DECLARATION

I declare that this project is my original work and has never been presented in any other university for any other award. No part of this project should be produced without authority of the author or/and Kenyatta university

Signed……………………………… Date…………………………

PETER GITAU NJUGUNA

D53/OL/CTY/26701/2014

This research project has been submitted for examination with my approval as the supervisor

Signed……………………………… Date…………………………

Mr. Shadrack Bett
Department of Business Administration
Kenyatta University
DEDICATION

I dedicate this research project to my lovely wife, parents, friends and colleagues who supported me along the process
ACKNOWLEDGEMENT

I would like to thank the Almighty God for giving me the opportunity and strength to pursue my education. It is through His abundant grace that has brought this research work this far. This work would have not been possible without my supervisor Mr. Shadrack Bett who guided me all along the process. I would like to thank my family, for their support and wonderful ideas throughout this process. I further wish to thank my older siblings for their invaluable advice and companionship on how to tackle the life challenges they have always been a source of inspiration from whom I get my strength and intelligence. Lastly, I also appreciate my friends who share this journey with me and encouraged me in the adventure of academics and have been my anchor.
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<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
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<td>PMBOK</td>
<td>Project Management Body of Knowledge</td>
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<tr>
<td>PMI</td>
<td>Project Management Institute</td>
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<tr>
<td>PRM</td>
<td>Project Risk Management</td>
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<td>SWOT</td>
<td>Strength Risk and threat</td>
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OPERATIONAL DEFINITION OF TERMS

**Project Performance:** This is the actual realization of project goals and objectives. It involves implementing a project according to plan, time schedule, budget and scope.

**Risk control:** This is the process of identifying risks, separating the project plan from encountering them in advance and having a risk management plan to enable minimize chances of the risks from occurring.

**Risk management practices:** these are approaches used to identify, mitigate, control, prevent and avoid incidences or activities that can affect negatively the implementation or lifecycle of a project.

**Risk prevention:** The process of advocating for early detection of risks and coming up with ways of enhancing staff capacity, work plans and thorough inspection and monitoring to ensure no risks frustrate the project management process.

**Risk retention:** The process of avoiding risks through self-insurance, use of alternative plans and not necessarily overcoming it but rather exploring options around it.

**Risk transfer:** This is the use of third-parties to carry the burden of the risks involved in the project lifecycle through insurance, legal agreements and outsourcing.
ABSTRACT
Projects are prone to risks the numerous types of risks that may affect a project are financial, strategic, hazardous and operational risks. Unexpected events and uncertainty often result to damaging consequences for projects. If these risks are not effectively dealt with, they may pose a challenge in the completion of the project. Therefore, risk analysis and management of risks is a major feature of project management in which project managers need to effectively deal with the risks and uncertainty in order to fully achieve the vision of the project. Project performance is determined by factors such as cost, customer satisfaction, time, health, client changes and business performance the concept of project delays as a result of risk is now a global phenomenon. The study’s general objective was to determine the influence of risk management practices on performance of projects in Nairobi City County, Kenya. The study was guided by the following specific objectives; to determine the influence of risk retention on project performance in Nairobi City County, Kenya, to investigate how risk prevention affects performance of the projects in Nairobi City County, Kenya, to examine the effect of risk control on performance of projects in Nairobi City County, Kenya and to evaluate how risk transfer affects the performance of projects in Nairobi City County, Kenya. The study will be guided by the Enterprise Risk Management theory, Network theory and the Expectancy Theory. The study adopted a descriptive design in order to determine how risk management practices with respect to the following independent variables risk prevention, risk retention, risk transfer and risk control and how they affect the performance of projects in Nairobi City County, Kenya. The study used primary data. The study employed semi-structured questionnaires to gather relevant information from a total of 135 project managers, supervisors, risk managers, construction firms and finance officers. The data collected was then analyzed using SPSS and findings of the study were presented in graphs, pie charts and tables. The study established that risk management practices have a significant and positive effect on project performance. The study concluded that risk transfer had a significant and to a great extent affected the performance of the projects in Nairobi City County, Kenya. It was also concluded that risk transfer is significantly embraced, applied and practiced among firms implementing projects in Nairobi City County, Kenya. The study concluded that risk prevention significantly affected project performance. It was concluded that risk prevention is embraced among organizations executing projects in Nairobi City County, Kenya as a risk management practice and it has enhanced project completion within scope, budget and time schedule. The study further concluded that there a significant and positive relationship between risk control and project performance. Risk control was significantly practiced among the organizations involved projects in Nairobi City County, Kenya and had a significant influence on project performance. It was concluded that risk retention had a positive and significant effect on the performance of the projects. To great extent, risk retention as a risk management practice had a positive effect on project performance. The study recommends that the management of the projects need to ensure the risk management practices are integrated in project implementation. Most of the practices were in place but were not effectively employed to ensure peak performance. The organizations were found to be skeptical on planning for risks and taking risk management steps and therefore for peak performance there is need to have a risk management plan in place and stick by it.
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to the Project Management Institute (2004), a project is a temporary venture that has an ending point and a unique way of achieving its objective. Project management on the other hand involves application of skills, techniques and tools that are incorporated in the project activities in order to achieve the project requirements. A project meets its objective and goals through the integration and application of project management practices such as initiation, planning, implementation, monitoring and controlling and the closing phases (PMI, 2004). In as much as project managers can apply these project management practices and tools it is undeniable that projects are prone to risks that makes the project teams bear challenges such as delay in completion, not biding to the desired quality and costs overrun which results to poor project performance (Macharia, 2017).

Project performance is determined by factors such as cost, customer satisfaction, time, health, client changes and business performance safety (Musyoka, 2012). The Concept of delays and overrun cost in projects is now a global phenomenon. According to a report of USA standish group (CHAOS report 2009) only 32% of projects meet the successful expected delivery period. 44% are challenged due to budget constraints and 24% projected with failure and cancellation. Africa failure of projects be it NGO, Governmental or Religious based sponsored generates a cycle of rising expectation and unfulfilled promises. The failure of such project teams to meet the desired project goals is usually as a result of failure to manage risk associated with the projects. According to Carbone and Tippet 2015, managing of project risk is important in successful management of projects.

Kumar (2014) risk management tools and techniques have been developed in order for project team to successfully deliver the project on time, within budget and in order to meet client desired quality. However, these project management practices are not widespread and most of the project managers have failed in applying them thus resulting to project failure. According to Musyoka (2012) all entities are faced with risk however the challenge of the management is the determination of how much risk it is prepared to accept so as it to strives to grow the value of the stakeholders. However, these uncertainties present both values and
risk with the potential; of enhancing or eroding value. Risk management practices enable them to identify, examine and manage risks associated with the uncertainty.

Unexpected events and uncertainty often result to damaging consequences for projects (Gitau, 2016). Therefore, risk analysis and management of risks is a major feature project management in which project managers need to effectively deal with the risks and uncertainty in order to fully achieve the vision of the project (Anderson, 2012). Globally, Lee, Lam and Lee (2015) conducted a study in Canada on risk management practices on energy contracting projects performance the study established that uncertainty such as baseline measurement and increase in overrun costs and project complexity arises due to failure of project managers to identify risks at the initiation phase of the project. In Nigeria, Augustine, Ajayi, Ade and Edwin (2013) evaluated risk management practices applied in construction firms in Lagos, the study established that introduction of Risk management practices has helped in reduction of costs, overtime run and hence has improved the quality of construction projects.

Regionally, Amandin and Kule (2016) conducted a study in Kigali Rwanda on risk management practices on construction project the study established that project delay is usually caused as a result of failure in identifying a formal and well-structured risk management strategy during project planning with involvement of project team, professionals and end users. In Kenya, Macharia (2016) established the effect of risk management strategies on performance of public schools in Nairobi the study findings implicated that among four risk management practices risk avoidance had the major influence on completion of the construction and it concluded that risk reduction, risk sharing and risk retention practices positively influenced the completion of the construction projects. According to Mbada (2016), failure of private and public construction projects to meet cost, time and quality has resulted to poor performance and waste of resources.

1.1.1 Risk Management Practices

According to PMI (2008) project risk is an uncertain event that when it occurs leads to a positive or negative consequence on at least one project objective, such as cost, time, quality or scope. Risk management is one of the nine knowledge areas propagated by the PMI. Project Management Body of Knowledge (PMBOK, 2004) highlighted the essence of risk management as it includes the processes concerned with carrying out risk management in
areas of initiating, planning, identifying, analyzing and monitoring and controlling on a project. Project risk management discipline has developed over a period of time as critical part of project management. Risk can have a two-dimensional meaning, either a negative implication or appositive implication. Risk management practices involve identification, understanding and determining of the potential unsatisfactory results that is likely to affect a project (Muriana & Vizzini, 2017).

After identifying the uncertainties, the risks involved are then analyzed based on likelihood and impact of the risks. According to Burtonshaw (2017), tools used in risk examination include the use of probability (Risk matrices), the SWOT analysis which is analyzing the strength, weakness, opportunity, and threat associated with the risk that has emerged. After the SWOT analysis the top ten risk item tracking technique is applied to access and rank the risk depending on the significance to a particular project. Probability and impact can be prioritized using a five-point scale for evaluating risk in the scale of critical risk, serious risk, moderate risk, minor risk and negligible risk. According to the PMBOK (2004) Risk control and response includes avoidance, acceptance, transfer and mitigation and thereafter positive risk can be enhanced, shared and exploited.

According to Cagliano, Grimaldi and Rafele (2015) risks should be continuously evaluated and monitored in order to identify new risks and effectiveness of risk control and feedback. Carvalho, and Rabechni (2015) identifies five Project Risk Management Practices (PRM) they include; systematic risk identification through documentation of reviews and information gathering techniques like SWOT analysis and interviews; methodic trade-off analysis which involves coming up with a plan and appointing risk manager; detailed planning for uncertainty to reduce the probability and the consequences associated with an adverse risk to an acceptable threshold; probabilistic risk analysis which includes assessing of likelihood that a risk will occur and the effects if it occurs.

A critical component of management of risk is the mitigating risk at its point of occurrence by reducing their impact. A successful risk mitigating strategy often leads to a reduction in the adverse impacts. According to Chapman and Ward (2007), when a risk mitigation strategy is well planned and properly administered it replaces an uncertain event with a more controlled and predictable response. Wallace and Blumkin (2007) argues that control activities at the planning phase includes risk profiling, architect and engineer selection.
process, architect and engineer contract review, site selection and validation, need identification and validation and preliminary budget and schedule development.

According to the International Organization for Standardization (ISO) risk is an effect of uncertainty on objectives, which means that they either results to a positive or negative effect. ISO 31000 is a set of standards relating to management of risks codified by the ISO 31000:2009, Risk management – Principles and guidelines it provides a principle, framework and a process for risk management. It can be applied by any organization regardless of its capacity, operations or sector. Using ISO 31000 helps organizations to increase the likelihood of achieving its vision, mission and objectives, improve the identification of opportunities and threats and effectively allocates and utilizes resources for risk treatment.

1.1.2 Project Performance

According to Muller (2016), an endeavor that is conducted in order to come up with a unique product that is beneficial and brings about change is known as a project. The essential measure of a successful project is that it measures it delivers what it is designed to deliver in terms of output product or services to a business. In addition, factors such as time limit achievement, working within the budget, approved scope and quality are also contributing reasons for a successful project. Measures of project performance consist of meeting outcomes positively and delivery of outcome within a specified contracted time frame and within the budget allocated with respect to reduced costs. Project performance relates to accomplishment of objectives and goals in fulfilling customer satisfaction and fulfilling technical requirements.

Todorović, Petrović, Mihić, Obradović and Bushuyev (2016) when projects are managed effectively, they contribute to a number of factors thus improving organizational performance. The long run advantages of project management include; attaining specified targeted profits, attainment of competitive advantages, an increase in market share, enhancement of the organization status quo. Cheung (2014) project performance is appraised and quantified using a number of performance indicators that include; cost, safety and health, quality, firm performance, time, endorsement of client and changes. According to Nyoni (2018), the implementation stage of the project is the benchmark of measuring the performance of a project this is because it provides a guideline to how the project will run in terms of its activities and ensuring all the project participants focus on the end goal of a project. This means that difference in opinions along with the project objectives among project participant
would lead to failure of the project. Kerzner (2017) project initiation takes an overall of 80% of all project activities and utilization of resources thus it’s a benchmark of whether the project will be successful or not.

According to Kerzner (2017), there are four dimensions of project performance. These four dimensions consist of factors such as quality, cost, time efficiency and production efficiency. However, different projects have different performance measurement thus organization should avoid limiting measurement of performance through using efficiency measures as the only indicators of project performance because it does not always signify the overall performance of a project. Organization should therefore look at measures such as the effect of the project on clients and how the end product of the project impacts the future state of the organization.

1.1.3 Projects in Nairobi City County, Kenya

Many projects fail due to risk management practices in the implementation of the projects by the Nairobi’s county government. In 2009 there were many projects which finished with poor performance because of many evidential poor risk management, non-availability of materials, road closure, amendment of the design and drawing which are entailed in projects design risks, additional works, waiting the decision, handing over, variation order, amendments in Bill of Quantity (B.O.Q) and delay of receiving drawings (Strenman, 2012). Nonetheless there are other factors for problems of performance in Kenya such as project management, coordination between participants, amongst other factors.

1.2 Statement of the Problem

Projects are always prone to uncertainties and risks and failure to effectively manage the associated risks appropriately results to failure of the projects in terms of delay in completion (Jean, 2015). Globally, regionally and locally various studies have been conducted on the risk management practices on performance and success of projects. For instance, Carvalho and Rabechini (2015) investigated the impact of project risk management practices on success of IT projects findings of the study revealed that IT projects carry out risk management to
maximize the performance and to manage risk effectively and efficiently enjoy financial savings and greater productivity. Adeleke, Nasidi and Bamgbade (2016) assessed the influence of risk management practices of construction projects in Lagos findings of the study revealed that risk management practices has a positive correlation with project success. When used consistently, risk management practices increase the chances of project success.

In Kenya, Kinyua, Ogolla and Mburu examined the effect of risk management practices on performance of SME dealing with communication and technology in Nairobi Kenya findings of the study revealed that many (ICT) enterprises in Nairobi, Kenya have realized the importance of risk management practice in ICT project management to achieve process success and adoption of risk management practices has improved success rates of new projects and better decision making. Macharia(2017) investigated risk management strategies and performance of public school construction projects in Murang’a county findings of the study revealed that The risk avoidance strategy has the strongest influence on performance of construction projects while risk transfer had the lowest influence risk management strategies have positive influence on performance of construction project in secondary schools.

The above-mentioned studies have proved that risk management practices enhance project performance. There is a contextual gap since very few studies have been done on the influence of risk management practices on performance of projects in Nairobi Kenya. However, the application of the findings of the mentioned studies is limited. It is in this perspective that this research assessed the influence of risk management practices and project performance in Nairobi City County, Kenya

1.3 Objectives of the Study

1.3.1 General objective

The study’ general objective was to determine the influence of risk management practices on performance of projects in Nairobi City County, Kenya.

1.3.2 Specific Objectives

The study was guided by the following specific objectives;

i. To determine the influence of risk retention on project performance in Nairobi City County, Kenya
ii. To investigate how risk prevention affects performance of the projects in Nairobi City County, Kenya

iii. To examine the effect of risk control on performance of projects in Nairobi City County, Kenya

iv. To evaluate how risk transfer affects the performance of projects in Nairobi City County, Kenya.

1.4 Research Questions

i. To what extent does risk retention affect the performance of projects in Nairobi City County, Kenya?

ii. What is the effect of risk prevention on performance of projects in Nairobi City County, Kenya?

iii. How does risk control affect the performance of projects in Nairobi City County, Kenya?

iv. What is the effect of risk transfer practice on performance of projects in Nairobi City County, Kenya?

1.5 Significance of the Study

It is hoped that the findings of this study will fill the existing gap on influence of risk management practices in enhancing performance of projects in Nairobi City County, Kenya. Findings of this study will be relevant to stakeholders involved in different projects. This study will outline risk management practices that lead to success of projects and enhance performance of those projects. The findings of the study will not only be important to the Nairobi City County, Kenya Government but will also be applicable in different projects settings such as NGOs, Religious based Organization and government projects. The findings of the study will also add up to the existing literature thus will be used as a point of reference by scholars who would want to pursue related research study.

Donors, government body and stakeholders may find the findings of this study useful in the process of decision making because the findings of the study will form a basis of understanding on how risk management practices influence performance of projects. The study will also be of relevance to potential investors and existing investors who would want to be invest in different projects because they shall be in a position to make appropriate
decisions on risk management practices and how they affect performance. Project managers will also benefit from the study since they will gain a clear understanding on which risk management practice effectively influence performance of projects. Lastly, the study will be of relevance to consultancy firms because they will be in a position of making wise decision on advice and recommendations to issue to their clients on influence of risk management practices and project performance.

1.6 Scope of the Study

This study focused on risk management practices and performance of projects in Nairobi Kenya with an emphasis on risk retention, risk transfer, risk control and risk prevention. To effectively establish how the risk management practices, affect the performance of project in Nairobi City County, Kenya. The study scope will consist of 190 staffs of Nairobi City County, Kenya Government that are involved in project implementation. The scope therefore consisted of, general managers, project managers, project supervisors, project officers, finance officers and Contracting Companies representatives. The reason for choosing the above mentioned was because they would give the relevant information on performance of projects in Nairobi City County, Kenya.

1.7 Limitation of the Study

Use of structured questionnaires was employed in data collection, the study experienced unwillingness of some respondents to share relevant information due to fear of victimization to overcome this challenge the researcher assured the respondents that information conveyed would be confidential. The researcher also acknowledged that respondents were busy when administering the questionnaires to curb this challenge the researcher contacted the respondents before administering the questionnaires and also used the drop and pick later method to ensure that answers given were well thought.

1.8 Organization of the Study

This study consists of five chapters. The first chapter gives us the body of the study it consists of background information, study objective, statement of the problem, research questions, research questions, significance of the study, scope and limitation of the study. The second chapter discusses the literature review consisting of theoretical and empirical literature and also gives us the research gaps and conceptual framework. The third chapter outlines the research methodology that was utilized to determine how project management practices
affects performance of projects in Nairobi City County, Kenya. Chapter four presents research findings, interpretations and discussions while chapter five gives the summary of the findings, conclusions and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
In this chapter, theories that form the basis of the study are discussed. Various studies carried out on risk management practices and performance of projects is also discussed in the empirical review. The research gaps and the conceptual framework are also included in this section.

2.2 Theoretical Review
Kothari (2003) the theoretical review provides the researcher with an opportunity to have a philosophical stand. Theoretical framework affects the decisions made in the process of research. The study was guided by three theories namely; Network Theory, Expectancy Theory and lastly the Enterprise Risk Management Theory.

2.2.1 Expectancy Theory
This theory was developed by Vroom (1964). The theorist believes that motivation of the individual is determined by perception of relationship between the actions and rewards. The theory is categorized into three sections namely, valence, expectancy and instrumentality. Expectancy assumes that a certain level of effort will be followed with certain level of performance. Valence represents a value that a given outcome has for individual. Instrumentality relate to the connection between first level outcome like promotion and second level outcome such as raise.

Thomas (1990) analyzed Vroom expectancy theory model in the context of construction industry, and found that the theory discusses variations of performance in terms of effort which the employee is willing to exert in order to finish a job. According to Thomas, the result performance could be observed based on efficiency, effectiveness, quality of work, innovation, profitability and productivity. 12 According to Gonzalez (1991), managers should determine the outcome of each employee values and define adequate and good performance, in terms that are observable and measurable so that employees understand managers’ desires. Project managers in construction industries should also ensure that intended level of performance is attainable in fact; they should connect the outcome required by the workers to specific performance. This theory relates to performance of projects as it will help all
stakeholders such as projects managers to develop measurement guide that can give important feedback to workers therefore improving performance of projects.

2.2.2 Enterprise Risk Management Theory

According to Nocco and Stulz (2006), Enterprise Risk Management (ERM) is a risk management theory advocates for recommends for the measurement and management of notable risk facing a given entity whole than the management of each risk independently. Its main aim is to combine the risk management silos in an organization into one holistic and comprehensive framework. The ERM risk management framework of managing risk emphasizes that senior company executives and employees should actively be involved in risk management process of analyzing and responding to a wide range of company risks (Hallowell, Molenaar, &Fortunato, 2013). This concept encourages all members of the organization to be involved in the management of risks and not only one or a few members.

The ERM also highlight the importance of clear process and policies for managing risks. According to Olson and Wu (2010), the theory also affirms that if 10 organizations can embrace formal policies that define risks appetite, strategic goals, tolerance and systematic processes then they can improve their risk management capacity of identifying, analyzing, and treating of risks. The theory also stresses on a creation of risk management culture where all stakeholders are empowered and accountable to manage risks. Cormican (2015) suggested that ERM practices involve increased competitive advantage, stakeholder confidence and long-term viability of organizations. The ERM theory has become popular in project management techniques despite the fact that it was developed for management of company risks. Drumll (2001) explains that adopting ERM philosophy in the construction industry is a wise decision as it applies to industries that have very high rates of failure like construction industry. These failures are as a result of failure to identify, mitigate and control risk across the entire business making this theory relevant to this research

2.2.3 Network Theory

Network theory is a hypothesis that is used to clarify the structure and working of social frameworks. According to Fang, Marle, Zio&Bocquet (2015) this hypothesis sees social frameworks, for example, organizations or projects as a network that includes nodes and links associating these nodes. For example, in a given projects, the nodes may incorporate members of the project team, the task administrator, suppliers, owner of the project and
project financiers. These nodes are associated with different connections such as supplier-buyer relationship, financing, legal, and working connections. The hypothesis clarifies that adjustments or unsettling influences in any node or line inside the system cause a progressively outstretching influence on every single other line and nodes. The theory is frequently used as a part of risk management to clarify and educate the procedure of risk analysis.

Moreover, according to Zingrand (2010), this theory also put more emphasis on the need to adopt a systematic approach when analyzing and understanding risk instead of concentrating on the risk consequences as one component of the project. It urges project team to consider how different segments of the project are interrelated and how obstruction in one component will influence other components of the project. This point of view of investigating risk empowers managers of the project to think of a more reasonable and all-encompassing evaluation of the effect of specific risk. This theory recommends that in order to judge the success of project management strategies the researcher should establish the extent at which this strategy holistic and comprehensive making this theory relevant to this research.

2.3 Empirical Literature Review

2.3.1 Risk Transfer and Project Performance

Aduma and Kimutai (2018) conducted a study in Nairobi Kenya to investigate risk management practices conducted at the National Hospital Insurance Fund in Nairobi. A descriptive research design was adopted in the study and a total of 651 management employees at NHIF were the study’ target population. A stratified proportionate random sampling technique was employed and the sample size was 241. Self-administered questionnaires were then administered to the study respondents who consisted of staff from finance, Health insurance and legal affairs, Public procurement and human resources departments. The data collected was then analyzed using both descriptive statistics and inferential statistics a test for multicollinearity. Findings of the study revealed that risk transfer influenced performance of NHIF in that use of outsourcing, high cost of risk premiums and insurance policy and contractual agreements to a third party greatly influenced performance of the Funds projects.

Nsiah and Bonnah (2014) conducted a study in Ghana to investigate the effect of risk management practices on Ghanaian banking industry. The study adopted a case study
research design and a total of 5 banks located in the rural area consisted of the study’ target population. The employed questionnaires and face to face in-depth interviews to investigate how risk management practices influenced the performance of the banks. Questionnaires were then successful administered to bank managers, strategic and finance officers. For data analysis, the study employed descriptive and content analysis and findings of the study revealed that risk transfer strategies such as high-risk premiums, signing of contracts and insurance policy influenced the performance of the 5 banks.

Kolo (2015) investigated the influence of project risk management practices in construction projects in Abuja Nigeria. The study adopted a descriptive research design and a total of 12 construction firms in Yola were the study’ target population. Questionnaires were successfully administered to project managers, supervisors and general managers of the firms. Data collected was then analyzed using descriptive analysis and findings of the study revealed that the construction firm adopted risk transfer strategies such as insurance policy and risk premiums influenced performance of the projects in terms of cost time and quality.

Pimchangthong and Boonjing (2017) investigated the effect of risk management practices on performance of IT projects. The study adopted a descriptive research design and a total of 200 project managers, IT managers and IT analysts working in IT firms were interviewed. The researcher successfully administered questionnaires consisting of both open ended and closed ended questions to the study respondents. Data collected was then analyzed using descriptive statistics. Findings of the study revealed that risk transfer strategies such as high-risk premiums, signing of legal agreements and outsourcing influenced the performance of the firm’s IT projects.

2.3.2 Risk Prevention and Project Performance

Wabomba (2015) conducted a study in Nairobi Kenya to investigate the influence of risk management strategies on performance of projects among International Development Organizations. The study adopted a correlational predictive research design and data was collected using both documentary study review analysis of concepts used by literature and primary methods. Questionnaires were then administered to project and programme managers involved in managing of International Development projects. Data collected was then analyzed using Excel 2013 and findings of the study revealed that the organization adopted changing of work plans to avoid risks, contingency, regular inspections, operational reviews training and skill enhancements in order to prevent risks.
Weingarten, Humphreys, Gimenez, and McIvor (2016) conducted a study to investigate the influence of risk prevention on performance and success of supply chain integration study adopted a descriptive research design and a total of 12 firms dealing with supply of stationery were the study’ target population. Questionnaires were then successfully administered to the study respondents who consisted of managers, finance offices and procurement officers. Data collected was then statistically analyzed using descriptive and inferential statistics. Findings of the study revealed that the supply chain firms adopted risk prevention strategies such as detailed planning, alternative approaches and contingency as a way of risk prevention. Study findings further implicated that risk prevention practice positively influences the performance of supply chain firms.

Aimable, Shukla and Oduor (2015) conducted a study in Rwanda to investigate the effects of risk management strategies on the performance of construction projects. The study adopted a descriptive research design and a total of 291 project team located in 4 districts were the study’ population. The study used simple random sampling and the sample size was 169. Study employed structured questionnaires, documentary review and In-depth interviews for data collection and for data analysis the study adopted qualitative analysis techniques. Findings of the study revealed that detailed work plan, safety inspection and having a safety system influence the performance of the construction projects. The study concluded that research prevention strategy influenced the performance of the construction firms.

Singh, Deep, and Banerjee (2017) carried out a study in India to investigate the influence of risk management practices in India construction firms. The study adopted a descriptive research design and questionnaires were developed based on the existing literature. A total of 152 respondents consisting of project managers, project team, supervisors and general managers of 3 construction firms were included in the study. Findings of the study revealed that the 3 construction firms used risk prevention strategies such as safety inspections, safety systems, contingency and detailed work plan to influence the construction projects performance. The study findings further revealed that alternative approaches for risk prevention.

2.3.3 Risk Control and Project Performance

Okumu and Wanjira (2017) investigated the risk management strategies adopted by Insurance firms in Kenya. The study adopted a descriptive research design and a total of 18 motor
insurance companies consisted of the study population. A simple random sampling and purposive sampling was employed and a total of 54 employees and management of the motor insurance companies were interviewed. The study employed self-administered questionnaires for data collection. Data collected was then analyzed statistically using descriptive statistics and content analysis. The findings of the study implicated that risk control strategies such as identifying risk events, quantifying risk, responding to risk as defined in risk management plan, risk control meetings, use of quality assurance, signed contracts, and use of contingency positively influenced performance of the motor insurance companies.

Aimable, Shukla and Oduor (2015) conducted a study in Rwanda to investigate the effects of risk management strategies on the performance of construction projects. The study adopted a descriptive research design and a total of 291 project team located in 4 districts were the study’ population. The study used simple random sampling and the sample size was 169. Study employed structured questionnaires, documentary review and In-depth interviews for data collection and for data analysis the study adopted qualitative analysis techniques. Findings of the study revealed that identifying risk event, quantifying risk, responding to risk as defined in risk management plan had a positive effect on performance of the construction projects.

Ubani, Amade, Benedict, Aku, Agwu, and Okogbuo (2015) conducted a study in Nigeria to investigate the influence of risk management practices on construction industry. The study adopted a case study research design and the study’ target population consisted of contractors, clients and consultants in the construction industry. A total of 84 respondents represented the sampling size. For data collection the study adopted use of questionnaires that were administered to 15 construction companies. Data collected was then analyzed using SPSS and the findings of the study revealed that the construction firms adopted risk control strategies through identification of the risk, quantifying and responding to the risk in accordance to risk management policy of each firm. The findings of the study further implicated that all of the construction firms adjusted plans and scope of work in order to counter risk effects, monitoring risk making timely decisions and keeping project managers informed about possible risk. The study concluded that by adopting risk control measures the construction company’s performance of projects is enhanced through working within the time limit and budget of projects.
2.3.4 Risk Retention and Project Performance

Naktari (2014) conducted a study in West Pokot to investigate the effect of humanitarian risk management strategies on NGO’s. The study adopted a descriptive research methodology and the study’ population consisted of all humanitarian NGO operating in West Pokot. The study employed structured questionnaires that consisted of both open ended and close ended questions. For the data collected the study employed descriptive statistics and content analysis for statistical analysis of the data collected. Findings of the study revealed that the NGO’s adopted a contingency plan to minimize hazard risks financial risks, operational and strategic risks. Study findings further revealed that the NGO’s adopted a detailed crisis management plan and a disaster recovery plan as the mitigation strategies.

Ubani, Amade, Benedict, Aku, Agwu, and Okogbuo (2015) conducted a study in Nigeria to investigate the influence of risk management practices on construction industry. The study adopted a case study research design and the study’ target population consisted of contractors, clients and consultants in the construction industry. A total of 84 respondents represented the sampling size. For data collection the study adopted use of questionnaires that were administered t 15 construction companies. Data collected was then analyzed using SPSS and the findings of the study revealed that the construction firms adopted risk retention through active retention by taking self-insurance after evaluation of possible losses and costs of alternative ways of handling risks. The study findings further implicated that risk retention positively influences performance of the construction firms.

Aimable, Shukla and Oduor (2015) conducted a study in Rwanda to investigate the effects of risk management methods on the performance of construction projects facilitated by RBSS multi-storey building projects. The study adopted a descriptive research design and a total of 291 project team located in 4 districts were the study’ population. The study used simple random sampling and the sample size was 169. Study employed structured questionnaires, documentary review and In-depth interviews for data collection and for data analysis the study adopted qualitative analysis techniques. Findings of the study revealed that the construction firm purchase insurance and have detailed crisis management plan and a disaster recovery plan in the case of hurricanes. The findings of the study revealed that risk retention positively influenced the performance of the construction projects.
Ali, Stewart and Qureshi (2017) conducted a study in Pakistan to investigate the risk management practices adopted in Construction industry. The study adopted a descriptive research design the study target population consisted of construction practitioners, construction managers and construction project team. Questionnaires were successfully administered to 40 respondents and data collected was statistically analyzed using descriptive statistics and inferential statistics. Findings of the study implicated that the risk retention strategies adopted by the construction company such as taking insurance and contingency plan influence completion of projects. The study concluded that risk retention policies have a strong positive influence on project performance.

2.4 Summary of Literature Reviewed and Research Gaps

Table 2.1: Research Gaps

<table>
<thead>
<tr>
<th>Author</th>
<th>Study Topic</th>
<th>Study Findings</th>
<th>Research Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aduma and Kimutai (2018)</td>
<td>Project risk management strategies and project performance at the National Hospital Insurance Fund in Kenya</td>
<td>Risk transfer influenced performance of NHIF in that use of outsourcing, high cost of risk premiums and insurance policy and contractual agreements to a third party greatly influenced performance of the Funds projects.</td>
<td>The study was conducted based on projects of a health insurance provider.</td>
</tr>
<tr>
<td>Wabomba (2015)</td>
<td>Influence of Risk Management Strategies on Project Performance: A Survey of Selected International Development Organizations Based in Nairobi City, Kenya</td>
<td>Changing of work plans to avoid risks, contingency, regular inspections, operational reviews training and skill enhancements in order to prevent risks.</td>
<td>Stud was conducted in International Development Organizations.</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Title</td>
<td>Findings</td>
<td>Study Area</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Naktare (2014)</td>
<td>Humanitarian Risk Mitigation Strategies Adopted by Non-Governmental Organizations in West Pokot County</td>
<td>NGO’s adopted a contingency plan to minimize hazard risks, financial risks, operational and strategic risks. Study findings further revealed that the NGO’s adopted a detailed crisis management plan and a disaster recovery plan as the mitigation strategies.</td>
<td>Study focused on NGO’s located in West Pokot.</td>
</tr>
<tr>
<td>Nsiah and Bonnah (2014)</td>
<td>The Effect of Risk Management in the Banking Industry in Ghana: A Case Study of Asokore Rural Bank Ltd.</td>
<td>Risk transfer strategies such as high-risk premiums, signing of contracts and insurance policy influenced the performance of the 5 banks.</td>
<td>The study was conducted in Ghana.</td>
</tr>
<tr>
<td>Aimable, Shukla and Oduor (2015)</td>
<td>Effects of risk management methods on project performance in Rwandan construction industry.</td>
<td>Detailed work plan, safety inspection and having a safety system influence the performance of the construction projects. The study concluded that research prevention strategy influenced the performance of the construction firms.</td>
<td>The study was conducted in Rwanda.</td>
</tr>
<tr>
<td>Ubani, Amade, Benedict, Aku, Agwu, and Okogbuo (2015)</td>
<td>Project risk management issues in the Nigerian construction industry.</td>
<td>Construction firms adopted risk control strategies through identification of the risk, quantifying and responding to the risk in accordance to risk</td>
<td>The study was conducted in Nigeria.</td>
</tr>
</tbody>
</table>
management policy of each firm. The findings of the study further implicated that all of the construction firms adjusted plans and scope of work in order to counter risk effects, monitoring risk making timely decisions and keeping project managers informed about possible risk.

Ali, Stewart and Qureshi (2017)  
Evaluating risk management practices in the Pakistani construction industry.  
implicated that the risk retention strategies adopted by the construction company such as taking insurance and contingency plan influence completion of projects  
Study was conducted in Pakistani.

Source: Literature Reviewed and Researcher, 2019

2.5 Conceptual Framework

A conceptual framework is important in a research, as it helps in making the conceptual distinction and in the organization of ideas. In this study risk management practices form the independent variable as it influences performance of projects which forms the study’ dependent variable. The main independent variables are risk transfer, risk retention, risk prevention and risk control. Based on the conceptual framework the effect of risk management practices on project performance will be established.
**Independent Variables**

**Risk Transfer**
- Insurance Policy use
- Using legal agreements to transfer risks to third party
- Outsourcing

**Risk Prevention**
- Safety Systems
- Detailed Work plan
- Contingency Plan
- Safety Inspection

**Risk Control**
- Risk identification
- Risk Classification
- Risk Assessment

**Risk Retention**
- Self-Insurance
- Taking action on risks perceived
- Contingency Plan

**Dependent Variable**

**Project Performance**
- Cost
- Time
- Quality
- Scope

Source: Researcher, 2019
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

According to Chekaluk and Batchelor (2016), research methodology refers to a set of principles that guides a research study. This chapter discusses the methodologies that were utilized in this study. The chapter is organized into 8 broad sections that discuss the research design, target population, sample and sampling techniques, data collection instruments, data collection procedure, data analysis plan, reliability and validity tests and ethical considerations.

3.2 Research Designs

A research method is a plan that specifies and outlines procedures and methods that are used in analyzing and collecting data on a given topic of research and reporting of findings in a manner that is detailed (Lewis, 2015). In order to achieve goal and objectives of this study a descriptive research design was adopted. Creswell and Creswell (2017) define a descriptive research design as a framework within which a research is conducted and it consists of a set of outlined guidelines of data collection for the study. Mugenda and Mugenda (2003) describes descriptive research design as a design that describes data and features in relation to study population, this design answers the who, what and how research questions of a study.

3.3 Target Population

A population is a set of members who belong to a group within which research is carried out that possess homogeneous observable characteristics (Barasa, Ikamari, Kiplang’at& Oladipo, 2015). The target population for this study consisted of a total of 135 respondents who included 10 general managers, 20 project supervisors, 30 M&E officers, 60 project officers, 25 finance officers and 10 project managers.
Table 3. 1 Target Population

<table>
<thead>
<tr>
<th>Department</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Managers</td>
<td>10</td>
</tr>
<tr>
<td>Project Supervisors</td>
<td>20</td>
</tr>
<tr>
<td>Contracting Firms</td>
<td>20</td>
</tr>
<tr>
<td>Project Officers</td>
<td>60</td>
</tr>
<tr>
<td>Finance Officers</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>135</strong></td>
</tr>
</tbody>
</table>

3.4 Sample Size and Sampling Procedures

Sampling is a process that involves selection of members of a population that represents entire population (Ogula, 2005). Barasa, et al. (2015) defines sampling as a process of selection of a section of respondents from the target population in a manner that is representative. Probability and Non-probability are the two popular sampling techniques. Probability sampling is where every member of the population has a likelihood of being selected whereas, where elements of the target population do not have equal chance of selection is Non-probability sampling (Lewis, 2015). In this study census was used since the population is less than 200. Census is effective when the sample size is less than 200 (Mugenda and Mugenda, 2003). The sample size for this study was therefore 155.

3.5 Data collection Instruments

According to Kothari (2004), data collection instruments are tools and methods used in collection of data. Primary and Secondary methods are the two ways of collection of data. Primary involves collection of fresh data and Secondary involves collection of data that have been analyzed.

This study relied on primary for collection of data. Observations, Interviews and questionnaires are the various techniques of primary collection. Use of structured questionnaires was employed in assessing risk management practices and performance of projects in Nairobi City County, Kenya. According to Cresw, Kausha and Singh (2017) a questionnaire is an inquiry tool used in collection of data in order to find answers of a set of research questions. The structured questionnaires were to answer the study research questions. The questionnaire was designed in a scale method consisting of a 5-point opinion scale (Likert scale Format) where 1 represents strongly disagree and 5 represents strongly agree in
order to make it easy when conducting qualitative analysis and to minimize biasness (Mugenda & Mugenda, 2003). The questionnaires were administered through drop and pick method. The structured questionnaire provides well thought answers since it ensures anonymity.

3.6 Data Collection Procedures

The researcher applied for a research permit from National Commission for Science Technology and Innovation (NACOSTI) before performing field visits. The researcher also sought approval from school department and after receiving approval the researcher contacted the study respondents and later on dropped the questionnaires with an attached letter explaining the purpose of conducting the study.

3.7 Reliability and Validity of the study Instruments

3.7.1 Validity of the Instruments

Validity refers to the extent in which an item measures what its established to measure. Hair and Lukas (2014) defines validity of a data collection instrument questionnaire as the extent to which it measures what it claims to measure. In order to eliminate biasness and unclear phrases the piloted questionnaire will be tested. Testing of the piloted questionnaire will ensure that the final questionnaire has a capability of eliciting information that answers the research question. Content and Construct validity was also determined in this study. To confirm the validity of the structured questionnaires, questionnaires were administered to managers and supervisors. Invalid questions were then removed from the final questionnaires after the review process.

3.7.2 Reliability of the Instruments

Reliability refers to the consistency of outcome when a test is carried out over and over. Cronbach's alpha (α) was employed in the analysis of the pilot test data to determine the internal consistency or average correlation of items in a survey instrument to gauge its reliability. According to Yin (2017), the Cronbach's alpha (α) indicates the extent to which the set of research instruments are reliable making it appropriate for the study. A coefficient value of above 0.7 implies that the research instruments (questionnaire) is reliable thus appropriate for use in the study (Neuman, 2013).
3.8 Data Analysis and Presentation
According to Mugenda and Mugenda (2003), data collected must be edited, cleaned and analyzed to establish accuracy, completeness, consistency and usefulness of data collected. Steps undertaken to organize data in order to deduce and make inference about data with the aim of finding correct answers of the research questions is known as data analysis (Barasa, et al., 2015) in this study data was analyzed statistically using Statistical Package for Social Science (SPSS version 23. The study also employed descriptive statistics to explain the distribution of scores, such as mean, frequency distributions, standard deviation and percentages. Findings of the study were presented using tables, pie charts and bar charts. The regression model below were used to establish the relationship between risk management Practices and performance of Nairobi City County, Kenya Government Projects.

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon \]

Where: \( Y \) = Project Performance
\( X_1 \) = Risk Transfer
\( X_2 \) = Risk Retention
\( X_3 \) = Risk Control
\( X_4 \) = Risk Prevention
\( \beta_0 \) = Intercept,
\( \beta_1 \) = Beta coefficient and
\( \varepsilon \) = error term.

3.9 Ethical Consideration
The study was conducted in an ethical manner. According to Kothari (2004), a norm that governs human conduct and has a significant effect on welfare of human is referred to as ethics (Kothari, 2004). The researcher ensured that the study was undertaken in an ethical manner by seeking permission before conducting the research in form of formal letter of request elaborating reasons for undertaking the study and the study’ purpose. The researcher also assured the respondents that any information submitted was treated with utmost confidentiality. The researcher also conducted the research in a professional manner.
CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction
This chapter presents the findings of the study on the effect of risk management practices on the performance of projects in Nairobi City County, Kenya. The risk management practices selected were risk transfer, risk prevention, risk control and risk retention. The respondents were the project management staff who consisted of a total of 135 respondents. The data was analyzed using both descriptive and inferential statistics with the aid of SPSS. The findings are as presented in the following sections.

4.1.1 Response Rate
Out of the 135 respondents sampled for the study, 120 of them completed the questionnaires and presented them for analysis. This represents a response rate of 88.89%. This rate is statistically significant and representative according to Mugenda and Mugenda (2003) who indicated that the response rate of half is sufficient for investigations and revealing, a 60% rate is by and large great while a 70% rate of response is magnificent. This is presented in the table below;

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Response rate</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>120</td>
<td>88.89</td>
</tr>
<tr>
<td>Non-Response</td>
<td>15</td>
<td>11.11</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field data, 2019

4.1.2 Reliability Test
The study conducted a pilot study which was used to test reliability of the study instruments by assessing the consistency of data arising from the use of the study research method. A Cronbach Alpha was used to measure reliability of the research questionnaires. The Cronbach findings were as shown in Table 4.2.
### Table 4.1: Reliability Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Coefficient</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk transfer</td>
<td>5</td>
<td>0.827</td>
</tr>
<tr>
<td>Risk prevention</td>
<td>5</td>
<td>0.794</td>
</tr>
<tr>
<td>Risk control</td>
<td>5</td>
<td>0.809</td>
</tr>
<tr>
<td>Risk retention</td>
<td>5</td>
<td>0.862</td>
</tr>
<tr>
<td>Average</td>
<td>5</td>
<td>0.823</td>
</tr>
</tbody>
</table>

*Source: Field data, 2019*

The study indicated that risk transfer as a risk management practice had a Cronbach Alpha of 0.827, risk prevention had a coefficient of 0.794, risk control had a coefficient of 0.809 while for risk retention it was 0.862. Since the Cronbach alpha coefficients were all more than 0.7 the data collection instruments were deemed statistically reliable to collect data for the study.

#### 4.2 Demographic Data

The study assessed the demographic background of the respondents among the projects in Nairobi City County, Kenya based on their age, highest education level, period worked among the projects and the job designations of the respondents. The findings were as presented below;

##### 4.2.1 Age of Respondents

The study analyzed the age distribution of the respondents who were the employees among the projects in Nairobi City County. This was to ascertain their level of maturity and appropriateness as employees and respondents to the study. The pie chart below presents the findings;
As presented in figure 4.1 above, 40% of the respondents were aged between 31 and 40 years, 24% were aged between 20 and 30 years, 2% were below 20 years, 12% were above 50 years while 22% were between 41 and 50 years. This indicates that majority of the respondents were aged above 30 years. This shows that they were grown-ups in the active labour force and above to deliver on their mandate.

### 4.2.2 Highest Academic Level

The study sought to establish the highest education level of the respondents. The findings were as tabulated below;

<table>
<thead>
<tr>
<th>Academic Qualification</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary certificate</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Secondary certificate</td>
<td>2</td>
<td>1.67</td>
</tr>
<tr>
<td>College diploma</td>
<td>12</td>
<td>10.00</td>
</tr>
<tr>
<td>University graduate</td>
<td>81</td>
<td>67.50</td>
</tr>
<tr>
<td>Post-graduate</td>
<td>25</td>
<td>20.83</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The study established that 1.67% of the respondents among the projects in Nairobi City County were secondary school graduates, 10% had college diplomas, and 67.5% were university undergraduates while 20.83% had post-graduate qualifications. This indicates
that most of the project staff among the projects were bachelor’s degree holders. This shows that the staff had the necessary academic, skills and knowledge to perform their duties.

### 4.2.3 Period worked in the current organization

The study sought to find out the number of years the respondents had worked in their respective projects. The findings were as presented in the chart below;

**Figure 4.2: Number of years worked**

*Source: Field data, 2019*

The study established that 13% of the respondents had worked for less than 1 year in the projects in Nairobi City County, 34% had worked for between 1 and 5 years, 33% had worked for between 5 and 10 years while 21% had worked for more than 10 years. This indicates that most of the project staff had worked for more than 1 year in their project hence understood the operations, risks encountered, possible mitigation strategies and project performance. This makes them better in making the study valid.

### 4.2.4 Job designation

The study in the process of assessing the background information regarding the respondents’ suitability for the study, sought to determine the job designation of the respondents in their respective organizations or projects. The figure below presents the findings;
As presented in Figure 4.3 above, 5% of the respondents were risk managers in the respective organizations, 8% were project managers, 6% were general managers, 48% were project officers, 15% were project supervisors while 18% were finance officers. This indicates that majority of the respondents were project officers. All cadres of management in the organizations or projects were fairly and significantly represented.

4.3 Descriptive Findings

The study analyzed the extent to which the independent variables which included risk management practices were applied among the projects using descriptive statistics. The findings were presented using means and standard deviations as indicated in the subsequent sub-sections.
4.3.1 Risk Transfer and Project Performance

The first objective of the study was to establish the effect of risk transfer on project performance among projects in Nairobi City County, Kenya. To this regard, the respondents were asked to indicate the extent to which risk transfer affected project performance. The findings were as presented in the chart below;

![Effect of Risk Transfers on Project Performance](chart)

*Figure 4.4: Extent to which risk transfer affects project performance*

*Source: Field data, 2019*

The study established that 28% of the respondents indicated that risk transfers affected project performance to a very great extent, 38% alluded that it affected it to great extent, 18% indicated that it was to a moderate extent, 13% were of the opinion that it was to a little extent while 4% indicated that risk transfers had no effect on project performance. This generally indicates that to a great extent, risk transfers had a significant effect on the performance of projects in Nairobi City County. Similar findings were made by Aduma & Kimutai (2018) in their study on project risk management strategies and project performance where they indicated that risk transfer influenced project performance through the use of outsourcing, high cost of risk premiums and insurance policy and contractual agreements to a third party which greatly influenced performance of the projects.

Further, the respondents were asked to indicate the extent to which they agreed or disagreed with the following statements on how risk transfer affect financial graduation projects.
performance in their organization on a scale of 1-5 where 1=strongly disagree, 2=disagree, 3-undecided, 4= agree and 5= strongly agree. The findings were as presented in the table below;

**Table 4.4: Risk Transfer and Project Performance**

<table>
<thead>
<tr>
<th>Risk Transfer and Project Performance</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization insures project items such as construction equipment to ensure no circumstances will result to delay in projects.</td>
<td>3.64</td>
<td>0.861</td>
</tr>
<tr>
<td>Our organization signs legal agreements to any even that may lead to project delay.</td>
<td>3.18</td>
<td>0.719</td>
</tr>
<tr>
<td>Our organization outsources any project functions example workforce that may cause a delay in project</td>
<td>2.89</td>
<td>0.822</td>
</tr>
</tbody>
</table>

*Source: Field data, 2019*

As presented in Table 4.4 above, the respondents agreed that their organizations insures project items such as construction equipment to ensure no circumstances will result to delay in projects as indicated by a mean of 3.64 and standard deviation of 0.861. The respondents were however neutral or indifferent on whether their organizations sign legal agreements to any event that may lead to project delay and they outsource any project functions example workforce that may cause a delay in a project as indicated by a mean of 3.18 and 2.89 respectively. This indicates that the organizations or projects to a significant extent transferred most of their risks especially those that may contribute to project delay through sub-contracting, outsourcing, legal agreements and insurance.

**4.3.2 Risk Prevention and Performance of Project in Nairobi City County, Kenya**

The second objective of the study was on risk prevention and project performance. The respondents were asked to indicate the extent to which risk prevention included the performance of projects in their organizations. The figure below presents the findings;
54% of the respondents indicated that risk prevention to a very great extent affect project performance, 33% indicated that it was to a great extent, 9% indicated that it was to moderate extent, 3% indicated that it was to a little extent and 1% indicated that risk prevention didn’t have any effect on project performance. This generally indicates that to a significant extent, risk prevention as a risk management practice influenced project performance. Wabomba (2015) in his study on the influence of risk management strategies on project performance in international development organizations in Nairobi City indicated similarly that changing of work plans to avoid risks, contingency, regular inspections, operational reviews, trainings and skill enhancements in order to prevent risks contribute significantly to project performance.

The respondents were requested to further indicated the extent to which they agreed or disagreed with the following statements using a scale of 1-5 where 1=strongly disagree, 2=disagree, 3=undecided, 4= agree and 5= strongly agree. The study had the following findings;
Table 4.5: Risk Prevention and Project Performance

<table>
<thead>
<tr>
<th>Risk Prevention and Project Performance</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization ensures installation of safety systems against any event that may lead to project delay</td>
<td>2.88</td>
<td>0.798</td>
</tr>
<tr>
<td>Our organization advocates for the use of alternative plan in case of occurrence of any event that may cause project delay</td>
<td>3.14</td>
<td>0.911</td>
</tr>
<tr>
<td>Our organization through project officials inspects ongoing projects to ensure projects are not delayed</td>
<td>3.71</td>
<td>0.801</td>
</tr>
<tr>
<td>Our organization encourages use of a detailed work plan to ensure no event leads to delays in projects</td>
<td>3.66</td>
<td>1.466</td>
</tr>
<tr>
<td>Our organization trains project team to ensure that projects run within the allocated time schedule</td>
<td>3.91</td>
<td>0.769</td>
</tr>
</tbody>
</table>

Source: Field data, 2019

The respondents agreed that their organizations through project officials inspect ongoing projects to ensure the projects are not delayed; the organizations encourage use of a detailed work plan to ensure no event leads to delays in projects and the organizations train project teams to ensure that projects run within the allocated time schedule as indicated by a mean of 3.71, 3.66 and 3.91 respectively. The study respondents agreed to a moderate extent that their organizations ensure installation of safety systems against any event that may lead to project delay and advocates for the use of alternative plan in case of occurrence of any event that may cause project delay as indicated by a mean of 2.88 and 3.14 respectively. This indicates that the organizations significantly embraced risk prevention mechanisms which involved installation of safety systems, having alternative plans, inspection and feedback, use of a detailed work plan and capacity building among project team members.

4.3.3 Risk Control and Project Performance

The respondents were asked to indicate the extent to which risk control mechanisms put in place among the organizations contributed to performance of projects in Nairobi City County, Kenya. The findings were as presented below
Figure 4.6: Risk Control and Project performance

Source: Field data, 2019

43% of the study respondents indicated that risk control to a very great extent influenced on the performance of projects, 33% indicated that it was to a great extent, 18% were for moderate extent, 4% to a little extent while 2% indicated that it was to no extent. This shows that risk control significantly and to a great extent affected the performance of projects in Nairobi City County. Similarly, Okumu and Wanjira (2017) in their study on risk mitigation strategies and performance of insurance industry in Kenya established that risk control strategies such as risk control meetings, use of quality assurance, signed contracts and use of contingency positively influenced performance of firms.

+The respondents were further asked to indicate the extent to which they agreed or disagreed with the following statements on risk control on a scale of 1-5 where 1=strongly disagree, 2=disagree, 3- undecided, 4= agree and 5= strongly agree. The study findings were as tabulated below;

Table 4.6: Risk Control and Project Performance

<table>
<thead>
<tr>
<th>Risk Control and project Performance</th>
<th>Mean</th>
<th>Std.Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization identifies risks associated with projects</td>
<td>2.45</td>
<td>0.850</td>
</tr>
<tr>
<td>Our organization separate actual risk events from sources of risks</td>
<td>2.69</td>
<td>0.697</td>
</tr>
<tr>
<td>Our organization through the risk managers respond to risk</td>
<td>3.56</td>
<td>0.717</td>
</tr>
<tr>
<td>Our risk manager responds to risks appropriately as defined in the risk management plan</td>
<td>2.71</td>
<td>0.811</td>
</tr>
</tbody>
</table>

Source: Field data, 2019
The respondents disagreed that their organizations identify risks associated with projects as indicated by a mean of 2.45 and standard deviation of 0.850. They however to a moderate extent agreed that their organizations separate actual risk events from sources of risks and risk managers respond to risks appropriately as defined in the risk management plan as indicated by a mean of 2.69 and 2.71 respectively. They on the other hand agreed that their organizations through the risk managers respond to risk as indicated by a mean of 3.56 and standard deviation of 0.717 respectively. This indicates that to a moderate but significant level, the organizations were found to employ risk control mechanisms which include risk identification, separation of risks, response to risk and use of risk management plan.

4.3.4 Risk Retention and Project Performance

The study sought to establish the effect of risk retention on project performance. The respondents were therefore asked to indicate the extent to which risk retention contributed to project performance.

![Pie chart](image)

**Figure 4.7: Extent to which risk retention affects project performance**

Source: Field data, 2019

The study respondents indicated that to a great extent (37%) risk retention affected project performance, 20% of them indicated that risk retention had a moderate effect on performance, 9% indicated that it was to a little extent, 2% indicated that it had no effect while 32% indicated that it had a very great effect. This indicates that risk retention to a significantly great extent had an effect on the performance of projects in Nairobi City County.
Naktare(2014) in his study also made similar findings that adopting a contingency plan to minimize hazard risks, financial risks, operational and strategic risks have a direct and significant effect on project performance.

The study further asked respondents to indicate the extent to which they agreed or disagreed with the following statements on risk retention on a scale of 1-5 where 1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree. The findings were as indicated below;

**Table 4.7: Risk Retention and Project Performance**

<table>
<thead>
<tr>
<th>Risk Retention</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization adopts self-insurance to avoid occurrence of events that may delay projects</td>
<td>3.91</td>
<td>0.861</td>
</tr>
<tr>
<td>Our organization sometimes takes no action to identified risks despite the fact that they may affect the duration of the construction project, as it is beneficial not to deal with them.</td>
<td>3.71</td>
<td>0.791</td>
</tr>
<tr>
<td>Our organization advocates for use of alternative plan to avoid any circumstances that result to project delay</td>
<td>3.88</td>
<td>0.688</td>
</tr>
</tbody>
</table>

*Source: Field data, 2019*

The respondents generally agreed that their organizations have adopted self-insurance to avoid occurrence of events that may delay projects, sometimes they take no action to identified risks despite the fact that they may affect the duration of the construction project, as it is beneficial not to deal with them and that the organizations advocate for use of alternative plan to avoid any circumstances that result to project delay as indicated by a mean of 3.91, 3.71 and 3.88. The generally indicates that the organizations significantly employed risk retention practices which included self-insurance, calculated risk management and use of alternative plan.

**4.3.5 Project Performance**

The dependent variable of the study was project performance. This section contains statements related to the performance of construction projects in terms quality expected and meeting the schedule. The respondents were asked to indicate the extent to which they agreed or disagreed with the following statements on project performance on a scale of 1-5 where...
1=strongly disagree, 2=disagree, 3= undecided, 4= agree and 5= strongly agree. The findings were as indicated below;

**Table 4.8: Project Performance**

<table>
<thead>
<tr>
<th>Project Performance</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my own point of view risk transfer to third-party leads to the timely completion of projects.</td>
<td>3.66</td>
<td>0.719</td>
</tr>
<tr>
<td>Project Retention risk lead to timely completion of projects.</td>
<td>4.01</td>
<td>0.902</td>
</tr>
<tr>
<td>Our organization has been able to complete projects on time over the past one year</td>
<td>3.81</td>
<td>0.843</td>
</tr>
</tbody>
</table>

*Source: Field data, 2019*

The respondents agreed that in their own point of view risk transfer to third party leads to the timely completion of projects, project retention of risk leads to timely completion of projects and the organizations have been able to complete projects on time over the last one year as indicated by a mean of 3.66, 4.01 and 3.81 respectively. This indicates that the performance of projects in Nairobi City County was above expectations.

The respondents indicated that risk management practices improve project performance as indicated by 81% of them. This signifies the relationship between the two main variables of the study.

### 4.4 Inferential Statistics

The study used regression analysis to establish the relationship between the independent and dependent variables of the study. The findings of Model Summary, ANOVA and Coefficient of Regression were as indicated in the following sections.

#### 4.4.1 Model Summary

The findings of coefficient of correlation and coefficient of determination are as shown in Table 4.9.
Table 4.9: Model summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R square</th>
<th>Adjusted r square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.819a</td>
<td>.856</td>
<td>.849</td>
<td>1.61972</td>
</tr>
</tbody>
</table>

a. Predictors: (constant), risk transfer, risk prevention, risk control and risk retention

Source: Field data, 2019

The study shows that coefficient of correlation R of 0.819 an indication of strong of correlation between the variables. The adjusted $R^2$ was 0.849 which implies that 84.9% of the variation in project performance was accounted for by the four independent variables which include: risk transfer, risk prevention, risk control and risk retention. The residual of 15.1% can be explained by other variables not incorporated in the current study.

4.4.2 ANOVA

An ANOVA was conducted at 95% level of significance. The findings of $F_{\text{Calculated}}$ and $F_{\text{Critical}}$ are as shown in Table 4.10.

Table 4.10: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>716.233</td>
<td>10</td>
<td>71.6233</td>
<td>19.0401</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>414.122</td>
<td>110</td>
<td>3.7617</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1130.355</td>
<td>120</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent variable: Project performance

b. Predictors: (constant), risk transfer, risk prevention, risk control and risk retention

Source: Field data, 2019
It was established that the study had $F_{\text{Calculated}}$ of 19.0401 and $F_{\text{Critical}}$ was 5.8126, this shows that $F_{\text{Calculated}} > F_{\text{Critical}}$ an indication that the overall regression model was significant for the study. The p value was 0.00<0.05 an indication that at least one independent variable significantly influenced the performance of projects in Nairobi City County, Kenya.

4.4.3 Regression Coefficient

The study used a regression coefficient to establish the effect of individual variables of risk management practices on performance of projects in Nairobi City County, Kenya. The findings are indicated in Table 4.11.

**Table 4.11: Regression Coefficient**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(constant)</td>
<td>5.194</td>
<td>1.06</td>
<td>2.213</td>
<td>.000</td>
</tr>
<tr>
<td>Risk transfer</td>
<td>0.816</td>
<td>.041</td>
<td>.526</td>
<td>2.366</td>
</tr>
<tr>
<td>Risk prevention</td>
<td>0.799</td>
<td>.039</td>
<td>.175</td>
<td>3.712</td>
</tr>
<tr>
<td>Risk Control</td>
<td>0.893</td>
<td>.071</td>
<td>.499</td>
<td>2.539</td>
</tr>
<tr>
<td>Risk Retention</td>
<td>0.801</td>
<td>.082</td>
<td>.487</td>
<td>2.410</td>
</tr>
</tbody>
</table>

a. Dependent variable: Project Performance

*Source: Field data, 2019*

\[ Y = 5.194 + 0.816X_1 + 0.799X_2 + 0.893X_3 + 0.801X_4 \]

Whereby: \( Y = \) Performance of Projects in Nairobi City County, Kenya

\[ X_1 = \text{Risk transfer} \]

\[ X_2 = \text{Risk prevention} \]

\[ X_3 = \text{Risk control} \]

\[ X_4 = \text{Risk Retention} \]
Table 4.11 indicates that all variables held constant, project performance would be at 5.194. This indicates that performance of the projects can still take place without the influence of the stated variables. The variable coefficients indicate that the relationship between risk management practices identified and project performance was positive and significant. These findings are similar to those by Aimable, Shukla and Oduor (2015) who on their study on effects of risk management methods on project performance in Rwandan Construction industry. The researchers indicated that detailed that risk management practices have a significant and positive effect on project performance.

The p values of all the independent variables which include project planning, monitoring and evaluation, communication and stakeholder participation were 0.000<0.05 an indication that the variables significantly influenced performance of projects in Nairobi City County. This is supported Ubani, Amade, Benefidct, Aku, Agwu and Okogb (2015) who in their study on project risk management issues and project performance concluded that project management practices are critical for peak project performance. The study indicated that organizations adjust plans and scope of work in order to counter risk effects, monitoring risks making timely decisions and keeping project managers informed about possible risk contributes to positive project performance.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings of the study as presented and discussed in the previous chapter. The study conclusions and recommendations are enumerated based on the findings; suggestions for further studies are also provided.

5.2 Summary of the Findings

The study sought to establish the effect of risk management practices on the performance of projects in Nairobi City County, Kenya. The study sought to establish the effect of risk transfer, risk prevention, risk control and risk retention on the performance of projects. The target population was 135 project management staff where a census was adopted. The response rate was 88.89% with 120 questionnaires sufficiently completed and submitted and hence used for analysis. Both descriptive and inferential statistics were used to analyze and present data.

5.2.1 Risk Transfer and Project Performance

The study established that risk transfer positively and significantly influenced performance of projects in Nairobi City County. The study established that to a great extent, risk transfers had a significant effect on the performance of projects in Nairobi City County. The respondents agreed that their organizations insure project items such as construction equipment to ensure no circumstances will result to delay in projects. The respondents were however neutral or indifferent on whether their organizations sign legal agreements to any event that may lead to project delay and they outsource any project functions example workforce that may cause a delay in a project. This indicates that the organizations or projects to a significant extent transferred most of their risks especially those that may contribute to project delay through sub-contracting, outsourcing, legal agreements and insurance.

5.2.2 Risk Prevention and Project Performance
The study found out that risk prevention significantly influenced performance of projects in Nairobi City County. The study established that to a significant extent, risk prevention as a risk management practice influenced project performance. The respondents agreed that their organizations through project officials inspect ongoing projects to ensure the projects are not delayed; the organizations encourage use of a detailed work plan to ensure no event leads to delays in projects and the organizations train project teams to ensure that projects run within the allocated time schedule. The study respondents agreed to a moderate extent that their organizations ensure installation of safety systems against any event that may lead to project delay and advocates for the use of alternative plan in case of occurrence of any event that may cause project delay. This indicates that the organizations significantly embraced risk prevention mechanisms which involved installation of safety systems, having alternative plans, inspection and feedback, use of a detailed work plan and capacity building among project team members.

5.2.3 Risk Control and Project Performance

The study pointed out risk control positively influenced performance projects in Nairobi City County. The study established that risk control significantly and to a great extent affected the performance of projects in Nairobi City County. The respondents disagreed that their organizations identify risks associated with projects. They however to a moderate extent agreed that their organizations separate actual risk events from sources of risks and risk managers respond to risks appropriately as defined in the risk management plan. They on the other hand agreed that their organizations through the risk managers respond to risk. This indicates that to a moderate but significant level, the organizations were found to employ risk control mechanisms which include risk identification, separation of risks, response to risk and use of risk management plan.

5.2.4 Risk Retention and Project Performance

The study established that risk retention significantly influenced performance of projects in Nairobi City County. The study established that risk retention to a significantly great extent had an effect on the performance of projects in Nairobi City County. The respondents generally agreed that their organizations have adopted self-insurance to avoid occurrence of events that may delay projects, sometimes they take no action to identified risks despite the fact that they may affect the duration of the construction project, as it is beneficial not to deal with them and that the organizations advocate for use of alternative plan to avoid any
circumstances that result to project delay. The generally indicates that the organizations significantly employed risk retention practices which included self-insurance, calculated risk management and use of alternative plan.

5.3 Conclusion
The study concluded that risk transfer had a significant and to a great extent affected the performance of the projects in Nairobi City County, Kenya. It was also concluded that risk transfer is significantly embraced, applied and practiced among firms implementing projects in Nairobi City County, Kenya.

The study concluded that risk prevention significantly affected project performance. It was concluded that risk prevention is embraced among organizations executing projects in Nairobi City County, Kenya as a risk management practice and it has enhanced project completion within scope, budget and time schedule.

The study further concluded that there a significant and positive relationship between risk control and project performance. Risk control was significantly practiced among the organizations involved projects in Nairobi City County, Kenya and had a significant influence on project performance.

It was concluded that risk retention had a positive and significant effect on the performance of the projects. To great extent, risk retention as a risk management practice had a positive effect on project performance.

It was finally concluded that a significant number of the projects organizations are implementing in Nairobi City County were performing well.

5.4 Recommendations
The study recommends that the management of the projects need to ensure the risk management practices are integrated in project implementation. Most of the practices were in place but were not effectively employed to ensure peak performance.
The organizations were found to be skeptical on planning for risks and taking risk management steps and therefore for peak performance there is need to have a risk management plan in place and stick by it.

The study recommends that the project management team should provide adequate finances for risk management, capacity building, and insurance and safety installations for better risk preparedness.

5.5 Suggestions for Further Studies

The study recommends a similar study to be carried out by use of secondary data. The current study had a coefficient of adjusted $R^2$ of 0.849 and a residual of 15.1% which can be explained by other variables beyond the scope of the current study that future scholars should focus on. The main objective of the study was to establish the effect of risk management practices on the performance of projects in Nairobi City County, future scholars should carry out similar study in other sectors or entities.
REFERENCES


Ell, J. (2018). *Research Design Qualitative & Quantitative Approaches*


APPENDICES

APPENDIX 1: QUESTIONNAIRE
This study aims at investigating the effects of Risk Management Practices on Performance of Projects in Nairobi City County, Kenya. All responses will be treated in strict confidence and will not be used for any other purpose apart from that stated. Thank you.

Please answer all the questions in all the sections as indicated by either ticking or filling in the blank space provided.

Section A: Background information (please put an X in relevant box)

Name (Optional)………………………………………….

1. What is your age bracket?
   - Below 20 years [    ]
   - 20-30 years [    ]
   - 31-40 years [    ]
   - 41-50 years [    ]
   - Above 50 years [    ]

2. Which is your highest academic level?
   - Primary certificate [    ]
   - Secondary certificate [    ]
   - College diploma [    ]
   - University Graduate [    ]
   - Post graduate [    ]

3. How long have you been working in your current organization?
   - Less than 1 year [    ]
   - 1-5 years [    ]
   - 5-10 years [    ]
   - Above 10 years [    ]

4. What is your job designation?
   - General Manager [    ]
   - Project Officer [    ]
   - Project Supervisors [    ]
   - Finance Officer [    ]
   - Project Manager [    ]
   - Risk Manager [    ]
Section B: Risk Transfer and Project Performance

5. To what extent does Risk Transfer affect the performance of projects in Nairobi Kenya.

- No extent [ ]
- Little extent [ ]
- Moderate extent [ ]
- Great extent [ ]
- Very great extent [ ]

6. Indicate the extent to which you agree or disagree with the following statements on how M&E plans affect financial graduation projects performance in your organization. Use a scale of 1-5 where 1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree.

<table>
<thead>
<tr>
<th>Risk Transfer and Project Performance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization insures project items such as construction equipment to ensure no circumstances will result to delay in projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization signs legal agreements to any even that may lead to project delay.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization outsources any project functions example workforce that may cause a delay in project</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section C: Risk Prevention and Performance of Project in Nairobi City County, Kenya

7. To what extent does Risk prevention influence the performance of Project in our organization?

- No extent [ ]
- Little extent [ ]
- Moderate extent [ ]
- Great extent [ ]
- Very great extent [ ]

8. Indicate the extent to which you agree or disagree with the following statements. Use a scale of 1-5 where 1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree.

<table>
<thead>
<tr>
<th>Risk Prevention and Project Performance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization ensures installation of safety systems against any event that may lead to project delay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Our organization advocates for the use of alternative plan in case of occurrence of any event that may cause project delay

Our organization through project officials inspects ongoing projects to ensure projects are not delayed

Our organization encourages use of a detailed work plan to ensure no even leads to delays in projects

Our organization trains project team to ensure that projects run within the allocated time schedule

**Section D: Risk Control and Project Performance**

9. To what extent does Risk Control affect the performance of projects in Nairobi City County, Kenya

- No extent [ ]
- Little extent [ ]
- Moderate extent [ ]
- Great extent [ ]
- Very great extent [ ]

10. Indicate the extent to which you agree or disagree with the following statements. Use a scale of 1-5 where 1=strongly disagree, 2=disagree, 3= undecided, 4= agree and 5= strongly agree.

Assessing risks Overhead cost General risk control Operating efficiency Policy Controlling indicator

**Risk Control and project Performance**

<table>
<thead>
<tr>
<th>Risk Control and project Performance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization identifies risks associated with projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization separate actual risk events from sources of risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization through the risk managers respond to risk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our risk manager responds to risks appropriately as defined in the risk management plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section E: Risk Retention and Project Performance**

11. To what extent does Risk Retention affect performance of projects in Nairobi City County, Kenya
12. Indicate the extent to which you agree or disagree with the following statements. Use a scale of 1-5 where 1=strongly disagree, 2=disagree, 3=undecided, 4=agree and 5=strongly agree.

<table>
<thead>
<tr>
<th>Risk Retention</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our organization adopts self-insurance to avoid occurrence of events that may delay projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization sometimes takes no action to identified risks despite the fact that they may affect the duration of the construction project, as it is beneficial not to deal with them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization advocates for use of alternative plan to avoid any circumstances that result to project delay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. SECTION F: Project Performance
This section contains statements related to the performance of construction projects in terms of quality expected and meeting the schedule. Tick one box accordingly. **Strongly Agree**

<table>
<thead>
<tr>
<th>Project Performance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my own point of view risk transfer to third-party leads to the timely completion of projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Retention risk lead to timely completion of projects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our organization has been able to complete projects on time over the past one year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. In my own opinion, do you think risk management practices improve project performance?

**Yes**{   } 

**No**{   }