfaction, Safety and security concerns, and Competition within the aviation industry, this in the long run has resulted in to a decline in the number of passengers, decline in revenue and overall poor financial performance of the industry. The sector especially in Kenya has experienced loss in market share and increase in operation cost in relation to revenue and total customer experience compared to other African airports ACI survey (2015). Aviation industry being global in nature, passengers are becoming more tolerant, stylish and challenging with regard to the service they receive and therefore customer focus must be the primary concern of airports. A combination of strategic approaches therefore, needs to be adopted to revamp the performance of the industry and restore the lost glory, Awino,(2011). The impact of risk on the business environment deals with the level of understanding of cause effect relationship. The impact of a given state of events may cause uncertainty for a firm, industry or the general business environment. By incorporating risk management into JKIA's operations, the aviation sector are better equipped to exploit their resources, thereby enabling their organizations to transform an expenditure activity into an positive return activity (Charles, & Omwenga, 2018).

In a few decades now the aviation sector saw variety of risk management policy guidelines and strategic risk management strategies. Recent policy documents, including the Economic Recovery Strategy for Wealth and Employment Creation (Kenya 2003) and the Kenya Vision 2030 (Kenya 2008), have reiterated the country's commitment to expand aviation risk as part of Kenya's overall development strategy. Uncertainties are issues that arise in every establishment. The measure of uncertainty an organization is prepared to take on is a challenge the management of that organization must deal with as it endeavors to build stakeholder value (Kululunga & Kuotcha, 2010). Uncertainty tables both risks and opportunities, with the potential of either destroying or increasing value. Risk management strategy allows management to single out, assess, and manage risks despite the uncertainties and is essential to creating and preserving value (Kenya Airports Authority Enterprise Risk Management Policy and Framework (ERMPF), 2011). Several studies relating to risk mitigation have previously been conducted in Kenya, for instance Kagwathi, et al (2014) conducted a study on Risks

Faced and Mitigation Strategies Employed by Small and Medium Enterprises in Nairobi, A study conducted on Risk Management Practices and Project Performance at KAA by Mutunga & Ondara (2021) came up with the findings that risk identification, risk reporting, risk analysis and risk control contributes significantly to project performance at KAA. Another study conducted by Ayiekoh (2006) on Kenyan Banking Industry, associated Risks and Mitigation Strategies found out that Banks in Kenya employs record management, credit management, insurance, partnerships and mergers, due diligence and macroeconomic forecasting as strategies to mitigate risks. A research conducted by Agoi, (2013) on Critical Success Factors And Risk Management Procedures At Kenya Airports Authority Found out that KAA has not exhaustively adopted the requisite risk Management strategies as stipulated 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 and require to intensify its efforts in establishing a full proof risk management procedures. Other studies done by Chopra (2003), on the implementation of enterprise risk management applied in research project in Texas State Government. Chow, (2007) on developing a methodology in aviation risk management based on sustainability in America, the identification and Leidecker and Bruno, (1984), usage of critical success factors in long range planning both did found out that aviation risk management strategies need to be reformulated frequently owing to the dynamic nature of risks and hazards (Jajac et al, 2013) asserts that organizations in Kenya which have been successful in practical implementation of risk management strategy are still in a small minority which does not exceed 25% according to the most optimistic reports. Despite these studies focusing on roads, offices, projects, and hospitality, banking institutions and tourism among others, none has focused on the relationship between risk management strategies and the financial performance in the context of aviation sector with much emphasis in JKIA.

According to Republic of Kenya Handbook, 2007 it is noted that despite public sector reforms, government Parastatals has not fully met the expectation of the users: Unmet targets, poor quality service, customer complaints, inefficiencies in service delivery, and bureaucratic tendencies are still a challenge. Bad image across the global arena (Republic of Kenya: Evaluation of performance 2007). However, many activities have failed to achieve success due to increased risk and uncertainty. These studies were however largely done in setting of countries different from Kenya. Therefore, from the distinct background differences of countries such outcomes cannot be appropriate to Kenya. This has created a shortage in empirical evidence and studies on the local scene. It was again on the background of the above worrying trends that this study carried out a comprehensive study seeking to examine effects of strategic risk management strategy on financial performance of JKIA and spillover effects to economy at large and shed new light to the Government and other stakeholders on how effective risk management strategy can turn around financial performance.

### 1.3 Objectives of the study

- i. To find out the effect of risk reduction strategy on financial performance of Jomo Kenyatta International Airport
- ii. To investigate the effect of risk mitigation strategy on financial performance of Jomo Kenyatta International Airport
- iii. To determine the effect of risk assessment strategy on financial performance of Jomo Kenyatta International Airport
- iv. To establish the effect of risk avoidance strategy on financial performance of Jomo Kenyatta International Airport

### 1.4 Research Questions

The study was guided by the following research questions;

- i. To what extend does risk reduction strategy affect the financial performance of JKIA
- ii. To what extend does risk mitigation strategy affect the financial performance of JKIA
- iii. To what extend does risk assessment strategy affect the financial performance of JKIA
- iv. How does risk avoidance strategy affect the financial performance of JKIA

### 1.5 Scope of the Study

This study was centered at JKIA. Further KAA as a policy and decision-making organ will also be covered. The studies was restricted only to the four study variables namely; risk reduction strategy; risk mitigation strategy; risk assessment

strategy and risk avoidance strategy. The main reason for focusing on JKIA is that it is the largest aviation facility in Kenya, the busiest in East Africa and acts as a pace setter for other airports in the region. It operates under the current hyper-competitive era where liberalization has fundamentally altered competitive landscapes for the aviation industry. There was an urgent need to carry out a comprehensive study in this area to enable the management to continuously evaluate Risk management strategy and refine actions towards optimum financial soundness in JKIA.

## 2. LITERATURE REVIEW

### 2.1 Theoretical review

#### 2.1.1 Portfolio Theory

Harry Markowitz first developed the basis of portfolio theory in 1959. The rationale behind the portfolio theory is based on the adage 'do not put all your eggs in one basket'. This explains the risk-reducing effect of spreading investment and risks across a range of assets and other organizations to assist in bearing the losses, that in a portfolio unexpected bad news concerning one company will be compensated for to some extent by an expected good news about another. Markowitz (1959) has given the tools for identifying portfolios that give the highest return for a particular level of risk. The management can then select the optimum risk-return trade-off for themselves depending on the of personal risk aversion. These portfolios of different proportions satisfy a particular level of organizational risk tolerance. According to the portfolio theory there is a risk-reducing effect of spreading operations across a range of service providers rather than running a single operation.

#### 2.1.2 Stakeholder Theory

Stakeholder theory was developed by Freeman (2005) as an instrument for business management but has since evolved into a grounded theory that is sufficient in explaining risk management. The focus of this theory is the determinant of corporate policy and its influence on the balance of stakeholder interests. Clarkson (1995) suggested that the firm is a system, where there are stakeholders and the purpose of the organization is to generate profit and create wealth for its stakeholders. Freeman (1984) contends that the network of relationships with many groups can affect decision making processes as stakeholder theory is concerned with the nature of these relationships in terms of both processes and results for the firm and its stakeholders.

#### 2.1.3 Agency Theory

Agency theory extends the analysis of the firm to include separation of ownership and control, and managerial motivation. Theory also elaborates differences on interest between shareholders, management, and debt holders due to variance in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value projects (Mayers and Smith, 1987). Stulz (1995) proposed a reason for the managers of a firm to be interested in taking part in risk management. He stresses that managers are presumed to be working on behalf of the owners of the firm and hence they have a responsibility to play in the firm's expected profits and resource allocation. They have to align themselves to risk avoidance strategies as much as possible to maximize profit and lessen returns variability. Executive incentive factors in implementation of corporate risk management have been empirically explored in a few studies with a negative effect (Faff and Nguyen, 2002; MacCrimmon and Wehrung, 1990; Geczy et al., 1997). Agency theory gives a firm analysis to perform detachment of rights of ownership and control, as well as managerial motivation. In Corporate risk management, agency issues have been revealed to manipulate managerial attitudes toward risk acceptance and transfer (Smith and Stulz, 1995). This had a positive effect on the firms profit value (Fite and Pfleiderer, 2001).

### 2.2 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of inquiry and used to structure a subsequent presentation (Reichel and Ramey, 1987). It will be conceptualized within the dependent-independent variable components and their indicators. Figure 2.3 below shows a diagrammatic representation of the relationship between the dependent and independent variables.

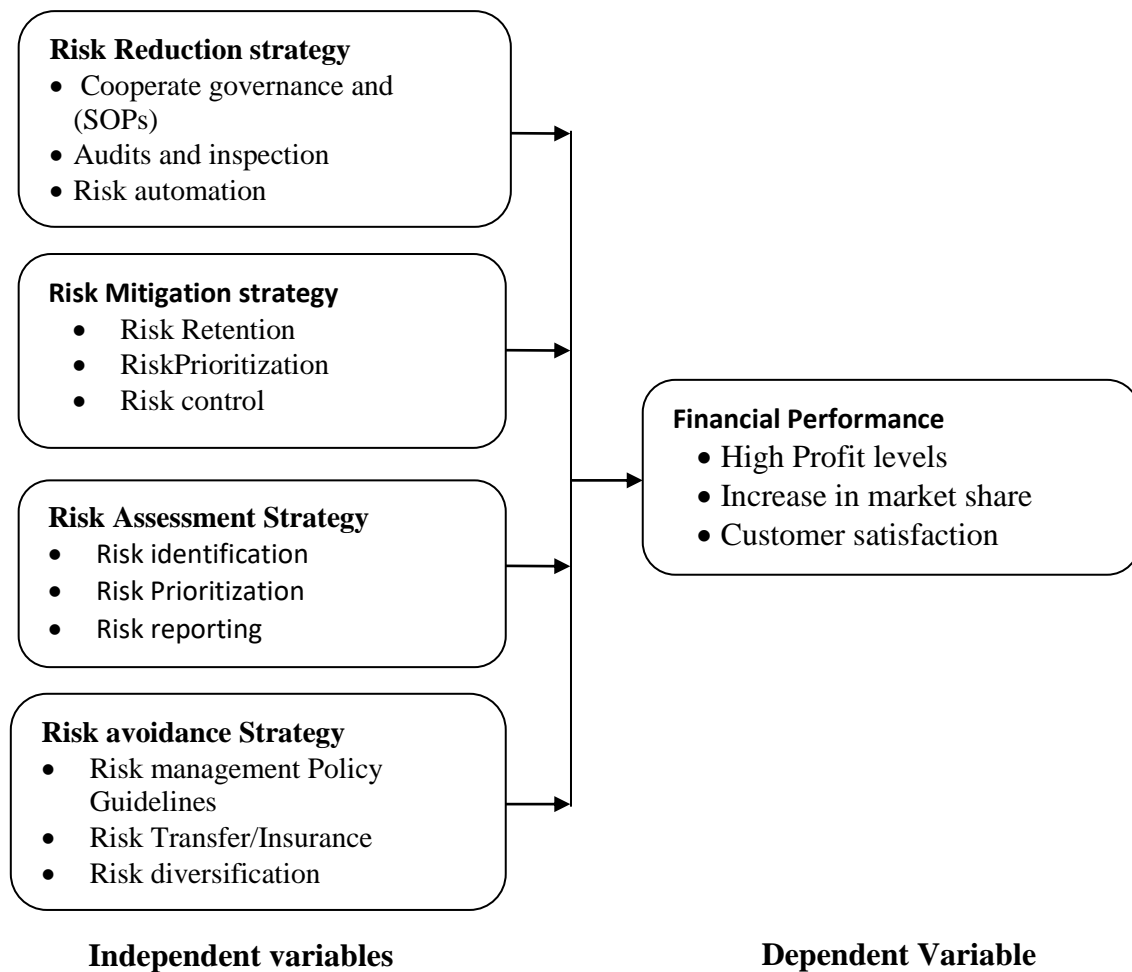


Figure 2.1: Conceptual Framework

### 2.3 Critique of the Literature

From the literature reviewed, the effect of risk management strategies on financial performance is not fully exhausted though various studies have been carried out such as; Njeri (2014) who looked at the effects of risk mitigation strategies on the financial performance of manufacturing firms in Kenya. Though the study established that that risk mitigation strategies affect the operating profit margin organization to a greater extent and that utilization of risk mitigation strategies affect the return on Assets (ROA) in organizations, the study only looked at one risk management strategy and could not be used to generalize the effects of other risk management strategies.

In addition, Omino (2014) studied the liquidity risk mitigation measures and financial performance of savings and credit co-operative societies (saccos) in Kisumu County-Kenya and established that that liquidity risk mitigation approaches adopted by different SACCOS had a significant effect on their financial performances. However, the study did not look at other risk management strategies but focused on risk mitigation strategy only. The study was also limited to SACCOS and hence the findings can not be generalized to highlight the situation in Jomo Kenyatta International Airport.

Moreover, Abdi (2017) looked at risk management techniques and financial performance of Islamic Banks in Kenya and found that Islamic banks had highly adopted risk management practices to manage risk and as a result the risk management practices comprising of; understanding risk, risk identification, risk analysis and assessment as well as risk monitoring had a positive correlation to the financial performance of Islamic banks in Kenya. However, the study omitted risk mitigation strategy among the reviewed risk management strategies. The study also focused on financial institutions and the current study focuses on government parastatals.

Additionally, Yvan (2018) did a study on risk assessment, practices and financial performance of business companies in Rwanda based on off-grid electric Rwanda and established that there is a strong and highly significant relationship between Risk assessment and practices and financial performance. However, the study was done in Rwanda and not Kenya. Further, Mutisya (2020) conducted a study on risk management strategies and performance of government funded youth projects in Machakos County and established that the risk avoidance strategy was found to have the strongest influence on performance of construction projects. Though, the study did not focus on Jomo Kenyatta International Airport.

Other studies included, Ondu (2020) who looked at risk management strategies and performance of SACCOS in Nakuru County, Kenya and established that found that risk management by the Saccos in Nakuru is accompanied by detailed plans concerning risks and thus enhances Saccos performance. However, the study focused on SACCOs and not Jomo Kenyatta International Airport. The study did not also look at financial performance rather it looked at performance in general. Also, Rop and Rotich (2018) did a study on effect of risk management practices on financial performance of commercial state corporations in Kenya and found that there is a fairly strong positive relationship between reputational risk management practices and financial performance to an extent of 56.2%. However, the studies looked at commercial state corporations in general and not specifically focus on JKIA.

Finally, Ng'aari (2016) conducted a study on effect of risk management practices on the profitability of listed commercial banks in Kenya and established that management of risk does not only involve reduction of chance of bad happenings but also ensuring the likelihood of good things occurring. However, the study looked at only commercial banks and the findings cannot be generalized to cover state corporations like Jomo Kenyatta International Airport.

## 2.4 Research Gap

Various studies have been conducted in relation to the effect of risk management strategies on financial performance. Some of the studies included: Chowdhury, Lau and Pittayachawan (2019) who looked at operational supply risk mitigation of SME and its impact on operational performance, Njeri (2014) who focused on effects of risk mitigation strategies on the financial performance of manufacturing firms in Kenya and Abdi (2017) who conducted a study on risk management techniques and financial performance of Islamic Banks in Kenya. Moreover, Yvan (2018) looked at risk assessment, practices and financial performance of business companies in Rwanda based on off-grid electric Rwanda, Macharia (2017) examined the risk management strategies and performance of construction projects in public secondary schools in Murang'a County, Kenya while Ahmed, Mukhongo and Datche (2019) did a study on the effect of financial risk management on financial performance of small and medium enterprises in Hirshabelle State-Somalia. Further, Okumu and Wanjira (2017) did a study to establish the extent to which risk avoidance influences performance of Motor Insurance Companies, Oudat and Ali (2021) examined the underlying effect of risk management on financial performance among commercial and investment banking in Bahrain and Osiemo (2016) examined the effects of risk management practices on financial performance of non-life insurance firms operating in Kisii County, Kenya. Despite the existence of these studies, the effect of risk management strategies on financial performance of Jomo Kenyatta International Airport are under researched. Most of the reviewed studies focused on financial institutions and their studies could not be generalized to cover state corporations. Other studies suffered from contextual and conceptual gaps. This study seeks to bridge these research gaps.

## 3. METHODOLOGY

### 3.1 Research methodology

This study adopted a descriptive research design. The study was undertaken at Kenya Airport Authority. The target population therefore comprised of 400 respondents who were drawn from all the Operations and Safety, Finance & Procurement, Quality Control and Corporate Planning departments of Kenya Airport Authority. The sample size is a representative of the target population and was drawn from employees of Jomo Kenyatta International Airport. According to Mugenda and Mugenda (2003) a researcher would have to use 10-30% of the total target population as a sample size for it to be accepted as a good representative sample. The use of sample assists the researcher to save time and costs associated with studying the entire population (Mark Saunders, et al, 2009). Thus, a total sample of 120 respondents was selected from the target population. The researcher used questionnaires and secondary data as the research instrument to gather the relevant information needed related to the study. The study carried out a pilot test to test the validity and

reliability of the questionnaires in gathering the data required for purposes of the study. The information gathered from the respondents was of a qualitative and quantitative nature. The data will be summarized and then analyzed by the use of descriptive statistics comprising of tables, graphs and percentages. The MS Excel, statistical software was used to analyze the collected information. This is because the MS Excel provides simplified analysis that is easy to interpret and present.

#### 4. RESEARCH FINDING AND DISCUSSION

##### 4.1 Response Rate

A total of 120 questionnaires were administered for this study and 110 were completed and returned. This represents rate of response of 91.7% as indicated in Table 4.1 below. The 8.3% questionnaires that were not returned were due to reasons like, the respondents were not available to fill them in at that time and with various follow-ups there were no positive responses from them. The response rate was found to be adequate as recommended by Babbie (2002) to allow the researcher to continue with the analysis. The questionnaires contained array of questions that met the research objectives (Mugenda & Mugenda, 2009). The response rate demonstrates a willingness of the respondents to participate in the survey by the Kenya Airports Authority employees.

**Table 4.1: Response Rate**

Category	Frequency	Percentage
Completed and returned	110	91.7
Not returned	10	8.3
Total	120	100

##### 4.2 Descriptive statistics

###### 4.2.1 Risk reduction strategy

The study sought to determine the effect of risk mitigation strategy on the on the performance of Jomo Kenyatta International Airport. With regard to this variable, respondents were asked to indicate their level of concurrence with various aspects of the risk reduction strategy. The respondents agreed that There is effective identification of potential risks (Mean=4.3088, SD=0.62908).The respondents also agreed that Jomo Kenyatta International Airport have bought insurance policy to reduce risks. The study also established that there are regular audits and inspection conducted at JKIA (Mean=4.2794, SD=.61923).Furthermore, automating the risks helps JKIA get more accurate and accessible data for their operations as represented by a mean of 4.2206 and standard deviation of 0.59464). Further, the respondents agreed that there are advanced surface movement guidance and control systems (Mean=4.2059, SD=.68150). On the other hand, the respondents concurred that the staff are engaged in enforcing risk reduction strategies (Mean=4.1324, SD=.68903).The rest of the results have been summarised in the table below.

1: - Strongly Agree    2:-Agree    3:-Neutral    4:-Disagree    5:-Strongly Disagree

**Table 4.2: Aspects of risk reduction strategy**

Statements	N	Min	Max	Mean	Std. dev
There is effective identification of potential risks	110	1	5	4.3088	.62908
Jomo Kenyatta International Airport have bought insurance to reduce risks	110	1	5	4.2794	.61923
There are regular audits and inspection conducted at JKIA	110	1	5	4.2206	.59464
Automating the risks helps JKIA get more accurate and accessible data for their operations	110	1	5	4.2059	.68150
There are advanced surface movement guidance and control systems	110	1	5	4.1324	.68903
The staff are engaged in enforcing risk reduction strategies	110	1	5	4.0441	.74180

###### 4.2.2 Risk mitigation strategy

The respondents were required to indicate their level of concurrence with various aspects of risk mitigation strategy. From the findings, the respondents agreed that an early warning system is used to track critical risks and decisions on activating mitigation measures (Mean=4.3088,SD=0.62908).Further, the study established that their risk mitigation is systematic, structured and timely as shown by mean 4.3088 and standard deviation of 0.62908.Furthermore, the before they are

implemented, risk mitigation actions are evaluated based on the reduction of impact of risk through the mitigation action as shown by mean 4.3088 and standard deviation of 0.62908. Also, the study established that JKIA insures different types of risks but not all risks (Mean=3.6176, SD=0.99295). Furthermore, JKIA trains insured parties on ways to avoid or minimize the chances of losses occurring (Mean=3.5735, SD=1.13711). In addition, JKIA has a mechanism for transferring certain risks to third parties (Mean=3.4265, SD=.81618). The rest of the results have been summarized in the table below.

1:-Strongly Agree 2:-Agree 3:-Neutral 4:-Disagree 5:-Strongly Disagree

**Table 4.3: Aspects of risk mitigation strategy**

Parameters of risk mitigation strategy	N	Min	Max	Mean	Std. dev
An early warning system is used to track critical risks and decisions on activating mitigation measures	110	1	5	3.9118	1.01827
Our risk mitigation is systematic, structured and timely	110	1	5	3.7941	.93934
Before they are implemented, risk mitigation actions are evaluated based on the reduction of impact of risk through the mitigation action.	110	1	5	3.6176	.99295
JKIA insures different types of risks but not all risks.	110	1	5	3.5735	1.13711
JKIA trains insured parties on ways to avoid or minimize the chances of losses occurring	110	1	5	3.4265	.81618
JKIA has a mechanism for transferring certain risks to third parties	110	1	5	3.3824	.99295

#### 4.2.3 Risk assessment strategy

The researcher aimed at determining the level of agreement with a number of items on the risk assessment strategy. From the findings, the respondents that agreed that risks were regularly re-assessed according to guidelines, e.g. after specific events or after a certain time interval (Mean=4.2647, SD=.56298). Also, the respondents agreed that risk mitigation in the County Government is systematic structured and timely (Mean=4.1765, SD=.91327). Furthermore, the measurement of both of the quantities in which risk assessment is concerned - potential loss and probability of occurrence – is carried out by the company (Mean=3.8824, SD=.85570). In addition, the risk management process was regularly reviewed and improved (Mean=3.7500, SD=.81726). Further, a risk with a large potential loss and a low probability of occurring is often treated differently from one with a low potential loss and a high likelihood of occurring as shown by mean of 3.5735 and standard deviation of .93547 and also that the impacts of risks are quantified using cost as a dimension (Mean=3.2500, SD=.90397). Finally, risks are evaluated with assumptions and uncertainties being clearly considered and presented (Mean=3.1029, SD=1.14787). The rest of the results have been summarised in the table below.

**Table 4.4: Risk assessment strategy Aspects**

Statements	N	Min	Max	Mean	Std. dev
Risks were regularly re-assessed according to guidelines, e.g. after specific events or after a certain time interval	110	1	5	4.2647	.56298
Measurement of both of the quantities in which risk assessment is concerned - potential loss and probability of occurrence – is carried out by the company	110	1	5	4.1765	.91327
The risk management process was regularly reviewed and improved	110	1	5	3.8824	.85570
A risk with a large potential loss and a low probability of occurring is often treated differently from one with a low potential loss and a high likelihood of occurring	110	1	5	3.7500	.81726
The impacts of risks are quantified using cost as a dimension	110	1	5	3.5735	.93547
The impacts of risks are quantified using technical performance or quality as a dimension	110	1	5	3.3824	1.18485
The impacts of risks are quantified using schedule as a dimension	110	1	5	3.2500	.90397
<b>Risks are evaluated with assumptions and uncertainties being clearly considered and presented</b>	<b>110</b>	<b>1</b>	<b>5</b>	<b>3.1029</b>	<b>1.14787</b>



#### 4.2.4 Risk avoidance strategy

In the area of risk avoidance strategy, the study established that the risky operations at JKIA are avoided (Mean=4.1765, SD=.57149) and also that Jomo Kenyatta International Airport have insurance policies to help in avoiding risks (Mean=4.0000, SD=.59851). On the other hand, there are limited opportunities at JKIA for the risk to cause a loss event (Mean=3.7941, SD=.78339). The study further established that employees are properly trained on risk avoidance policies of the firm

(Mean=3.7353, SD=.92426). Furthermore, the study established that controls are in place to avoid any potential risks at JKIA (Mean=3.6912, SD=.77762). Finally, study established that the roles and responsibilities of each employee in the risk avoidance efforts of the firm are well communicated to them (Mean=3.5588, SD=.96788). The rest of the results have been summarised in the table below.

1: -Strongly Agree 2: -Agree 3: -Neutral 4: -Disagree 5: -Strongly Disagree

**Table 4.5: Risk avoidance strategy**

	N	Min	Max	Mean	Std. dev
The risky operations at JKIA are avoided	110	1	5	4.1765	.57149
Jomo Kenyatta International Airport have insurance policies to help in avoiding risks	110	1	5	4.0000	.59851
There are limited opportunities at JKIA for the risk to cause a loss event.	110	1	5	3.7941	.78339
Employees are properly trained on risk avoidance policies of the firm	110	1	5	3.7353	.92426
Controls are in place to avoid any potential risks at JKIA	110	1	5	3.6912	.77762
The roles and responsibilities of each employee in the risk avoidance efforts of the firm are well communicated to them	110	1	5	3.5588	.96788

#### 4.2.5 Financial performance of Jomo Kenyatta International Airport

Findings in this area indicate that JKIA has improved in service delivery as compared to previous years (Mean=4.1471, SD=.90215). Further, JKIA is rated highly in service delivery among the East African Countries (Mean=4.0000, SD=.59851). The study also established that the level of complains among our customers has reduced significantly (Mean=3.7941, SD=.78339). Furthermore, the customers are invited to comment on service delivery through suggestions boxes (Mean=3.7647, SD=.81254). On the other hand, respondents consider customer requirements in the delivery of our services (Mean=3.7647, SD=.81254).

1:-Strongly Agree 2:-Agree 3:-Neutral 4:-Disagree 5:-Strongly Disagree

**Table 4.6: Financial performance of Jomo Kenyatta International Airport**

Statements	N	Min	Max	Mean	Std. dev
JKIA has improved in service delivery as compared to previous years	110	1	5	4.1471	.90215
JKIA is rated highly in service delivery among the East African Countries	110	1	5	4.0000	.59851
The level of complains among our customers has reduced significantly.	110	1	5	3.7941	.78339
Our customers are invited to comment on our service delivery through suggestions boxes.	110	1	5	3.7647	.81254
We consider customer requirements in the delivery of our services	110	1	5	3.7353	.92426

### 4.3 Inferential Statistics

#### 4.3.1 Correlation Analysis

As indicated in the table 4.12 below, risk management strategies is associated positively with financial performance at correlation factor of 0.654. While the dependent variables-risk reduction strategy, risk mitigation strategy, risk assessment strategy and risk avoidance strategy- are positively associated with the financial performance at 0.654, 0.562, 0.653 and

0.677 respectively. Further, the analysis indicates that there no perfect correlation between the variables, hence the variables are suitable for regression analysis. These results are consistent with Kamoni P., (2018) who noted that there are significant associations between the risk management strategies and financial performance, but the extent of the risk management strategies influence varies from the most effective to the least effective determinants.

**Table 4.7: Correlations Analysis**

		RRS	RMS	RAS	RAVS	FP
RRS	Pearson Correlation	1	.523*	.509**	.562**	.654**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	110	110	110	110	110
RMS	Pearson Correlation	.523*	1	.417*	.442*	.562**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	110		110	110	110
RAS	Pearson Correlation	.509**	.417*	1	.537**	.653**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	110	110	110	110	110
RAVS	Pearson Correlation	.562**	.442*	.537**	1	.677**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	110	110	110	110	110
FP	Pearson Correlation	.654**	.562**	.653**	.677**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	110	110	110	110	110
**. Correlation is weighty at the 0.01 level (2-tailed).						
*. Correlation is significant at the 0.05 level (2-tailed).						

#### 4.3.2 Regression results

##### Regression Analysis Model Summary

A multiple linear regression analysis was specifically done to investigate the effect of the independent variables on the dependent variable. The input into the regression model was obtained using the average scores for the four independent (risk reduction strategy, risk mitigation strategy, risk assessment strategy & risk avoidance strategy). The standard error of the regression model is 0.16 as indicated in Table 4.17. Results in Table 4.17 indicate that the adjusted  $r^2$  was 0.792 indicating that the independent variables explained 79.2% of the financial performance of Jomo Kenyatta International Airport. This indicates that the model had good explanatory power.

**Table 4.8: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.894 <sup>a</sup>	.800	.792	.16144

a. Predictors: (Constant), risk reduction strategy, risk mitigation strategy, risk assessment strategy & risk avoidance strategy

Analysis of variances is important allows the researcher to determine if the difference in means values are by chance or if they are indeed significantly different. The regression output in Table 4.18 presents the source of variance, mean of variances and the f value. In statistics, p-value between 0.000 and 0.005 are normally accepted to be significant in statistical inference. In this case, p-value is 0.000<sup>b</sup> and this provide sufficient evidence to conclude that the regression model fits the better the data obtained in this research. The results indicate that the overall model was significant and could provide important results. This indicates that the model could provide some predictive significance and was a good fit.

**Table 4.9: Analysis of Variance of the Regression (ANOVA)**

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.936	4	2.734	104.905	0.000 <sup>b</sup>
	Residual	2.737	105	.026		
	Total	13.673	109			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant); risk reduction strategy, risk mitigation strategy, risk assessment strategy & risk avoidance strategy

Further, the regression output on significance of the independent variables is presented in Table 4.19.

**Table 4.10: Significance of Independent Variables**

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	692	.033		.000	.000
	Risk reduction strategy	0.737	.045	.837	16.252	.001
	Risk mitigation strategy	0.898	0.048	0.799	17.230	.002
	Risk assessment strategy	0.583	.052	.725	11.189	.004
	Risk avoidance strategy	0.981	.040	.917	24.402	.003

a. Dependent Variable: Financial performance

In statistics, a t-statistic of 2 and above as well as p-value between 0.000 and 0.005 are normally accepted to be significant in statistical inference. Risk reduction strategy, risk mitigation strategy, risk assessment strategy & risk avoidance strategy were all found to be statistically significant as all their t-statistic values were above 2 and also as the range of their p-value was between 0.000 and 0.005.

The results in Table 4.10 indicate that risk reduction strategy positively influences financial performance of financial performance of Jomo Kenyatta International Airport. Further; it tells that risk reduction strategy is a starting point of any risk management program since an organization cannot manage what it does not know and plays a vital role in influencing financial performance of financial performance of Jomo Kenyatta International Airport. On the other hand, once risks have been identified, evaluation follows before incorporating risks mitigation aspects and ensures implementation of risks for the organizations success.

Risk assessment strategy had important and positive effect on the financial performance of Jomo Kenyatta International Airport. This implies that risk assessment enables the management to divide management risks that are threatening the existence of the operations from those which can cause slight damages. Therefore, operations must be assessed, analyzed and evaluated which includes identification of the probability distributions of outcomes for each material risk. This will call for prioritization of risks which includes the determination of the contribution of each risk to the aggregate risk profile, and appropriate prioritization which in turn will enhance financial performance

Further, risk mitigation strategy has a significant and a positive effect on the financial performance of Jomo Kenyatta International Airport. This implies that risk can be managed through selection of one or a combination of available risk management techniques for mitigating loss exposure through risk control and risk financing which in turn enhances financial performance of Jomo Kenyatta International Airport. Therefore, should adopt risk mitigation process to minimize or reduce the frequency of the firm's exposure to uncertainty using least possible cost.

Risk avoidance had significant and a positive outcome on the financial performance of Jomo Kenyatta International Airport. This implies that when an appropriate risk monitoring strategy is put in place, it means that appropriate product model in line with estimated risk is achieved which in turn influence financial performance of Jomo Kenyatta International Airport. Risk avoidance can create a pointer on what is going wrong and discover mistakes at early stage. Effective monitoring of risks requires robust reporting and review structure to ensure that appropriate controls and responses are in place. The research shows that there exists adequate support and linkages in the literature provided by various scholars on the dependent and independent variables of this research.

## 5. CONCLUSION

This study established that risk reduction strategy significantly and positively influences financial performance of Jomo Kenyatta International Airport. The study established that risk mitigation strategy was major and a positive influence on the financial performance of Jomo Kenyatta International Airport. The study established that risk assessment strategy had a significant and positive impact on the financial performance of Jomo Kenyatta International Airport. Risk monitoring had significant and a positive effect on financial performance of Jomo Kenyatta International Airport as established in the study.

## 6. RECOMMENDATIONS

Risk reduction strategy was noted to have a considerable effect on the financial performance of Jomo Kenyatta International Airport as established in the study. The study recommends that risk mitigation planning which includes activities to be undertaken to mitigate against risks should be put in place by Jomo Kenyatta International Airport. It was recommended that Jomo Kenyatta International Airport should develop and implement appropriate mechanisms for analysis and evaluation of risks to enhance financial performance. The study also recommended that risk avoidance strategy should ensure appropriate risk control and monitoring management strategies are developed and implemented

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