Journal of Entrepreneurship & Project Management

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ISSN: 2616-8464

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 5||Issue 1||Page 45-63||February||2021|
Email: info@stratfordjournals.org ISSN: 2616-8464

Risk Management Practices and Project Performance at Kenya Airports Authority

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How to cite this article: Mutunga, M., S., & Ondara, A. (2021). Risk Management Practices and Project Performance at Kenya Airports Authority. *Journal of Entrepreneurship & Project management,* 5(1), 45-63

Abstract

Project performance has gained prominence as a distinctive concept in management that is used in driving the objectives of the business alongside the economic agenda of a country that is still developing like Kenya. The current environment of business is characterized by various turbulences and cut throat competitive forces. These dynamics and competition are triggered by changes in technology, globalization, customers who are additionally requesting and more elevated levels of vulnerability which have resulted in challenges in organizational administration than previously. In some cases, the project deliverables fail even before they are handed over to the project sponsor while many others fail during the project liability period. Delays in completion, upward revaluation of project costs, poor quality workmanships and premature termination of major government projects are common phenomena in Kenya and are a major concern to researchers, project sponsors, contractors and other stakeholders and cast a major doubt whether the government is able to guarantee value for money to the tax-payers. It was on this background that this examination expected to survey the effect of managing of risk tools on performance of project at Kenya Airport Authority. The study specifically ascertained the effect of risk identification, risk reporting, risk analysis and risk control on project performance at Kenya Airport Authority. Systems theory, goal orientation and contingency theories were utilized to reinforce the research. The examination plan for this investigation was descriptive. The research population was made up of 281 staff which were from KAA projects' board division that have been dealing with various ventures at KAA throughout the previous 5 years. From this population, a sample of 141 staff was considered. The research relied on primary data collected through administering of the questionnaires. The analysis of research data was on the premised on inferential and descriptive (multiple regression analysis). Ethical considerations were duly complied with throughout the research. The study found that risk identification had significant effect on project performance at Kenya Airport Authority. The study found that risk reporting significantly affects project performance at Kenya Airport Authority. The study also found that risk analysis significantly contributes to project performance at Kenya Airport Authority. The study also documented that risk control is significant in predicting the project performance at Kenya Airport Authority. The study recommended that Kenya Airports Authority should put in place adequate institutional framework for effective identification of risks associated with projects. The study

recommended that effective risk reporting channels be put in place so as to ensure timely communication of identified risks to management. It is further recommended that Kenya Airport Authority provides enabling environment for proper risk analyses. The study further recommended that effective tools for risk control should be put in place by Kenya Airport Authority.

Keywords: *Risk Analysis, Risk Control, Risk Identification, Risk Management, Risk Management Practices, Risk Reporting, Project performance.*

1.0 INTRODUCTION

1.1 Background of the Study

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 (Black & Fitzgerald, 2010). Organization's business performance has become much more decisive in recent times due to the fact that global competition is on the rise. Yet, many projects are faced with delays, changes in their degree, disappointments and a few stands the risk of being cancelled (Roque& de Carvalho, 2013). Typically, those problems may occur as a result of inefficient risk management in projects. Risk management in projects have become a fundamental aspect of a successful project management (Carbone & Tippett, 2014), however, the techniques required for the managing of risks in project that will thereby lead to a higher success rate in projects are still limited (Makori, 2011).

Many Sub Saharan African economies go through losses that amount to billions of dollars, due to delay in conclusion of projects in infrastructure, that undercut the good aim of reducing poverty (Homthong & Moungnoi, 2016). The delay in completing infrastructural projects significantly affects cost, which as a result bears huge implication in the citizens' lives, principally in developing countries such as Kenya. Investigations carried out in diverse backgrounds have shown that though impediments to development activities' completion is a global occurrence, it is seen to be most prevailing in developing countries as compared to developed countries (Aziz, 2013). Studies have shown that developed nations like USA, Canada, Britain, Australia alongside others have experienced a level of delay in the completion of infrastructural (Mwangi & Ngugi, 2018).

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 (Kululanga & Kuotcha, 2010). Uncertainty tables both risks and opportunities, with the potential of either destroying or increasing value. Project risk management 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).

1.2 Statement of the Problem

Project performance has gained prominence as a distinctive concept of management that is relied on in driving the objectives of a business as well as the economic agenda of countries that are still developing like Kenya. In line with this viewpoint, Bakker et al. (2012) puts a lot of emphasis on the identification of risk as having a lot of influence based on the numbers and strength of communication, then reporting of risk, registration of risk and allotment of risk, scrutiny of risk and the controlling of risk. A project is commonly accredited as doing well when if completed on time, as budgeted, and conformance to specifications and satisfaction of

stakeholders (Muto Performance Corp, 2010). Functionality, nonexistence of claims and court proceedings also, "readiness for reason" for occupiers has similarly been used as proportions of achievement of task (Zwikael & Ahn, 2011)

Different undertakings devouring an extensive spending plan in KAA are development and upkeep works for air terminal encourages (counting runways, runways, covers, terminal structures and different designs). Review of these projects has revealed that most of these projects are characterized by poor performances. The poor performances span from these projects not been finished on schedule, high spending plan/cost as well as met quality details. On many occasions contractors therefore request additional time and orders of variation in order to finish the projects and cater for costs attributed to the change in scope. The expansion projects by KAA such as the second runway at Jomo Kenyatta International airport are characterized by delays. Delays in completion, upward revaluation of project costs, poor quality workmanships and premature termination of major government projects are common phenomena in Kenya and are a major concern to researchers, project sponsors, contractors and other stakeholders and cast a major doubt whether the government is able to guarantee value for money to the taxpayers (KAA, 2017).

This phenomenon is also reflected in KAA where major projects have not been finished on schedule, high spending plan/cost as well as met quality details. In some cases, the project deliverables fail even before they are handed over to the project sponsor while many others fail during the project liability period. Studies on risk managing and project performance include those of Ropque and de Carvalho (2013), Kinyua, Ogollah and Mburu, 2015), Julian and Alexander (2013) and Jun, Qiuzhen and Qingguo (2010). These studies were however largely done in setting of countries different from Kenya. Therefore, from the distinct background differences of countries such outcomes can't be appropriate to Kenya. It is from this foundation that this investigation planned to evaluate the effect of danger overseeing instruments on project performance at Kenya Airport Authority. The study specifically established the effect of risk identification, risk reporting, risk analysis and risk control on project performance at Kenya Airport Authority.

1.3 Research Objectives

i) To investigate the impact of risk identification on project performance at Kenya Airport Authority.
ii) To investigate the impact of risk reporting on project performance at Kenya Airport Authority.
iii) To establish the impact of risk analysis on project performance at Kenya Airport Authority.
iv) To assess the impact of risk control on project performance at Kenya Airport Authority.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 System Theory

The pioneer of this concept was Parsons (1960). Another contributor to this theory was Easton (1965), who asserts that the theory takes its departure from the concept of political life as boundary-sustaining interactions embedded in and encircled by social systems through which it is continually exposed. System according to him doesn't exist in isolation. It is always engrossed in an explicit setting that is called boundary or environment. In the light of this point,

Easton (1965) argues that there is massive influence coming from the atmosphere of a political arrangement able to disturb the way tasks are performed by the system (Easton, 1965).

The manner in which a system operates is partly a product of how it reacts to the entire social, cultural, biological and physical environment (Anderson, 1997). It is pertinent to visualize a political system as having a demarcation in the same context as physical system. The edge of a system is determined by all actions which are less or more straightforwardly allied to the making of required decisions for a society. In line with the system theory, government operates in an environment that is composed of inputs coming from masses, in the form of demands for, or support to an action of government. Demands that are interpreted as societal needs are processed and changed into outputs through conversion mechanism.

System which serves as a processing unit processes the demands from the public and the output and feed back to the environment. This process goes in a cyclical fashion. The theory shows how government reacts to people 's plight in terms of the provision of basic necessities of life. The theory highlights how demands of the public/masses are presented to the government, government 's actions on these demands and the output/outcome being the programmes that will enhance the well-being of the people. The theory argues that demands for strategic actions emanate from problems and crisis in the environments which are channeled to the system by groups and officials. At the same time, environment limits and directs what strategy makers and implementers can effectively do (Anderson, 1997). In relation to this study, projects are as a result of public demand, therefore, the performance of these projects are dependent on effect risk management put in place.

2.1.2 Uncertain Theory

Liu (2010) introduced the uncertain theory as a result of generality of area of uncertainty. This concept was additionally contextualized to an uncertain logic by Liu and Li (2010) where the value of truth is described as the uncertain measure that the proposal is accurate. What's more, Liu (2010) proposed uncertain entailment which can be utilised in calculation of the value of truth for a formula is not certain where the values of truth of the other formula that is not certain is given. Uncertainty isn't an abandoned idea in managing project. The initial development of techniques such as PERT in 1950s, acknowledged the likelihood of length of tasks being varied. These applications were expanded in 1960s to integrate probabilistic branching. Qualitative techniques, like Analysis of Potential problems, were introduced with an aim of guiding the managers of projects in the preparation for uncertainty through prevention of risk and planning for contingencies (Uhlenfeldt and Henriksen, 2006). These ideas have mostly helped when it comes to scheduling of tasks in projects that are not certain and are complex. The CPM (Critical Path Method) is well acknowledged technique).

Predictable uncertainties are recognized, but not certain, influences in a project management. The approach to project and stakeholder management is influenced by uncertainty risk. Therefore, predictable uncertainty demands closely controlled risk managing, the recognition of possible risk that is likely to affect the project, preparation of measure that are preventive to deter unfavorable events and manifold contingent actions brought about by the events. The tracking of progress made calls for monitoring of both the completed activities as well as the activities that are yet to be completed. The project manager is expected to have the ability to solve besides consolidating what's been accomplished to a certain level in project. The risks, incidences and results of project activities requires continuous monitoring as well as communication to the stakeholders in the project. Hence this hypothesis subsequently helps in clarifying risk managing practices and its effects on project performance.

2.1.3 Contingency Theory

Fielder (1960) propounded this concept. This presumption is basically an approach used while studying the behavior in an organization where comprehensible exegesis is given regarding contingency factors like culture, external environment and technology affects the blueprint and organizations' functions. The supposition that underlies the concept is that different organizations have distinct organizational structure which implies that no particular structure type is suitable for every organizations. Instead, the efficiency of a business is contingent on a blend between the kind of technology, changes in the environment, the business size, structure of organization characteristics as well as the system of information (Njeri, 2014). The theory originated from theories of sociological functionalist of structure of organization for instance the approach to studies of organizations by (Ochoge, 2011).

The applicability of this presumption to the present study arises from its description of the connection between internal control effectiveness' structure, context and performance of organization particularly in terms of how reliable the financial reporting is (Abdi, 2013). An empirical examination by Guilding and Cadez (2008) suggest that the effectiveness of analysis internal control can be achieved through internal auditors with high ability and specialization in internal audit to the benefit of firm.

The location of details as it relates to technology and environment has a great impact on the structure of an association. In unpredictable environments with uncommon technology, information is often internal while predictable environments, or environments where there is a pattern in use of technology. The dimensions of control and structure are structures of activities & authority (Saidu & Zabedah, 2013).

The hypothesis of possibility notes that "the design and use of control systems depends on the context of the organizational environment in which such controls operate" (Fisher, 1998). Along these lines, the premise of this theory is that the use of a given executive control system depends on a number of internal and external factors. It is explicit therefore that technology, size, culture, outside environment, and strategy has an impact on the systems of managing controls. Thus, the demands brought about by tasks that are technical in organization boost the formulation of strategies for coordinating and controlling risk (Abdi, 2013).

2.2 Empirical Review

2.2.1 Risk Identification and Project Performance

Jun, Qingguo & Qiuzhen (2010) examined the role of risk planning of project on performance of IT project with a focus on vendor firms in china. The variables examined were risk planning of projects, identification, reporting and control with a goal of establishing whether they make a considerable positive contribution to performance of projects where the levels of uncertainty is low than when the levels are high. Questionnaires were utilised in the collection of data from 181 managers in the software project alongside other respondents drawn from software houses in China, City of Hangzhou through email and mails. The questions sought to get information concerning outsourced and recently completed projects. From the investigation, it was discovered that there was an enormous positive correlation between risk recognition and project success. The research was however done in the context of China (China vendor firms) whereas this research is based on the Kenyan context.

A research was carried out by Roque and de Carvalho (2013), the goal was to determine the impact of management of project risk, risk evaluation on project performance in vendor companies based in Brazil. The goal was to bring a comprehension on how evaluation of risk impacts on performance of IT projects and the degree to which risk evaluation has been

diffused in the vendor companies in Brazil. Four hundred and fifteen IT projects of various companies within the IT sector were surveyed. The results clearly depict that identification of risk has a substantial positive impact on the success of the mission. It was ascertained that risk management tools are vital in the success of projects.

A research was done by Kinyua, Mburu &Ogollah (2015) which sought to identify how risk managing practices impacts projects performance of SMES in ICT within Nairobi. The research took on a descriptive design. Forty-eight ICT SMEs were the target population. Arbitrary examining was utilized in the investigation. Multiple regression was employed in ascertaining the effects of strategies of risk managing on performance of project of ICT SMES. The research showed that risk identification positively and significantly influences project execution to the extent SMEs in Kenya is concerned. The research was anchored on the SME sector as well as ICT hence the present study examined the airport which falls within the transport industry.

2.2.2 Risk Reporting and Project Performance

Alexander & Juliane (2013) sought to bring a comprehension on the role of managing of portfolio risk on the success of UK IT projects. The success of the IT projects was measured on the basis of performance. In terms of data gathering, questionnaires were employed with one hundred and seventy-six firms being sampled. The outcome further displayed a material positive association between reporting of risk and success of projects ($b=0.16$, $p<0.05$). Thus, management of portfolio risk, identification of risk, counteraction, observing and joining of data with respect to hazard in administration of undertaking portfolio positively impacts performance. The gap from this examination was that it centered around IT sector with the current study examining the airport authority which falls within the transport industry.

Roque and de Carvalho (2013) did an empirical analysis on the impact of project risk management and risk assessment on project success in Brazilian vendor companies. The purpose was to figure out the risk evaluation impact on performance of IT projects at the same time investigating the extent to which risk evaluation has been diffused in the vendor companies. The number of projects considered for the survey were 415 mainly in IT sector. It was discovered from the outcome that risk reporting had a huge positive sway on the achievement of the undertakings in the vendor companies in Brazil. While this examination provides a comprehension on risk managing and project accomplishment, it was narrowed to the IT sector. This study focused on KAA which is under the transport industry. Secondly the exists differences in the contextual setting between Kenya and Brazil.

An empirical analysis was done by Kinyua, Mburu &Ogollah (2015) on the effect on the performance of risk management procedures project within the SME in ICT companies in Nairobi. The analysis was premised on 4 approaches; logical framework, analysis of risk of project and Management model, portfolio and Network Theory. The research was based on descriptive design and a target population of forty-eight SMEs in ICT. The study adopted arbitrary examining strategy in the determination of test of staff of project from the research population. Using multiple regression model, the study depicted a positive connection between risk reporting and project performance. The present examination addressed the aspect of risk reporting from the perspective of KAA which is within the transport industry since this analysis examined the ICT sector.

2.2.3 Risk Analysis and Project Performance

A research was done by Jun, Qingguo and Qiuzhen (2010) which aimed at figuring out the effect of undertaking hazard anticipating execution of China's IT project within vendor

companies. The examination aimed at examining the impact of risk planning and control and how they contribute to performance of projects when the uncertainty levels are low than at high levels. Questionnaire was used for the collection of data from one hundred and eighty-one software project managers alongside other informants in China's Hangzhou City. The respondents were required to give information regarding the outsourced IS development projects that were recently completed. A considerable positive association between analysis of risk of project and performance was established. The study was however based on Hangzhou City, China while this examination was based on KAA an authority in Kenya.

Another research was undertaken by Roque and de Carvalho (2013) on the role of management of risk on projects, evaluation of risks and performance of projects vendor companies in Brazil. 415 projects falling under the IT sectors were surveyed. Using regression analysis, the study revealed that risk analysis was significant in predicting the success of projects since staff under project were able to recognize and alleviate risk happening to larger extent. The examination established that the critical factors of success include; evaluating uncertainties, utilizing the strategies of managing risks, and deeply comprehending the environment of the business. The study however focused on the influences of managing project risks alongside risk evaluation on performance of project within the Brazilian setting specifically vendor companies. This study focused on Kenya Airport Authority, Kenya.

2.2.4 Risk Control and Project Performance

An investigation was finished by Juliane and Alexander (2013) on portfolio hazard the board and accomplishment of IT projects portfolio in UK businesses. The research instrument for the study was questionnaire which utilised a likert scale. Cross industry sampling was used in selection of the sample comprising 176 firms. The outcome of the scrutiny depicted that risk control emphatically affects IT project performance. The examination was however on UK businesses; therefore, the findings cannot be extended to the Kenyan context owing to the fact that Kenya is a developing nation whereas the UK is a developed nation.

Roque and de Carvalho (2013) did an Inquiry into the role of managing of risk on projects, evaluation of risks and performance of projects vendor companies in Brazil. 415 projects falling under the IT sectors were surveyed. Using regression, the analysis revealed that risk evaluation and planning was significant in predicting the success of projects to greater extent. Comprehending the effect of managing project risk, evaluation of risks on project performance in seller organizations in Brazil. The investigation figured out that risk control had significant impact on project success. The outcomes illustrated that influence of project risk evaluation on success of project was positive.

Kinyua, Mburu and Ogollah (2015) completed an empirical examination on the effect on project success of risk management software of SME enterprises in ICT within Nairobi-Kenya. The investigation was anchored on logical Framework Approach, network theory, management model and Risk Analysis of project. The predictor variables were the strategies of managing risks with the dependent being performance of SMEs' projects. Using a descriptive research design, research population of forty-eight SMEs in ICT was surveyed. In terms of the technique of sampling, a random technique was employed. A multiple regression was employed also, settled a positive correlation exists between risk management and the ICT project. execution based on its statistical significance at 0.05 level.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 5||Issue 1||Page 45-63||February||2021|
Email: info@stratfordjournals.org ISSN: 2616-8464

2.3 Conceptual Framework

The conceptual outline of the research displays the underlying association existing among the research variables. The relationship between risk management practices and project performance is presented in Figure 1

Independent variables

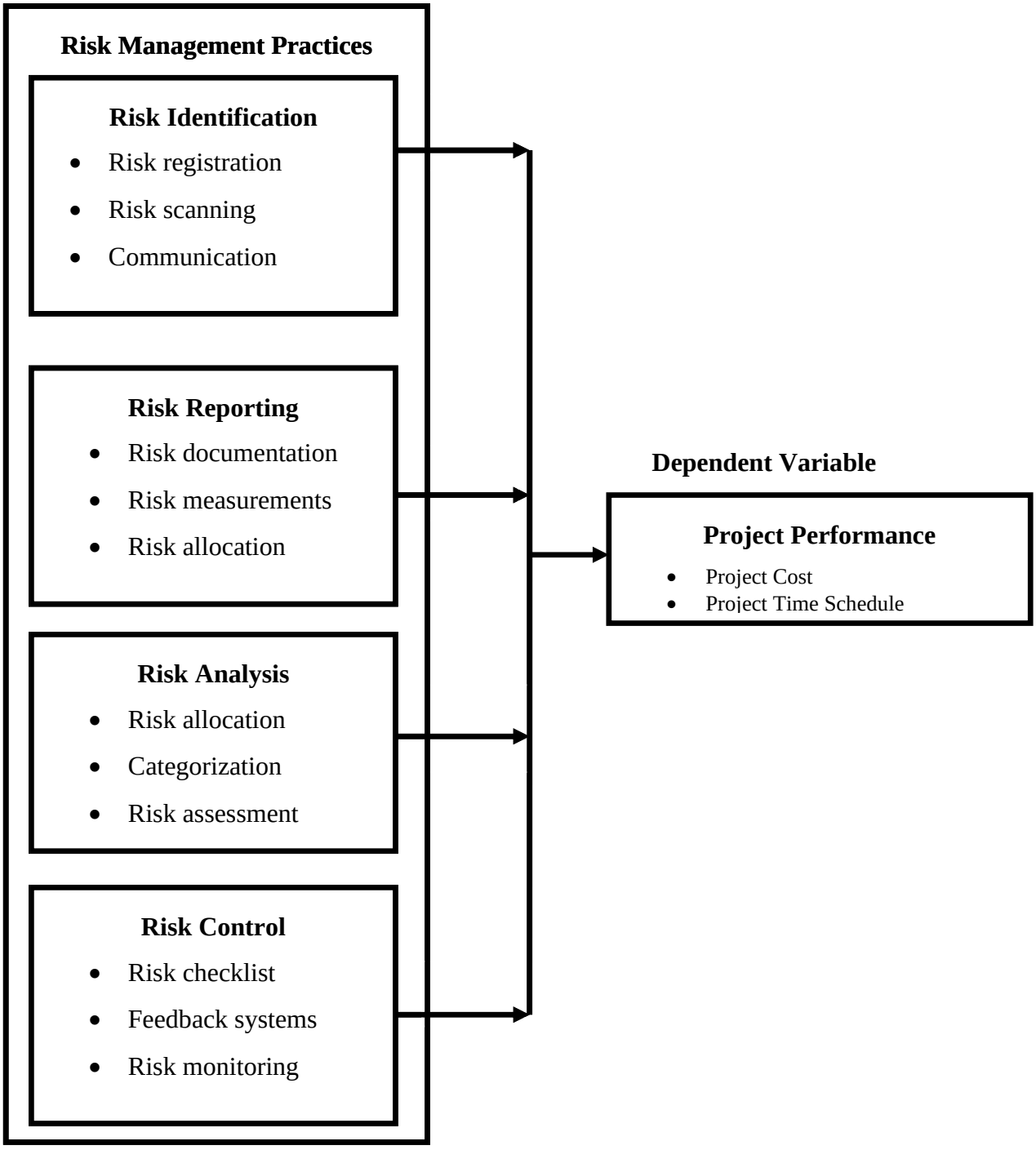

Figure 1: Conceptual Framework.

3.0 RESEARCH METHODOLOGY

The examination plan for this investigation was descriptive. The research population was made up of 281 staff which were from KAA projects' board division that have been dealing with various ventures at KAA throughout the previous 5 years. From this population, a sample of 141 staff was considered. The research relied on primary data which was based on a questionnaire which filled in as the examination instrument. The research questionnaire was based on a Five-point Scale Likert. In doing the examination, the validity and reliability of research instruments were determined by the use a pilot study to ensure reliability and to ensure validity the researcher ensured that respondents are not constrained in any capacity to choose explicit decisions among the appropriate response sets. The analysis of research data was on the premised on inferential and descriptive (multiple regression analysis).

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1 Descriptive Analysis

4.1.1 Risk Identification

The descriptive results of the study on risk identification are contained in Table 1

Table 1: Descriptive Statistics on Risk Identification

Statement	Minimum	Maximum	Mean	Std. Deviation
Risk identification process is carried out at the inception of projects	2.00	5.00	3.6078	.63178
Risk identification is carried out by experts	2.00	4.00	3.6431	.63706
Risk identification is key in project risk management	2.00	5.00	4.1765	.69527
Project performance is enhanced by effective risk identification	2.00	5.00	3.9333	.67974
Average Scores			**3.8402**	**0.6610**

Source: Survey Data (2020)

Based on the descriptive statistics presented in Table 1, the statement that risk identification process is carried out at the inception of projects was relatively agreed by the respondents as demonstrated by a mean and standard deviation of 3.6078 and 0.63178 respectively. This is additionally supported by a min and max of 2.00 and 5.00 respectively. The respondents largely agreed that risk identification is carried out by experts as indicated by a minimum of 2.00, maximum of 4.00, mean of 3.6431 and average deviation of 0.63706. The statement that Risk identification is key in project risk management has been demonstrated by a norm and average deviation of 4.1765 and 0.69527 with a corresponding minimum of 2.00 and maximum of 5.00. The respondents relatively agreed that project performance is enhanced by effective risk identification as demonstrated by a norm and average deviation of 3.9333 and 0.67974. The descriptive analysis for the variable risk identification had average scores of 3.8402 and 0.6610 as norm and average deviation respectively

4.1.2 Risk Reporting

The researcher analyzed the data collected on risk reporting and documented the discoveries in Table 2

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 5||Issue 1||Page 45-63||February||2021|
Email: info@stratfordjournals.org ISSN: 2616-8464

Table 2: Descriptive Statistics on Risk Reporting

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Risk identified is reported to management	102	2.00	4.00	3.4941	.69778
Risk identified is reported to stakeholders	102	2.00	4.00	3.6078	.61591
Risk identification is key in risk management practices	102	2.00	5.00	3.8216	.66655
Project performance is enhanced by effective risk reporting	102	2.00	5.00	4.1784	.65152
Average Scores				**3.7755**	**0.6579**

Source: Survey Data (2020)

Based on the results presented in Table 2 the lion's share of respondents in the study accepted that the defined risk was reported to management as supported by an average of 3,4941, the average deviation of 0.69778, minimum of 2.00 and maximum of 4.00. The statement that risk identified is reported to stakeholders had minimum and maximum values of 2.00 and 4.00 respectively. The statement further had a norm and average deviation of 3.6078 and 0.61591 respectively, thus showing some level of agreement among respondents.

Risk identification being key in risk management practices was relatively agreed by the respondents of the study as shown by a norm and average deviation of 3.8216 and 0.66655 respectively with accompanying low value of 2.00 and high value of 5.00. The respondents varied to some extent on the statement that project performance is enhanced by effective risk reporting as captured by a norm of 4.1784 and average deviation of 0.65152. The average scores for the variable risk reporting were 3.7755 and 0.6579 as mean and standard deviation respectively.

4.1.3 Risk Analysis

This segment presents the discoveries of the investigation on risk analysis based on descriptive analysis as presented in Table 3.

Table 3: Descriptive Statistics on Risk Analysis

Statement	No	A Minimum	A Maximum	A Mean	Average Deviation
The risks assessment is carried out by project managers	102	2.00	4.00	3.4804	.67090
Risks are ranked from low to major risks	102	2.00	4.00	3.4706	.60862
Risk are categorized	102	2.00	5.00	3.4216	.69562
Project performance is dependent on efficient risk analysis	102	2.00	5.00	3.5588	.65360
Average Scores				**3.4828**	**0.6572**

Source: Survey Data (2020)

Table 3 presents the descriptive statistics on risk analysis which indicates that the statement that risks assessment is carried out by project managers had a minimum and maximum values of 2.00 and 4.00 respectively. The statement reportedly had a norm and average deviation of 3.4804 and 0.67090 meanwhile, thus, implying that the participants were generally in understanding in their responses. The respondents similarly concurred that risks are ranked from low to major risks as indicated by 3.4706 and 0.60862 as norm and standard deviation respectively. The respondents relatively agreed to the statement that risks are categorized as reported by minimum responses of 2.00 and maximum of 5.00. This statement was further supported by a norm of 3.4216 and average deviation of 0.69562. The statement that project performance is dependent on efficient risk analysis was relatively concurred by the respondents as reported by a norm and average deviation of 3.5588 and 0.65360 meanwhile. This was further indicated by minimum and maximum responses of 2.00 and 5.00. The descriptive results for risk analysis had average scores of 3.4828 and 0.6572 as mean and standard deviation respectively.

4.1.4 Risk Control

The researcher analyzed the data collected on risk control and presented the outcomes as depicted in Table 4 below.

Table 4: Descriptive Statistics on Risk Control

Statement	Minimum	Maximum	Mean	Std. Deviation
Control measures are put in place to curb risks	2.00	4.00	3.3922	.58287
Risk control is key in risk management	2.00	4.00	3.9314	.60542
Risk matrix is developed and utilized when executing projects	2.00	5.00	3.5392	.67003
Project performance is dependent on effective risk control practices	2.00	5.00	3.5020	.63339
Average Scores			**3.5912**	**0.6229**

Source: Survey Data (2020)

Table 4 presents the descriptive statistics on risk control. Control measures are put in place to curb risks had a norm of 3.3922 and an average deviation of 0.58287 which indicates that the study participants were largely in keeping with this argument. The statement that risk control is key in risk management reportedly had a norm of 3.9314 and average deviation of 0.60542. Majority of the study participants decided on the possibility of matrix is developed and utilized when executing projects as supported by a norm and average deviation of 3.5392 and 0.67003. The explanation that project performance is dependent on effective risk control practices had a norm of 3.5020, average deviation of 0.63339, minimum response of 2.00 and maximum response of 5.00. This therefore implies that the responses on this statement by the respondents were relatively in agreement. The descriptive results for risk control had a norm and average deviation of 3.5912 and 0.6229. It can in this manner be deducted that the respondents of the study relatively agreed to the various statements contained therein.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 5||Issue 1||Page 45-63||February||2021|
Email: info@stratfordjournals.org ISSN: 2616-8464

4.1.5 Project Performance

The researcher analyzed the data collected on project performance and the descriptive statistics are presented in Table 5

Table 5: Descriptive Statistics on Project Performance

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Projects are carried out within the stipulated budget	102	2.00	4.00	3.6230	.65627
Projects are carried out within the stipulated time schedule	102	2.00	4.00	3.5588	.57288
Projects executed are at the intended quality	102	2.00	5.00	3.7010	.59286
Projects carried out address the needs of customers.	102	2.00	5.00	3.5824	.66069
Project performance is affect by risk management practices	102	2.00	4.00	3.5294	.67054
Average Scores				**3.5989**	**0.6306**

Source: Survey Data (2020)

The explanation that projects are carried out within the stipulated budget had a norm and average deviation of 3.6230 and 0.65627 as indicated in Table 5. The explanation that projects are carried out within the stipulated time schedule had a norm of 3.5588 and standard deviation of 0.57288. Also, respondents majorly agreed projects executed are at the intended quality as portrayed by a norm and average deviation of 3.7010 and 0.59286. Explanation on projects carried out address the needs of customers had a norm of 3.5824 and average deviation 3.66069. The relatively agreed that project performance is affect by risk management practices as shown by a mean and standard deviation of 3.5294 and 0.67054. The descriptive statistics on project performance had an overall ranking of 3.5989 and average deviation of 0.6306. participants therefore relatively agreed with each other.

4.2 Diagnostic Tests

This section focused on the diagnostic tests on risk management practices and project performance.

4.2.1. Correlation Test

Correlation test was examined by utilizing the Pearson analysis and the outcomes are presented in Table 6

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 5||Issue 1||Page 45-63||February||2021|
Email: info@stratfordjournals.org ISSN: 2616-8464

Table 6: Correlation Test Results

		Project Performance	Risk Identification	Risk Reporting	Risk Analysis	Risk Control
Project Performance	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Risk Identification	Pearson Correlation	.486**	1.000			
	Sig. (2-tailed)	.000				
Risk Reporting	Pearson Correlation	.481**	.207*	1.000		
	Sig. (2-tailed)	.000	.037			
Risk Analysis	Pearson Correlation	.486**	.044	-.094	1.000	
	Sig. (2-tailed)	.000	.660	.345		
Risk Control	Pearson Correlation	.459**	.066	.303*	-.108	1.000
	Sig. (2-tailed)	.000	.512	.016	.282	

**. Correlation is significant at the level of 0.01 (2-tailed).

*. Correlation is significant at the level of 0.05, (2-tailed).

Source (Research Data, 2020)

Risk identification has a positive with significant correlation in project performance as indicated by β=0.486 and p=0.00 in Table 6. Risk reporting reportedly had positive and significant associations with project performance (β=0.481 and p=0.00). Risk analysis has a positive and significant correlation in project performance as shown by β=0.486 and p=0.00. Lastly, risk control reportedly has a positive and essential meaning Correlation with project performance as indicated by β=0.459 and p=0.00. The findings correspond with those of previous studies. Juliane and Alexander (2013); Roque and de Carvalho (2013); Kinyua, Mburu and Ogollah (2015) found positive and significant correlation between risk control and project performance.

4.2.2. Normality Test

The normality test was performed, to decide whether informational index follows a typical dispersion. A Normality test was conducted utilizing the Shapiro test and the findings presented in Table 7.

Table 7: Normality Test Results

		Shapiro-Wilk		
Risk Management		**Statistic**	**Df**	**Sig.**
Project Performance	Risk Identification	.912	10	.339
	Risk Reporting	.963	10	.828
	Risk Analysis	.967	10	.882
	Risk Control	.966	9	.832

a. Lilliefors Significance Correction

Source (Research data, 2020)

If the p value is <0.05 then it means that the data set does not follow a normal distribution on the off chance that it is more noteworthy than 0.05 it implies that the information set follows a normal distribution. Thus, the results from Table 7 shows that the data was normally distributed as the respective p values for all variables were greater than 0.05.

4.2.3. Multicollinearity Test

Multicollinearity test was undertaken in the study so as to examine the degree of collinearity among the independent variables. The test was based on the VIF test as shown below in Table 8

Table 8: Multicollinearity Test Results

		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		**B**	**Std. Error**	**Beta**	**T**	**Sig.**	**Tolerance**	**VIF**
1	(Constant)	-2.032	.888		-2.289	.024		
	Risk Identification	.901	.214	.398	4.205	.000	.678	1.476
	Risk reporting	.957	.212	.421	4.512	.000	.696	1.436
	Risk Analysis	.302	.120	.199	2.515	.014	.968	1.033
	Risk Control	-.584	.191	-.282	-3.064	.003	.717	1.395

a. Dependent Variable: Project Performance

Source (Research Data, 2020)

Based on the collinearity statistics presented in Table 8, risk identification had a VIF output of 1.476, risk reporting had 1.436, risk analysis had 1.033 while risk control had 1.395. Going by the stipulation by Green (2008) who documented that VIF value ranging from 1 to 10 indicates the absence of excessive multicollinearity among the variables. A value VIF output below 1 and/or above 10 also indicate the problem of multicollinearity. In line with these, none-of the independent variables of the study had multicollinearity problem.

4.2.4. Heteroscedasticity

The test for heteroskedasticity was undertaking and results documented in Table 9.

Stratford Peer Reviewed Journals and Book Publishing
Journal of Entrepreneurship & Project management
Volume 5||Issue 1||Page 45-63||February||2021|
Email: info@stratfordjournals.org ISSN: 2616-8464

Table 9: Heteroscedasticity Test Results

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.231	.498		4.481	.000
	Risk Identification	-.244	.151	-.230	-1.616	.110
	Risk Reporting	-.241	1.393	-.227	-.173	.863
	Risk Analysis	-.041	.067	-.058	-.616	.539
	Risk Control	.007	.107	.008	.069	.945

a. Dependent Variable: AbsUt

Source (Research data, 2020)

The test for heteroskedasticity was aimed at ascertaining whether the variability of variables isn't equivalent over a series of predictor variables. This test was carried out using Test Glejser. A significance of > 0.05 implies that there is no Heteroscedasticity while a p estimation of < 0.05 infers that there is heteroscedasticity problem. Based on the output in Table 9, the residuals are homoscedastic.

4.3 Multiple Regression Analysis

A multiple analysis of regression was performed and presents model summary, R2, and the regression output as shown below. Table 10 presents the model summary

Table 10: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.842[a]	.709	.688	.52421	.000

a. Predictors: (Constant), Risk Control, Risk Analysis, Risk Reporting, Risk Identification

Source (Researcher, 2020)

The model reportedly had an R-square of 0.709 and adjusted R-square of 0.688 as shown in Table 10. The interpretation of these statistics is that risk management practices (risk identification, risk reporting, risk analysis and risk control) collectively explain 70.9 percent of the variables in the project performance at Kenya Airports Authority.

The ANOVA (Analysis of Variance) results are illustrated in Table 11

Table 11: ANOVA (Analysis of Variance)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.688	4	4.672	17.002	.000[b]
	Residual	26.655	97	.275		
	Total	45.343	101			

a. Dependent Variable: Project Performance

b. Forecasters: (Constant), Risk Control, Risk Analysis, Risk Reporting, Risk Identification

Source (Researcher, 2020)

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Journal of Entrepreneurship & Project management
Volume 5||Issue 1||Page 45-63||February||2021|
Email: info@stratfordjournals.org ISSN: 2616-8464

The results for the ANOVA are shown in Table 11 shows a p-value of 0.000 which suggests that the model was substantial at 0.05 significance level. Therefore, it was adequate for subsequent estimations which is a requirement for regression analyses.

The regression model was estimated and results documented in Table 12

Table 12: Multiple Regression Results

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
		B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound
1	(Constant)	-2.032	.888		-2.289	.024	-3.794	-.270
	Risk Identification	.901	.214	.398	4.205	.000	.476	1.327
	Risk Reporting	.957	.212	.421	4.512	.000	.536	1.378
	Risk Analysis	.302	.120	.199	2.515	.014	.064	.540
	Risk Control	-.584	.191	-.282	-3.064	.003	-.963	-.206

a. Dependent Variable: Project Performance

Source (Researcher, 2020)

$Y= -2.032+0.901RI+0.957RR+0.302RA -0.584RC+\varepsilon$

Whereby

PPE = Project Performance

RI_1 = Risk Identification

RR_2 = Risk Reporting

RA_3 = Risk Analysis

RC_4 = Risk Control

$\beta1, \beta2, \beta3, \beta4$ = Coefficients of Regression

ε = Term of error

The results show that in the absence of the risk management practices variables which are risk identification, risk reporting, risk analysis and risk control, the value of project performance is -2.032. The study sought to establish the effect of risk identification on project performance at Kenya Airports Authority. The study findings with respect to this objective indicates a coefficient of 0.901 with p-value of 0.000. This therefore infers that risk identification reportedly had significant positive effect on project performance at Kenya airports authority. The significant positive effect can be explained by the fact that the more the ability of organizations to identify risk, the better their chances of providing solutions and in turn enhancing the performance of projects.

Jun, Qingguo & Qiuzhen (2010) examined the role of risk planning of project on performance of IT project with a focus on vendor firms in china. From the investigation, it was found that there existed a critical positive connection between hazard recognizable proof and execution of tasks. Roque and de Carvalho (2013) tried to describe the effects of project risk management, risk evaluation on project performance in vendor companies based in Brazil. The results clearly

depict that risk identification has a significant positive effect on the project's success. Kinyua, Mburu & Ogollah (2015) sought to identify how risk managing practices impacts projects performance of SMES in ICT within Nairobi. The research showed that risk identification positively and significantly influences project performance as far as SMEs in Kenya is concerned.

The second explicit goal of the examination is to inspect the effect of danger of risk reporting on Project performance at Kenya Airports Authority. With respect to this objective, the results show that a coefficient of 0.957 and p-value of 000 were obtained. The results therefore imply that risk reporting had significant positive effect on project performance at Kenya Airports Authority. Therefore, a unit increase in risk reporting yields a corresponding increase in project performance by 0.957. The more the risk reporting, the better the performance of projects at Kenya Airports Authority.

Alexander & Juliane (2013) sought to bring a comprehension on the role of managing of portfolio risk on the success of UK IT projects. The research documented that risk reporting positively impacts performance. Roque and de Carvalho (2013) did an empirical analysis because of danger the executives of projects, and risk evaluation on project performance in vendor companies in Brazil. It was discovered from the outcome that risk reporting had a significant positive impact on the success of the projects in the vendor companies in Brazil. An empirical analysis was done by Kinyua, Mburu & Ogollah (2015) on the impact of risk managing procedures on performance of project within the SME in ICT companies in Nairobi. Using multiple regression model, the study depicted a positive connection between risk reporting and project performance.

The third specific purpose of the analysis was to evaluate effect of risk analysis on project performance at Kenya Airports Authority. Based on the study findings, a coefficient of 0.302 and p-value of 000 were obtain. The results therefore imply that risk analysis had significant positive effect on project performance at Kenya Airports Authority. Also, a unit increase in risk analysis brings about a corresponding increase in project performance by 0.302. Risk analysis provides organizations with the ability to assess the extent and nature of risks facing them which will enable them come up with viable solutions of addressing these risks.

Jun *et al*. (2010) studied the impact of project risk planning on performance of China's IT project within vendor companies. A considerable positive association between analysis of project risk and performance was established. Roque and de Carvalho (2013) assessed the role of management of risk on projects, evaluation of risks and performance of projects vendor companies in Brazil. The examination established that the risk analysis had strong effect on performance of project in Brazil (vendor companies).

The study tried to discover the impact of risk control on project performance at Kenya Airports Authority which was the fourth objective the study. In line with this objective, a coefficient of 0.302 and p-value of 000 were obtain. The results therefore imply that risk control had significant positive effect on project performance at Kenya Airports Authority. Also, a unit increase in risk analysis brings about a corresponding increase in project performance by 0.302. Risk control provides organizations with better project performance as risk general hamper the progress and execution of projects.

On portfolio risk management and performance of IT ventures by Juliane and Alexander (2013) portfolio in UK businesses. The outcome of the scrutiny depicted that risk control has positive influence on the success of IT projects. Roque and de Carvalho (2013) did an investigation on the role of managing of risk on projects, evaluation of risks and performance of projects vendor

companies in Brazil. Using regression, the analysis, the study established that risk control had significant impact on project success. In addition, Kinyua, Mburu and Ogollah (2015) performed an empirical study on the effect of risk management instruments on the ICT project success of SMEs in Nairobi-Kenya. A multiple regression was employed It identified that a positive correlation exists between risk management and the output of the ICT project on the basis of its statistical significance at level 0.05.

5.0 CONCLUSION

The study concluded that risk identification contributes significantly to project performance at Kenya Airport Authority. Increases in the identification of risks results in better performances of projects by Kenya Airport Authority. The study further concluded that risk reporting is key in predicting project performance at Kenya Airport Authority. This can be linked to the notion that when risk is reported, it facilitates the coming up of solutions which will be geared towards addressing these risks.

The study concluded that risk analysis significantly contributes to projects' success at Kenya Airport Authority. Risk analysis enables the organizations to know the nature and extent of risks associated with projects. This in turn helps them to adequately address these risks thereby ensuring optimum project performance at Kenya Airport Authority. The study also concluded that risk control leads to better project performance at Kenya Airport Authority. This can further be linked to the notion that in the case where risks associated with projects are effectively controlled, then project performance is guaranteed.

6.0 RECOMMENDATIONS

The study recommended that Kenya Airports Authority should put in place adequate institutional framework for effective identification of risks associated with projects.The study found that risk identification had significant effect on project performance at Kenya Airport Authority.The study recommended that effective risk reporting channels be put in place so as to ensure timely communication of identified risks to management. The research discovered the risk reporting significantly affects projects success at Kenya Airport Authority.The study also found that risk analysis fundamentally contributes to project performance at Kenya Airport Authority. It is therefore recommended that Kenya Airport Authority provides enabling environment for proper risk analyses. The study recommended It is therefore recommended that effective tools for risk control should be put in place by Kenya Airport Authority.Lastly, the study recommended that effective tools for risk control should be put in place by Kenya Airport Authority since it was found that risk control is significant in predicting the project performance at Kenya Airport Authority

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