

**EFFECT OF RISK MANAGEMENT PRACTICES ON THE SUCCESSFUL
COMPLETION OF AFFORDABLE HOUSING PROJECTS IN NAIROBI
COUNTY**

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**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF
MANAGEMENT AND LEADERSHIP IN PARTIAL FULFILLMENT OF
THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF
MANAGEMENT AND LEADERSHIP OF THE MANAGEMENT
UNIVERSITY OF AFRICA**

OCTOBER 2024

DECLARATION

This project is entirely original with no submissions to other universities for credit toward a degree.

Signature..... **Date**

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ODLBDS/27/00339/2/22

As the University Supervisor, I have given my consent for this project to be submitted for review.

Signature..... **Date**

Mr. Brown Kitur

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DEDICATION

This project is dedicated to my beloved parents, whose unwavering support has been the foundation of my academic journey. Their constant encouragement, patience, and belief in my abilities have been a source of strength throughout my studies. I am deeply grateful for their financial sacrifices, which have made it possible for me to pursue my education and follow my dreams. Their love and guidance have shaped me into the person I am today, and this work is a testament to their enduring commitment to my success. I dedicate this project to them with heartfelt appreciation and gratitude.

ACKNOWLEDGEMENT

I am grateful to Almighty God for all that has happened in my life. I'd want to express my gratitude to Mr. Brown Kitur, my research project supervisor, for the unwavering support, direction, and professional counsel that saw me through to the conclusion. Management University of Africa for being involved in the work of teaching information to numerous students, and last but not least, the management of Pangani Affordable housing project for allowing me to do my study there.

ABSTRACT

This research aimed to explore the effect of risk management practices on the successful completion of affordable housing projects in Nairobi County. A case study of Pangani Affordable housing project. The study's particular objectives were to find out the effect of risk identification on the successful completion of affordable housing projects in Nairobi County, to explore the influence of risk assessment on the successful completion of affordable housing projects in Nairobi County, to find out the effect of risk mitigation on the successful completion of affordable housing projects in Nairobi County and to assess the effect of risk monitoring on the successful completion of affordable housing projects in Nairobi County. The findings will be useful to Pangani Affordable housing project's management, policy makers and future researchers. In this study, a descriptive research design was employed. From a target demographic of 200 employees, a sample size of 60 responders was selected using a stratified random sampling technique. Questionnaires were used as data gathering tools. The information gathered was examined using qualitative and quantitative approaches before being displayed in the form of tables. The study recommends that affordable housing projects in Nairobi County implement a systematic and proactive approach to risk identification. This should involve the use of comprehensive risk assessment tools and techniques to anticipate potential challenges early in the project lifecycle. Project stakeholders, including contractors, government agencies, and community representatives, should be involved in collaborative discussions to identify risks from multiple perspectives. Regular risk identification sessions should be held throughout the project, and a centralized database for documenting and updating identified risks should be established to ensure timely and effective risk management. The study recommends that affordable housing projects in Nairobi County adopt a thorough and continuous risk assessment process to enhance project success. This should include the use of both qualitative and quantitative risk assessment techniques to evaluate the potential impact and likelihood of identified risks. Project teams should be trained in risk assessment methodologies, ensuring they can accurately prioritize risks based on their severity and urgency. Furthermore, risk assessments should be revisited at key project milestones to address any new or evolving risks, enabling more informed decision-making and improving overall project resilience and outcomes. The study recommends that affordable housing projects in Nairobi County implement proactive and comprehensive risk mitigation strategies to ensure successful project completion. This includes developing detailed risk mitigation plans that outline specific actions for addressing identified risks, assigning responsibility to appropriate team members, and setting clear timelines for mitigation efforts. Additionally, the study suggests incorporating contingency planning and allocating sufficient resources, such as time and budget, to handle unexpected risks. Regular training on risk mitigation practices should also be conducted to ensure that all project stakeholders are equipped to handle potential challenges effectively and minimize disruptions to project timelines and objectives. The study recommends that robust risk monitoring systems be established for affordable housing projects in Nairobi County to ensure their successful completion. This involves implementing continuous monitoring frameworks that track identified risks throughout the project lifecycle, allowing for timely identification of new risks and assessment of existing ones. The study suggests regular reviews and updates of the risk management plan, along with the use of key performance indicators (KPIs) to measure risk management effectiveness.

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ACRONYMS AND ABBREVIATION

SEM Structural Equation Modeling

SPSS Statistical Package of Social Sciences

TOC Theory of Constraints

UK United Kingdom

US United States

USA United States of America

OPERATIONAL DEFINITION OF TERMS

Risk Management Practices: These are methodical techniques and procedures that businesses use to recognize, assess, reduce, and track risks that could impede their progress.

Risk Identification: This involves systematically identifying and documenting potential hazards that could hinder an organization's ability to reach its objectives.

Risk Assessment: This procedure entails assessing hazards that have been discovered in order to ascertain their possible consequences and likelihood of occurring.

Risk Mitigation: This alludes to the tactics and measures used to reduce the impact or likelihood of hazards that have been recognized.

Risk Monitoring: This is a continuous process that involves monitoring hazards that have been discovered, assessing how well risk mitigation techniques are working, and spotting new risks as they appear.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Risk management practices, which involve identifying, assessing, mitigating, and monitoring risks, play a crucial role in the successful completion of affordable housing projects. These practices help project managers anticipate potential challenges, such as budget overruns, delays in construction, regulatory compliance issues, and material shortages, which are common in large-scale housing projects. By proactively addressing these risks, project teams can ensure that resources are effectively allocated, timelines are maintained, and quality standards are met. Effective risk management practices lead to better decision-making, reduced uncertainties, and a higher likelihood of project success (Smith, 2020).

According to a study by Anderson (2018), the influence of risk management practices on the successful completion of affordable housing projects in Canada was thoroughly investigated. The study employed surveys and interviews as data collection instruments, targeting project managers and stakeholders in housing developments across several provinces. Data analysis was conducted using regression analysis and thematic coding to assess the quantitative and qualitative responses. The study found that projects that integrated risk management practices, such as early risk identification and continuous monitoring, were more likely to meet their timelines and stay within budget. The survey uncovered that risk management mitigated the impact of unexpected costs, regulatory changes, and material shortages. The study concluded that systematic risk management is crucial in preventing common challenges in affordable housing projects, significantly increasing the likelihood of their timely completion.

A study by Brown (2019) in England examined how risk management practices influenced the completion of affordable housing projects in urban areas. The study utilized structured questionnaires distributed to developers and government agencies involved in affordable housing, complemented by focus group discussions. Data analysis was performed using statistical software for quantitative data and content analysis for qualitative insights. The study revealed that risk assessment and mitigation strategies, especially around financial risks and planning regulations, were

critical for successful project outcomes. The study found that projects with detailed risk management frameworks had fewer delays and cost overruns, particularly in regions with stricter regulatory environments. The study concluded that adopting comprehensive risk management plans significantly improved project efficiency and completion rates in England's affordable housing sector.

Financial risks, such as changes in material costs and funding shortages, were the biggest obstacles to project completion, according to a study by Mthembu (2020) in South Africa that examined the effect of risk management practices on the successful completion of affordable housing projects in the provinces of Gauteng and Western Cape. The study gathered data through surveys and in-depth interviews with project managers, contractors, and government officials. The data were then analyzed using descriptive statistics and thematic analysis. On the other hand, projects with strong risk mitigation strategies in place like flexible budgeting and contingency planning were more likely to be finished on schedule and within budget. The study came to the conclusion that overcoming operational and financial obstacles in South Africa's affordable housing market required incorporating risk management into project design and execution.

Adewale (2017) conducted a survey in Nigeria that explored how risk management techniques contributed to the completion of affordable housing projects in Abuja and Lagos. The study targeted contractors, architects, and housing authorities and collected data through questionnaires and interviews. Both content analysis and regression analysis were utilized in the research's data analysis. The results showed that the main causes of the frequent delays and cost overruns in Nigeria's housing projects were political and economic instability as well as insufficient risk management techniques. However, the study found that projects with structured risk identification and monitoring processes were better able to navigate these uncertainties, leading to more successful outcomes. The research concluded that improving risk management practices, particularly in areas of economic and political risk, could significantly enhance the successful delivery of affordable housing projects in Nigeria.

Mwakyusa (2018) conducted a study in Tanzania that evaluated how risk management techniques affected Dar es Salaam's affordable housing developments.

Project managers, contractors, and local government representatives were interviewed and given questionnaires as part of the study. SPSS was used to analyze the quantitative data, and NVivo was used to analyze the qualitative data. The research uncovered that risks related to land acquisition, legal frameworks, and community opposition were the most critical challenges faced by housing projects. However, the study revealed that projects which actively engaged in stakeholder risk assessment and maintained strong legal compliance strategies were more likely to succeed. The research remarked that incorporating risk management practices early in the project lifecycle significantly reduced the likelihood of legal disputes and delays, thereby improving project outcomes in Tanzania's affordable housing sector.

Kyambadde (2019) investigated the effect of risk management strategies on the accomplishment of affordable housing projects in Kampala, Uganda. Kyambadde adopted a mixed-methods approach, incorporating surveys and interviews with housing developers, government officials, and community leaders. For data analysis, the study used thematic coding and factor analysis. The outcomes uncovered that the most common risks were those associated with funding, material supply, and regulatory compliance. According to the study, projects with proactive risk management like obtaining several funding sources and carrying out frequent risk audits had a higher chance of succeeding. The research remarks that risk management techniques were essential to maintaining the operational and financial stability of affordable housing projects in Uganda, particularly when it came to lessening the impact of funding shortages.

A research by Omondi (2020) in Kenya studied the role of risk management in the successful delivery of affordable housing developments in Nairobi and Mombasa. Omondi targeted project stakeholders, such as developers, contractors, and governmental organizations, with questionnaires and focus groups to gather data. Both content analysis and descriptive statistics were embraced in the research to examine the data. The study found that the main obstacles facing Kenyan affordable housing projects were budgetary limitations, regulatory delays, and corruption threats. The study revealed that projects employing thorough risk management practices, such as transparent procurement processes and regular financial risk assessments, were more likely to be finished on time and within budget. Additionally, it highlighted that

effective risk management is essential for addressing the systemic challenges in Kenya's affordable housing sector and improving project completion rates.

1.1.1 Risk identification

Risk identification is crucial for the successful completion of affordable housing projects in Nairobi County as it allows project managers to proactively address potential obstacles that could delay or derail project execution. By systematically identifying risks such as land acquisition issues, fluctuating material costs, regulatory challenges, and corruption, project teams can develop strategies to mitigate these risks before they impact the project's progress. Effective risk identification helps in minimizing unforeseen disruptions, ensuring that projects stay on schedule and within budget, ultimately contributing to their successful completion (Omondi, 2021).

1.1.2 Risk assessment

Risk assessment is pivotal for the successful completion of affordable housing projects in Nairobi County, as it enables project managers to evaluate and prioritize risks based on their potential impact and probability. By assessing risks such as delays in land acquisition, variations in construction costs, regulatory challenges, and corruption, project teams can identify which risks require immediate attention and develop effective mitigation strategies. This structured approach allows for better resource allocation, timely intervention, and the implementation of contingency plans, thereby reducing the likelihood of project delays and cost overruns and enhancing project outcomes (Mwangi, 2022).

1.1.3 Risk mitigation

Risk mitigation is crucial for the successful completion of affordable housing projects in Nairobi County, as it involves implementing strategies to address and reduce identified risks. Effective mitigation measures, such as securing reliable land acquisition processes, establishing fixed contracts for construction materials, and strengthening regulatory compliance, help manage potential issues proactively. By addressing risks such as financial constraints, project delays, and administrative hurdles, these strategies ensure that projects remain on schedule and within budget. Consequently, proper risk mitigation enhances project stability and contributes to the timely and cost-effective delivery of affordable housing (Njoroge, 2023).

1.1.4 Risk monitoring

Risk monitoring is essential for the successful completion of affordable housing projects in Nairobi County as it ensures that risks are continuously tracked and managed throughout the project lifecycle. By regularly reviewing risk indicators and assessing the effectiveness of mitigation strategies, project managers can detect emerging issues early and adjust their plans accordingly. This ongoing oversight helps prevent minor issues from escalating into major problems, thereby keeping projects on track and within budget. Effective risk monitoring enables timely interventions and ensures that risk management practices remain responsive to changing conditions, ultimately contributing to the successful delivery of housing projects (Wanjiku, 2024).

1.1.5 Successful completion of affordable housing projects in Nairobi County

The successful completion of affordable housing projects in Nairobi County hinges on effective management of various factors, including risk identification, assessment, mitigation, and monitoring. By addressing challenges such as land acquisition, fluctuating construction costs, and regulatory compliance, project managers can ensure that projects are delivered on time and within budget. Implementing robust risk management strategies, maintaining clear communication with stakeholders, and adhering to project timelines are critical components in achieving successful project outcomes. Such comprehensive management practices contribute to the creation of sustainable and affordable housing solutions that meet the needs of Nairobi's growing population (Mutua, 2023).

1.1.6 Profile of affordable housing projects in Nairobi County

Affordable housing projects in Nairobi County are part of Kenya's national development agenda under the Big Four Agenda, aimed at addressing the housing deficit and providing quality, low-cost homes for the growing urban population. These projects are designed to cater to low and middle-income earners, offering affordable options that range from apartments to other modern residential units. The primary objective is to bridge the housing gap while improving living standards. The projects are located in various parts of Nairobi, including areas such as Park Road, Ngara, Shauri Moyo, and Starehe, with some sites nearing completion or already handed over to beneficiaries. Public-private partnerships (PPPs) have played a significant role in financing and developing these projects, ensuring their feasibility and scalability.

These housing projects incorporate sustainable urban planning, modern architectural designs, and essential amenities like water, electricity, and sanitation services. With units priced affordably, the government has also introduced flexible mortgage options through financial institutions such as the Kenya Mortgage Refinance Company (KMRC) to ease the burden on prospective homeowners. These housing projects are not only aimed at providing shelter but also at creating employment opportunities, stimulating the local economy, and contributing to the reduction of informal settlements within the city. By focusing on affordable, quality housing, Nairobi County is taking steps to reduce the urban housing crisis while promoting sustainable urban development.

1.2 Statement of the Problem

The successful completion of affordable housing projects has become a critical issue in urban areas, particularly in rapidly growing cities like Nairobi. Effective risk management, which includes identifying, assessing, mitigating, and monitoring risks, is crucial to ensuring that projects are delivered on time, within budget, and to the necessary quality standards. Despite the increased demand for affordable housing, many projects experience significant delays and cost overruns, which are frequently attributed to inadequate risk management practices. As noted by Smith (2019), poor risk management practices can lead to financial losses, project abandonment, and unsatisfactory outcomes in housing projects, particularly in developing countries.

In Nairobi County, the housing deficit continues to rise, with more than 250,000 housing units needed annually, but only an estimated 50,000 units being delivered, leading to an acute shortage of affordable housing (Kenya National Bureau of Statistics, 2021). According to a report by the World Bank (2020), approximately 60% of affordable housing projects in Nairobi experience significant delays, and 40% exceed their initial budgets due to unforeseen risks such as land disputes, regulatory challenges, and fluctuations in material costs. The lack of proper risk management frameworks in many of these projects exacerbates the challenges, affecting their timely and successful completion.

A study by Omondi (2020) on affordable housing in Nairobi found that poor risk identification and assessment were key contributors to project failures, with many risks being addressed too late in the project cycle. Another study by Mwangi (2021)

revealed that while risk mitigation strategies were employed, they were often reactive rather than proactive, leading to inefficiencies. However, both studies did not explore the continuous monitoring of risks throughout the project lifecycle, leaving a gap in understanding the full impact of ongoing risk management on project success. Additionally, these studies focused primarily on financial risks, overlooking other critical areas such as regulatory and operational risks. These gaps highlight the need for further research to examine the comprehensive effect of risk management practices on the successful completion of affordable housing projects in Nairobi.

1.3 Objectives of the Study

1.3.1 General Objective

Determining the impact of risk management techniques on the successful completion of affordable housing projects in Nairobi County was the main goal of the study.

1.3.2 Specific Objectives of the Study

- i. To find out the effect of risk identification on the successful completion of affordable housing projects in Nairobi County.
- ii. To determine the effect of risk assessment on the successful completion of affordable housing projects in Nairobi County.
- iii. To find out the effect of risk mitigation on the successful completion of affordable housing projects in Nairobi County.
- iv. To assess the effect of risk monitoring on the successful completion of affordable housing projects in Nairobi County.

1.4 Research Questions

- i. What is the effect of risk identification on the successful completion of affordable housing projects in Nairobi County?
- ii. What is the effect of risk assessment on the successful completion of affordable housing projects in Nairobi County?
- iii. What is the effect of risk mitigation on the successful completion of affordable housing projects in Nairobi County?
- iv. What is the effect of risk monitoring on the successful completion of affordable housing projects in Nairobi County?

1.5 Significance of the Study

The study will help project managers and developers in Nairobi County enhance their understanding of the importance of risk management practices in the successful completion of affordable housing projects. By identifying, assessing, mitigating, and monitoring risks effectively, project teams can reduce delays, avoid cost overruns, and improve the overall quality of housing projects. With this knowledge, developers will be able to take proactive measures to minimize risk, guaranteeing that affordable housing projects are finished on schedule and within budget, which would ultimately benefit Nairobi's citizens.

The study will help policymakers in the housing sector design more effective frameworks and guidelines for managing risks in affordable housing projects. By providing data-driven insights on the specific risks affecting such projects in Nairobi, the study will enable policymakers to create regulations that address these challenges directly. This will lead to a more stable regulatory environment, making it easier for developers to navigate complex processes and reduce the chances of project failure. In turn, this can help bridge the housing deficit in the city by increasing the completion rates of affordable housing projects.

The study will help future researchers by filling gaps in the existing literature regarding the comprehensive impact of risk management practices on affordable housing projects. Many studies have focused on specific aspects of risk management, such as financial risks, without fully exploring other types of risks, such as operational and regulatory risks. By filling in these gaps, the study will advance our understanding of risk management and affordable housing while laying the groundwork for future investigations into enhancing project outcomes in Nairobi and other quickly expanding metropolitan areas.

1.6 Scope of the Study

Using Pangani Affordable Housing Project Limited as a case study, the study aimed to ascertain how risk management techniques affected the successful completion of affordable housing projects in Nairobi County. Two hundred employees were the study's target population. Between September 2024 and October 2024, the study was conducted.

1.7 Chapter Summary

This chapter contains details on the study's background, issue statement, goals, significance, and field of investigation.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter includes a review of both theoretical and empirical studies, an overview of the areas where research is lacking, a conceptual model, and how different variables are defined and measured.

2.1 Theoretical Literature Review

2.2.1 Risk Management Theory

The risk management theory was established by Kenneth Arrow, 1965. The Risk Management Theory, established by Kenneth Arrow in 1965, suggests that organizations must adopt structured processes for identifying, assessing, and managing risks to ensure successful project outcomes. According to the notion, risk management should be a crucial component of any project's decision-making process since it enables businesses to reduce the likelihood and effect of unfavorable outcomes. As new hazards surface during a project, it also emphasizes the necessity of ongoing monitoring and revision of risk management plans. In the context of affordable housing projects, the theory proposes that risks such as land disputes, fluctuating construction costs, and regulatory challenges need to be anticipated and mitigated through careful planning (Kenneth Arrow, 1965).

One of the positive criticisms of the Risk Management Theory is that it offers a clear framework for systematically addressing risks, making it a practical guide for project managers. The idea lowers the possibility of project delays and cost overruns by giving project teams a systematic method for managing risks. This helps them to foresee possible obstacles and take proactive measures to address them. Furthermore, it encourages the adoption of mitigation strategies early in the project lifecycle, which is crucial for managing the complex risks associated with affordable housing projects (Kenneth Arrow, 1965). On the negative side, some critics argue that the theory can be overly rigid, focusing too much on formal risk management processes rather than the dynamic and evolving nature of risks. In rapidly changing environments, such as construction projects, unforeseen risks can emerge that are difficult to capture through pre-established frameworks. This limitation can make it challenging for project teams to respond to new risks in real time. Despite this, the theory is highly relevant to

affordable housing projects in Nairobi County, as it underscores the importance of systematically addressing risks throughout the project lifecycle, ensuring that projects are completed within scope, time, and cost constraints.

2.2.2 Theory of Constraints (TOC)

Theory of Constraints (TOC) was established by Eliyahu Goldratt, 1984. The Theory of Constraints (TOC), developed by Eliyahu Goldratt in 1984, suggests that every project has a set of constraints or bottlenecks that limit its ability to achieve successful outcomes. In the context of risk management, TOC emphasizes that risks often act as constraints that hinder project progress, and these constraints must be systematically identified and resolved to ensure project success. For affordable housing projects, risks such as regulatory delays, insufficient funding, or unreliable suppliers can act as bottlenecks, preventing the timely completion of housing units. TOC advocates for a focused approach where project teams prioritize addressing the most critical risks that threaten project completion (Eliyahu Goldratt, 1984).

The positive aspect of TOC is its ability to help project teams focus on the most pressing constraints that have the greatest impact on project outcomes. By narrowing down the key risks that need to be mitigated, TOC allows for a more efficient allocation of resources and time. This focused approach can be especially valuable in affordable housing projects, where time and budget constraints are tight, and minimizing delays is essential for delivering projects on schedule (Eliyahu Goldratt, 1984). One criticism of TOC is that it can oversimplify complex projects by focusing too narrowly on specific constraints, potentially overlooking other interrelated risks. Additionally, some argue that TOC places too much emphasis on short-term problem-solving rather than addressing underlying systemic issues that may cause risks to re-emerge in future projects. Nevertheless, TOC remains highly relevant to affordable housing projects in Nairobi County because it encourages project managers to identify and resolve key risks early on, ensuring that bottlenecks are eliminated and projects progress smoothly toward completion.

2.2.3 Uncertainty Reduction Theory

Charles Berger and Richard Calabrese created the Uncertainty Reduction Theory in 1975. As per the Uncertainty Reduction Theory, which was first presented by Charles Berger and Richard Calabrese in 1975, lowering uncertainty in interactions and

decision-making processes should be the main objective of both individuals and organizations. This theory is highly relevant in the context of project management, where uncertainty about risks can lead to delays, cost escalations, and project failures. The theory suggests that effective communication and data collection are essential in minimizing uncertainties related to project risks. In affordable housing projects, uncertainty regarding land availability, regulatory approvals, and material costs can be managed through regular communication with stakeholders and continuous risk assessment (Charles Berger and Richard Calabrese, 1975).

A key strength of the Uncertainty Reduction Theory is its focus on communication and information-sharing as tools to reduce risk. By ensuring that all stakeholders are informed about the status of the project and any emerging risks, project teams can create a more collaborative environment where risks are identified and addressed early. This proactive approach helps in minimizing misunderstandings and fostering a sense of shared responsibility among stakeholders, which is critical for the successful completion of affordable housing projects (Charles Berger and Richard Calabrese, 1975). However, the theory has been criticized for being too simplistic, as it assumes that uncertainty can always be reduced through communication and information gathering. In reality, some uncertainties, such as market fluctuations or political instability, are beyond the control of project teams and cannot be fully mitigated through communication alone. Despite these limitations, the Uncertainty Reduction Theory is relevant to affordable housing projects because it highlights the importance of reducing unknown risks through active stakeholder engagement, improving project outcomes in complex and dynamic environments like Nairobi County.

2.2 Empirical Literature Review

2.2.1 Risk identification and the successful completion of affordable housing projects in Nairobi County

According to a research by Smith (2018) on the influence of risk identification on the effective completion of affordable housing projects in Ontario, Canada, data were collected using structured questionnaires distributed to project managers and stakeholders involved in housing projects. Regression analysis and descriptive statistics were both used in the study to investigate the connection between project success and risk identification. The study found that early identification of risks such as budget overruns, design flaws, and regulatory issues significantly enhanced the

likelihood of timely project completion. The study revealed that the proactive identification and mitigation of risks at the planning stage helped to minimize delays and cost escalations. In conclusion, the study emphasized that a structured approach to risk identification leads to better resource allocation, improved project timelines, and overall project success in the affordable housing sector in Canada.

A study by Johnson (2019) in London, England, examined the role of risk identification in ensuring the effective completion of affordable housing projects. Data were collected through in-depth interviews with project managers, architects, and local government officials. The study used thematic analysis to identify key risks that impacted project delivery. The study found that risks related to land acquisition, legal disputes, and environmental factors were the most critical in delaying project completion. The study revealed that housing projects with comprehensive risk identification processes were able to anticipate potential challenges and adjust their timelines and budgets accordingly. The study remarked that the early identification of risks, particularly legal and environmental ones, is crucial in preventing delays and ensuring the successful delivery of affordable housing projects in England.

A study that studied the influence of risk identification on the successful completion of affordable housing projects was carried out in Madrid, Spain (Martinez, 2020). Project managers and contractors in the housing industry were surveyed as part of the data collection process, and structural equation modeling (SEM) was used to analyze the results. According to the study, Spain's affordable housing market frequently faces risks like shifting material prices, a lack of workers, and unstable political conditions. According to the study, early risk identification reduced the possibility of project delays and cost overruns by enabling project teams to create backup plans. In order to guarantee that affordable housing projects are finished on schedule and under budget, the study emphasized the significance of having a dynamic risk identification framework that can adjust to changing situations.

In Helsinki, Finland, Virtanen (2017) did a survey that looked at the connection between risk identification and affordable housing project completion. Engineers, project managers, and government housing officials were given organized questionnaires as part of the data collecting tools. Multivariate analysis was used in the study to evaluate how different risk factors affected project timeframes. The study

(2017) found that risks related to regulatory approvals, contractor performance, and weather conditions significantly affected project completion. The study revealed that early identification and documentation of these risks allowed for better project scheduling and resource management. The conclusion of the study was that integrating risk identification into the project planning phase is critical to avoiding delays and ensuring successful project completion in the Finnish affordable housing sector.

Nkurunziza (2019) conducted a study in Bujumbura, Burundi, that examined the significance of risk identification in the accomplishment of affordable housing projects. Interviews and focus groups with project managers and local community leaders involved in housing initiatives were used to gather data. Data analysis was conducted using content analysis to identify common themes and risks. The study found that risks such as political instability, lack of skilled labor, and funding shortages were major barriers to project completion. The study revealed that affordable housing projects that identified these risks early were more likely to develop mitigation strategies, such as securing alternative funding sources and using local materials, to ensure successful project delivery. In conclusion, the study emphasized that risk identification, particularly related to political and financial risks, is essential for the timely completion of housing projects in Burundi.

According to Mensah (2020), a study in Accra, Ghana, examined how risk identification impacts the success of affordable housing projects. The data collection involved surveys distributed to contractors, project managers, and financial institutions involved in housing projects, and data were analyzed using regression analysis. The study found that risks such as fluctuating interest rates, currency depreciation, and supply chain disruptions were the most significant factors affecting project completion. The study revealed that identifying these financial and logistical risks early in the project cycle allowed for better financial planning and reduced the impact of unforeseen economic changes. In conclusion, the study found that robust risk identification mechanisms are vital to the successful completion of affordable housing projects in Ghana, particularly in the face of economic instability.

A study by Uwizeyimana (2018) in Kigali, Rwanda, explored the influence of risk identification on the successful completion of affordable housing projects. Data were

collected using a combination of questionnaires and interviews with project stakeholders, including government officials and construction companies. Both qualitative and quantitative techniques, such as correlation analysis, were used to analyze the data. The survey found that risks related to land tenure issues, community resistance, and project financing were the most critical in affecting project success. The study revealed that early risk identification helped mitigate land acquisition challenges and secure financing, which in turn led to more efficient project completion. The conclusion of the study was that identifying and addressing social and financial risks early in the project lifecycle is key to ensuring the success of affordable housing projects in Rwanda.

A study by Kato (2019) in Kampala, Uganda, investigated the effect of risk identification on the completion of affordable housing projects. Data were collected through surveys and interviews with housing developers, contractors, and government officials. Data were analyzed using factor analysis to determine the most significant risks. The research uncovered that risks such as corruption, inadequate infrastructure, and high construction costs were the primary obstacles to project completion. The study revealed that projects with comprehensive risk identification strategies were able to minimize these risks by adopting transparent procurement processes and improving project oversight. In conclusion, the study found that effective risk identification is essential for overcoming systemic challenges and ensuring the effective completion of affordable housing projects in Uganda.

A study that looked at the effect of risk identification on the successful completion of affordable housing projects was carried out in Nairobi, Kenya (Omollo, 2020). Project managers, architects, and government housing authorities were given questionnaires to complete in order to gather data, which was then evaluated by regression analysis and descriptive statistics. Project schedules were shown to be severely impacted by hazards such as rising material prices, delays in acquiring permissions, and insufficient contractor capacity. According to the study, project teams were able to enhance project results by implementing corrective steps like negotiating better terms with suppliers and expediting approval processes if these risks were identified early. The conclusion obtained from this study was that a proactive strategy to risk identification

is vital to the timely and cost-effective completion of affordable housing projects in Kenya.

2.2.2 Risk assessment and the successful completion of affordable housing projects in Nairobi County

According to a study by Schneider (2018) in Berlin, Germany, the influence of risk assessment on the successful completion of affordable housing projects was thoroughly examined. Data were collected using structured questionnaires distributed to project managers, contractors, and housing developers involved in affordable housing projects. The study employed regression analysis to evaluate how different risk assessment methods influenced project timelines and budget adherence. The study found that thorough risk assessments, particularly during the project planning and design stages, were crucial in identifying potential delays related to material procurement and regulatory compliance. The study revealed that projects that conducted detailed risk assessments early on had a higher likelihood of staying on schedule and within budget. In conclusion, Schneider emphasized that the integration of formal risk assessment procedures significantly improves project outcomes, leading to the timely and successful completion of affordable housing projects in Germany.

A research by Durand (2019) in Paris, France, investigated the role of risk assessment in the effective completion of affordable housing projects. Data were collected through semi-structured interviews and surveys distributed to stakeholders, including engineers, project managers, and financial institutions. The study utilized thematic analysis and regression techniques to analyze the data. The research uncovered that comprehensive risk assessments allowed project teams to anticipate potential financial and environmental risks, such as fluctuating interest rates and strict environmental regulations. The study revealed that projects that conducted thorough risk assessments were better equipped to implement preventive measures, such as securing fixed-rate financing and ensuring compliance with environmental standards. In conclusion, the study found that the implementation of systematic risk assessments contributes to the successful delivery of affordable housing projects in France by minimizing unforeseen obstacles and mitigating financial risks.

A study by Rossi (2020) in Rome, Italy, explored how risk assessment impacts the effective completion of affordable housing projects. Data were collected using a

combination of surveys and focus group discussions with key project stakeholders, including government officials, contractors, and housing developers. The study employed factor analysis to identify the most significant risks and their impact on project success. The study found that projects that incorporated comprehensive risk assessments, particularly concerning contractor reliability and supply chain stability, were more likely to avoid delays. The study revealed that a proactive approach to assessing risks related to contractor capacity and material shortages led to more efficient project management and better resource allocation. In conclusion, the study emphasized that the successful completion of affordable housing projects in Italy is largely dependent on the depth and thoroughness of risk assessments conducted during the project planning phase.

A study conducted in Madrid, Spain, by Martinez (2019) found that risk assessment is essential to the effective completion of affordable housing projects. Surveys and in-depth interviews with project managers, architects, and local government representatives involved in housing projects were used to gather data. Structural equation modeling (SEM) was utilized to analyze the data and determine how risk assessment and project success are related. According to the study, projects that carried out thorough risk assessments at an early stage of development were more resistant to financial concerns like inflation and a labor shortage. According to the study, risk assessments assisted project managers in implementing flexible schedules and modifying budgets to account for possible changes in the economy. Martinez concluded by saying that risk assessments are crucial to guaranteeing the timely and cost-effective completion of affordable housing projects in Spain.

Hassan (2018) conducted a study in Cairo, Egypt, that looked at how risk assessment affected the success of affordable housing initiatives. Surveys were given to government housing authorities, contractors, and project managers in order to gather data for the study. Regression analysis and descriptive statistics were utilized to analyze the data and investigate the connection between project outcomes and risk assessment procedures. The study found that risks related to political instability, currency depreciation, and bureaucratic delays were critical in affecting project completion timelines. The study revealed that affordable housing projects that carried out detailed risk assessments, particularly focusing on political and financial risks,

were better positioned to implement mitigation strategies, such as securing alternative sources of financing. In conclusion, the study found that a robust risk assessment framework is vital for the successful and timely delivery of affordable housing projects in Egypt.

According to Mensah (2020), a study conducted in Accra, Ghana, investigated the impact of risk assessment on the successful completion of affordable housing projects. Data were collected using questionnaires distributed to contractors, project managers, and local government officials. The study employed multiple regression analysis to assess how risk assessment practices affected project success. The study found that comprehensive risk assessments, especially regarding financial risks such as fluctuating material costs and access to credit, significantly improved the likelihood of project success. The study revealed that projects that conducted detailed risk assessments were better able to secure financing and manage budgetary constraints, leading to timely completion. In conclusion, the study emphasized that the adoption of structured risk assessment processes is critical in managing the uncertainties that often arise in Ghana's affordable housing sector, ensuring successful project outcomes.

A study by Mushi (2019) in Dar es Salaam, Tanzania, explored the influence of risk assessment on the completion of affordable housing projects. Data were gathered through a combination of surveys and interviews with project stakeholders, including engineers, architects, and housing officials. The survey employed correlation analysis to determine the association between risk assessment and project performance. The study found that risks related to land acquisition, labor availability, and regulatory compliance were the most significant factors impacting project timelines. The study revealed that early and thorough risk assessments helped project teams anticipate potential delays, allowing them to develop contingency plans and allocate resources more effectively. In conclusion, the study found that comprehensive risk assessments are essential in avoiding delays and ensuring the successful completion of affordable housing projects in Tanzania, particularly in navigating the challenges of regulatory and land-related risks.

According to Omollo (2020), a study in Nairobi, Kenya, examined how risk assessment affects the successful completion of affordable housing projects. Data were collected using structured questionnaires distributed to project managers,

contractors, and government officials involved in the planning and execution of housing projects. Regression analysis and descriptive statistics were both employed in the study to examine the data. According to the study, projects that included formal risk assessment procedures had a higher chance of staying within their allocated price and schedule, particularly when it came to financial risks like shifting construction costs and delays in regulatory approval. The study revealed that early identification and assessment of risks allowed project teams to adjust their plans and mitigate potential issues before they became significant obstacles. In conclusion, the study found that risk assessment is a crucial component of project management in Kenya's affordable housing sector, directly influencing the successful completion of projects by assuring that risks are identified and mitigated early in the project lifecycle.

2.2.3 Risk mitigation and the successful completion of affordable housing projects in Nairobi County

A study by Johansen (2020) in Oslo, Norway, explored the outcome of risk mitigation on the effective completion of affordable housing projects. Data were collected through structured questionnaires and interviews with project managers, contractors, and government officials involved in housing development. The research utilized regression analysis to explore the association between risk mitigation strategies and project success. The survey uncovered that projects that implemented comprehensive risk mitigation measures, such as contingency planning for financial risks and ensuring flexibility in project timelines, experienced fewer delays and budget overruns. The study revealed that effective risk mitigation strategies allowed for quicker response times to unforeseen challenges, such as supply chain disruptions and labor shortages, ensuring projects were completed on time.

A study by Virtanen (2019) conducted in Helsinki, Finland, investigated how risk mitigation impacts the successful completion of affordable housing projects. Data were gathered using a combination of surveys and focus group discussions with key stakeholders such as architects, engineers, and housing developers. The study employed structural equation modeling (SEM) to analyze the effect of various risk mitigation techniques on project achievement. The study found that implementing proactive risk mitigation measures, such as securing fixed-price contracts and diversifying supplier networks, was crucial in minimizing financial risks and construction delays. The study revealed that projects that actively engaged in risk

mitigation early in the project lifecycle were more likely to adhere to budgetary constraints and project timelines

A study by Van Dijk (2021) in Amsterdam, Netherlands, examined the influence of risk mitigation on the completion of affordable housing projects. Data collection was carried out through surveys distributed to contractors, project managers, and urban planners. The data were analyzed using correlation analysis to explore the effect of risk mitigation on project success. The study found that implementing comprehensive risk mitigation strategies, such as using standardized contracts and establishing clear communication channels among stakeholders, reduced the likelihood of project delays and disputes. The study revealed that projects that incorporated risk mitigation techniques early in the planning phase were able to anticipate and prevent issues related to regulatory compliance and material procurement.

According to a study by Dupont (2020) in Brussels, Belgium, the role of risk mitigation in the successful completion of affordable housing projects was examined. Data were collected through structured interviews with project stakeholders, including financial institutions, contractors, and government regulators. Data analysis was conducted using thematic analysis to explore the effectiveness of risk mitigation strategies. The study found that projects that implemented financial risk mitigation strategies, such as securing fixed-interest loans and contingency funds, were more likely to avoid cost overruns and delays. The study revealed that proactive risk mitigation strategies, particularly those addressing financial and regulatory risks, contributed to the successful completion of housing projects by ensuring that unexpected challenges could be swiftly addressed. In conclusion, the study emphasized that effective risk mitigation planning is key to the successful delivery of affordable housing projects in Belgium.

A study by Uwizeyimana (2019) in Kigali, Rwanda, focused on the effect of risk mitigation strategies on the successful completion of affordable housing projects. Data were collected through questionnaires and interviews with developers, contractors, and government officials. The study used regression analysis to examine how different risk mitigation strategies influenced project outcomes. The research uncovered that projects that implemented risk mitigation measures, such as securing local financing and diversifying construction materials, were better able to avoid

delays and cost overruns. The study revealed that proper risk mitigation, especially concerning financing and material sourcing, was instrumental in ensuring the timely completion of affordable housing projects.

Diop (2018) studied the impact of risk reduction on the accomplishment of affordable housing projects in Dakar, Senegal. Project managers, contractors, and government officials were surveyed and interviewed as part of the data collection process. Multiple regression analysis and descriptive statistics were utilized to analyze the data. As per the research, projects that implemented early risk mitigation strategies especially with regard to financial and political risks were better able to stick to their budgets and schedules. According to the study, affordable housing projects were more resilient and finished more quickly when they took into consideration possible risks like inflation and regulatory delays.

A study by Gebremedhin (2020) in Addis Ababa, Ethiopia, examined the impact of risk mitigation strategies on the completion of affordable housing projects. Data were collected through surveys and in-depth interviews with construction managers, housing developers, and government officials. The study employed factor analysis to evaluate how different risk mitigation strategies influenced project success. The study found that projects that focused on mitigating risks related to labor shortages and regulatory approval delays experienced fewer disruptions and cost escalations. The study revealed that the integration of risk mitigation strategies, such as hiring additional skilled labor and streamlining the approval process, contributed to more efficient project execution.

According to a study by Omollo (2019) in Nairobi, Kenya, risk mitigation plays a crucial role in the successful completion of affordable housing projects. Data were collected through structured questionnaires distributed to project managers, developers, and government housing officials. The research utilized multiple regression analysis to explore how risk mitigation strategies influenced project success. The study found that implementing risk mitigation strategies, such as securing alternative financing options and developing contingency plans for regulatory approval delays, significantly improved project outcomes. The study revealed that projects that conducted early risk mitigation efforts were better equipped

to handle challenges related to fluctuating construction costs and regulatory bottlenecks.

2.2.4 Risk monitoring and the successful completion of affordable housing projects in Nairobi County

According to a study by Lim (2020) conducted in Singapore, the effect of risk monitoring on the successful completion of affordable housing projects was examined. Data collection involved surveys and interviews with project managers, contractors, and government officials. The study employed regression analysis to evaluate how ongoing risk monitoring contributed to project success. The study found that projects with consistent risk monitoring practices were more successful in identifying potential threats, such as financial mismanagement and supply chain disruptions, allowing for immediate corrective action. The study revealed that continuous risk monitoring enabled project teams to track and mitigate risks in real time, leading to fewer project delays and cost overruns. In conclusion, Lim emphasized that risk monitoring is essential in ensuring the timely completion of affordable housing projects, as it helps to maintain control over uncertainties that arise during the project lifecycle.

A study by Rahman (2019) in Kuala Lumpur, Malaysia, investigated the impact of risk monitoring on affordable housing projects. The study collected data through questionnaires distributed to housing developers, engineers, and government officials involved in affordable housing initiatives. Using factor analysis, the study evaluated how regular risk monitoring contributed to project outcomes. The study found that implementing robust risk monitoring mechanisms, such as frequent audits and risk assessments throughout the project, was key to preventing significant cost overruns and delays. The study revealed that early identification and resolution of risks, including material shortages and regulatory challenges, ensured that projects were completed on schedule and within budget. The study concluded that continuous risk monitoring helps housing developers stay informed about emerging risks, making it easier to mitigate them and ensure successful project completion.

A study by Somsak (2021) conducted in Bangkok, Thailand, examined the role of risk monitoring in the successful execution of affordable housing projects. Data were collected through structured interviews and surveys with key stakeholders, including

contractors, developers, and government regulators. The study utilized descriptive statistics and regression analysis to analyze the effect of risk monitoring on project performance. The research uncovered that frequent and proactive risk monitoring allowed project teams to adjust their strategies in response to issues such as labor shortages, financial constraints, and legal disputes. The study revealed that affordable housing projects with effective risk monitoring were better equipped to handle uncertainties and maintain project schedules.

A study by Mkhize (2019) in Johannesburg, South Africa, explored the influence of risk monitoring on the successful completion of affordable housing projects. Data collection involved administering structured questionnaires to project managers, contractors, and government officials, and the data were analyzed using correlation analysis. The study found that ongoing risk monitoring, particularly in the areas of compliance with building regulations and material supply chains, played a critical role in reducing project delays and cost overruns. The study revealed that risk monitoring allowed for early detection of potential issues, such as regulatory changes and labor strikes, enabling timely intervention.

A study by Okello (2020) in Kampala, Uganda, investigated the effect of risk monitoring on the success of affordable housing projects. Data were gathered through interviews and questionnaires administered to project managers, engineers, and government officials. The research utilized regression analysis to explore the correlation between risk monitoring and project success. The survey uncovered that consistent risk monitoring, especially in tracking project costs and timelines, significantly contributed to the successful completion of housing projects. The survey revealed that continuous oversight of potential risks, such as inflation and changes in government policy, allowed project managers to adjust plans accordingly, minimizing delays and ensuring budget adherence.

A study by Mwangi (2021) conducted in Nairobi, Kenya, examined the role of risk monitoring in the completion of affordable housing projects. Data were collected through structured questionnaires distributed to project managers, contractors, and government officials, and analyzed using multiple regression analysis. The research uncovered that projects with robust risk monitoring frameworks were able to avoid significant delays and budget overruns by identifying and addressing risks early on.

The study revealed that continuous monitoring of financial risks, labor shortages, and material procurement challenges contributed to better project outcomes.

2.3 Summary and Research Gaps

The research by Anderson (2018) highlights the critical role of risk management practices, such as early risk identification and continuous monitoring, in ensuring the successful completion of affordable housing projects in Canada. The research found that these practices helped mitigate challenges related to unexpected costs, regulatory changes, and material shortages, ultimately enabling projects to meet timelines and budgets. While the study offers valued comprehensions into the importance of risk management, there are research gaps regarding the long-term sustainability of such practices and their application in diverse housing contexts. Additionally, the study focuses predominantly on the Canadian context, leaving room for further exploration in different geographic regions or under varying economic conditions to compare the effectiveness of risk management practices in affordable housing projects globally.

Table 2. 1 Research Gaps

Author/year	Title	Findings	Gap	Focus on the current study
Smith (2018)	Effect of Risk Identification on the Successful Completion of Affordable Housing Projects in Ontario, Canada	Early risk identification significantly enhances project success by addressing budget overruns, design flaws, and regulatory issues, leading to timely completion and better resource allocation.	The study primarily focuses on risk identification but does not explore the long-term impacts of risk management strategies or their effectiveness in different geographic or economic contexts.	To find out the effect of risk identification on the successful completion of affordable housing projects in Nairobi County
Durand	Role of Risk Assessment in	Comprehensive risk	The study primarily	To examine how risk

(2019)	the Successful Completion of Affordable Housing Projects in Paris, France	assessments helped anticipate financial and environmental risks (e.g., fluctuating interest rates, environmental regulations). Projects that used thorough risk assessments implemented preventive measures, such as fixed-rate financing and regulatory compliance, ensuring project success.	focuses on financial and environmental risks but does not explore other potential risks like labor shortages or political instability. Additionally, the study is limited to the Paris context, leaving a gap in understanding risk assessment practices in other regions.	assessment affects the successful completion of affordable housing projects in Nairobi County.
Johansen (2020)	Effect of Risk Mitigation on the Successful Completion of Affordable Housing Projects in Oslo, Norway	Projects with comprehensive risk mitigation measures, like contingency planning for financial risks and flexible timelines, faced fewer delays and budget overruns. Effective strategies enabled faster response to challenges like supply chain disruptions and labor shortages, ensuring	The study mainly focuses on financial and timeline risks but does not explore other potential risks such as regulatory changes or community opposition. The study is also region-specific to Norway, with no	To explore the effect of risk reduction on the successful completion of affordable housing projects in Nairobi County.

timely project completion. comparison s to other countries.

2.4 Conceptual Framework

Theoretical structure directs the research. With a careful attention to the particular variables being sought in the study, the conceptual framework introduces and defines the viewpoints that make an effort to explain the study problem under investigation.

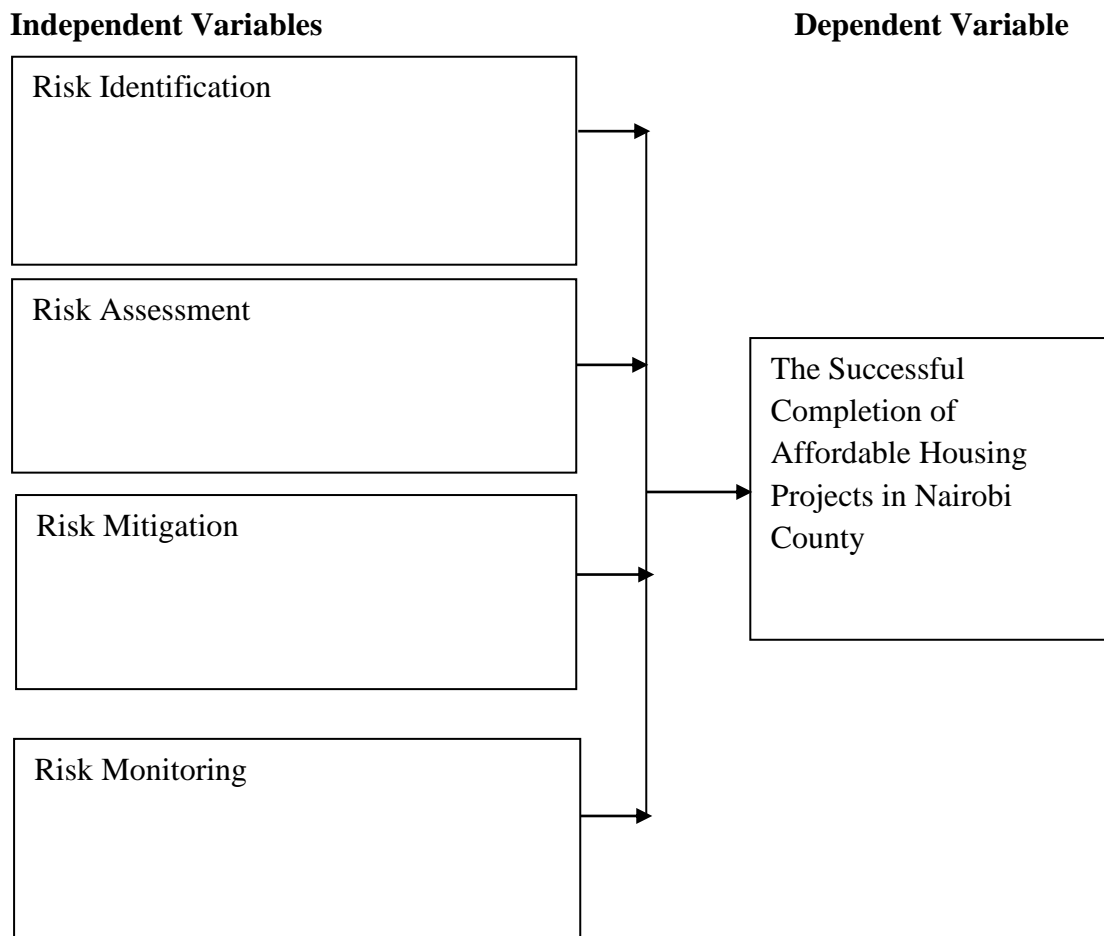


Figure 1 Conceptual Framework

2.5 Operationalization of Variables

Table 2. 2 Operationalization of Variables

Variables	Predictors	Analysis Type	Measuring Tools
Risk Identification	<ul style="list-style-type: none"> •Timeliness of Risk Identification •Comprehensiveness of Risk Identification •Accuracy of Risk Prediction 	Descriptive statistics	Likert questionnaire, frequencies and percentages
Risk Assessment	<ul style="list-style-type: none"> •Risk Prioritization •Thoroughness of Risk Evaluation •Preventive measures 	Descriptive statistics	Likert questionnaire, frequencies and percentages
Risk Mitigation	<ul style="list-style-type: none"> •Response Time to Risk Events •Budget Control •Project Timeline Adherence 	Descriptive statistics	Likert questionnaire, frequencies and percentages
Risk Monitoring	<ul style="list-style-type: none"> •Risk Response Plans •Frequency of Risk Monitoring •Tracking of Risk Indicators 	Descriptive statistics	Likert questionnaire, frequencies and percentages
The successful completion of affordable housing projects in Nairobi County	<ul style="list-style-type: none"> • Timeliness of Project Completion • Budget Adherence • Quality of Construction 	Descriptive statistics	Likert questionnaire, frequencies and percentages

2.6 Chapter Summary

The chapter reviews various theories on which the study is anchored on. The study reviews the Risk Management Theory, Theory of Constraints (TOC) and Uncertainty Reduction Theory. It also reviews empirical literature and conceptual framework.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter highlights the strategies and tactics used to collect research data. Topics covered included research design, target population, sample designs, data collection instruments, and data analysis methods.

3.1 Research Design

According to Kothari (2014), a study design is a comprehensive plan including the procedures and methods for gathering and evaluating the necessary data. By distributing questionnaires, the researcher employed a descriptive research approach to collect data for this study. The primary goal of the design was to methodically and accurately portray the scenario or topic of interest. It can be applied to quantify the frequency of events and helped answer the questions of what, why, and how many.

3.2 Target Population

Mugenda and Mugenda (2015) describe the target population as any group, individual, object, or item from which samples are taken for study. Two hundred employees of Pangani Affordable Housing Project Limited were the study's target group. The study's target audience comprised support personnel, middle management, and upper management. Table 3.1 lists the target population as follows:

Table 3. 1 Target Population

Category	Frequency	Percentage
Top Level Management	2	1
Middle Level Management	10	5
Support Staff	188	94
Total	200	100

Source: Pangani Affordable Housing Project (2024)

3.3 Sample and Sampling Technique

Sampling, as defined by Kothari (2014), involves selecting and studying a small sample of individuals, objects, or events to improve understanding of the larger population it represents. A sample is a small, randomly chosen segment of a population. The researcher employed stratified random sampling to enable generalization of a larger population within a specific margin of error.

Table 3. 2 Sample Size

Category	Frequency	Sample Size	Percentage
Top Level Management	2	1	1
Middle Level Management	10	3	5
Support Staff	188	56	94
Total	200	60	100

Source: Author (2024)

3.4 Instruments

The researcher employed questionnaires to collect data from the participants. The surveys were chosen and distributed within the designated time frames. This approach is simpler because every response is noted and sent right away to the researcher for assessment. The questionnaires were used in the study since they were provided on paper. The interviewer was not allowed to be biased. The surveys were designed to be easily comprehensible in order to increase participation.

3.5 Pilot Study

According to Kothari (2014), a pilot study is an initial examination carried out to evaluate statistical variation for predicting the appropriate sample size and suitable study design prior to initiating a research project. The researcher handed out questionnaires to six Pangani Affordable Housing Project employees who would not be part of the final sample. This was done to validate the surveys and ensure that they accurately reflected their primary objective (Mugenda and Mugenda 2015).

3.5.1 Validity

This represents how accurately a study reflects the specific objective the researcher is attempting to measure. It is the degree to which results from analyzing data truthfully represent the phenomenon under investigation. Kothari (2014) claims that expert opinion improves the content validity of a tool. The researcher sought advice from the appointed supervisor, who is an expert in research, to improve the validity of the instrument's content.

3.5.2 Reliability Test

Reliability is the term utilized to describe how consistent the results of a measuring technique are when repeated multiple times. Without the approval of unbiased observers who can replicate research procedures and utilize reliable methods and instruments for accurate measurements, researchers would struggle to form conclusions, create hypotheses, or establish the generalizability of their work. In order to evaluate the reliability of the questionnaire, a pilot study was carried out and a Cronbach's Alpha Coefficient was computed. This determined how consistently the questionnaire receives identical responses.

3.6 Data Collection Procedure

Questionnaires were distributed by hand and retrieved three days later. The researcher formulated the questions clearly to establish explicit dimensions for analyzing respondents. This approach proved to be successful for the research as it ensured privacy and eliminated the need for the researcher's presence since the questionnaire was easily understood without assistance.

3.7 Data Analysis and Presentation

This is the process of gathering, shaping, and transforming raw data to highlight important information, offer suggestions, reach conclusions, and assist in making decisions. Kothari (2014) states that the objective of data analysis is to convert raw data into a format that is comprehensible. After analyzing both quantitative and qualitative data, the information was presented in the form of tables, percentages, and frequencies.

Quantitative data analysis was done utilizing Microsoft Excel. Moreover, the researchers utilized a multiple linear regression model to analyze the primary data. Here is the formula utilized for modeling.

The basic regression model is $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$

Where, Y – is the dependent variable (the successful completion of affordable housing projects in Nairobi County)

X1- Risk identification

X2- Risk assessment

X3- Risk mitigation

X4- Risk monitoring

β_0 – is the constant, e is the error of prediction.

β_1 -n = the regression coefficient or change included in Y by each X_n

e = error term

To explore the association between the variables, the coefficient of correlation was calculated. To explore how strongly the variables were related to one another, analysis of variance was used.

3.8 Ethical Considerations

Ethical considerations in research refer to a set of principles guiding your research ideas and procedures. Researchers and scientists must always adhere to a specific set of guidelines when obtaining information from individuals (Orodho, 2013).

3.8.1 Informed Consent

As per the Beauchamp and Childress (2015), participants need to have complete understanding of the study's objectives, possible advantages, drawbacks or dangers of joining, how the gathered data will be used, and the guarantee that no research will be done without their permission, as part of ethical research standards. Because it grants the respondent the right to autonomy and the capacity to act in accordance with their own plan, informed consent is crucial in research. As a result, the respondents must be given the confidence to take part in the survey after receiving sufficient information. The collaborating institutions provided a research permission permit, and in order for subjects to participate in the study, they had to sign consent forms.

3.8.2 Voluntary Participation

All research participants are free to decide whether or not to participate, and this is known as voluntary participation. Every participant is free to leave the study at any time and is not under any pressure to stay on. According to Trochim (2016), your subjects are not need to give a reason for withdrawing from the study. No one was forced to take part in the research. Participants were informed about their freedom to leave the study whenever they wished. This explanation was given to each respondent in an effort to encourage volunteer involvement. Prior to sending out the questionnaires, the researcher obtained consent. Participants were given the option to participate in the study or not, and their agreement was requested. The respondents were informed by the researcher that the data they provided would only be utilized for the study. The researcher further clarified that by contributing their opinions on the research issue, useful data for this study was obtained.

3.8.3 Confidentiality

In research, confidentiality refers to the pact made between the researcher and the individuals involved. It specifies thoroughly how the researcher will manage, regulate, and distribute the private information of the participants, ensuring they give their informed consent (Beauchamp & Childress, 2015). Only after obtaining consent from the respondents and the organization can researchers use confidential information. This indicates that the researcher asked the university for permission to gather data. The researcher informed the participants that the information being collected for this study would be kept private and that the results would be used for a Management University of Africa project. The respondent was informed by the researcher that confidentiality would be maintained during the study time.

3.8.4 Privacy

The secrecy granted to study participants is referred to as privacy in research (Orodho, 2015). By making sure that no responders' answers to the questionnaires or interviews could be used to identify them, the respondents' privacy was protected. To safeguard the respondents' identities, the study employed codes and pseudonyms. Respondents were informed by the researcher that the data to be composed for this study would be handled in the strictest secrecy and privacy.

3.8.5 Anonymity

According to the research ethics principle of anonymity, a study participant's identity should be kept secret. No one, not even the researcher, should be able to identify the study participants in order to maintain anonymity. This can be accomplished by identifying participants using codes and making sure that no one submits their real name on the data collection form. This prevented them from sharing information about their race, cultural background, or other characteristics that could reveal who they are (Borg & Grall, 2015). The researcher promised defendants that the data gathered for this study would remain confidential and did not require them to write their names. Throughout the study period, the respondents' anonymity was maintained, the researcher added.

3.9 Chapter Summary

The target populace, sample, sampling methods, data gathering tools, pilot project, data gathering process, data analysis and exhibition, and ethical issues are all covered in this chapter.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Introduction

The data analysis procedure, study findings presentation, and result interpretation are the main topics of this chapter.

4.1 Findings Presentation

4.1.1 Response Rate

Table 4. 1 Response Rate

Category	Frequency	Percentage
Response	50	83
Non-Response	10	17
Total	60	100

Source: Author (2024)

Table 4.1 indicates that 83% of all participants provided a response to the study, while the remaining 17% did not take part. The fact that such a high proportion of individuals responded implies that the study was effective in obtaining data from a substantial segment of the intended audience. As a result, it can be inferred that the study accomplished its goal of gathering information from the participants.

4.1.2 Gender Analysis

Table 4. 2 Gender Analysis

Category	Frequency	Percentage
Male	30	60
Female	20	40
Total	50	100

Source: Author (2024)

Table 4.2 displays the findings of the data analysis on the gender distribution of the participants, which showed that 60% of the participants were men and 40% were women. This shows that despite males somewhat outnumbering women, the research managed to establish a fairly equal distribution of both sexes. According to Kothari (2014), gender is a crucial component to take into account when determining respondents' perspectives on particular themes, hence the research's findings are likely to more accurately reflect both genders.

4.1.3 Age Category

Table 4. 3 Age Category

Category	Frequency	Percentage
21 to 30 years	4	8
31 to 40 years	10	20
41 to 50 years	7	14
51 to 60 years	24	48
Above 61 years	5	10
Total	50	100

Source: Author (2024)

The findings of the data analysis about the age distribution of the participants are shown in Table 4.3. According to the results, 48% of the respondents were between the ages of 51 and 60, 20% were between the ages of 31 and 40, 14% were between the ages of 41 and 50, 10% were over the age of 61, and 8% were between the ages of 21 and 30. The study concludes that there was a fairly even distribution of respondents across the various age groups. Kombo and Tromp (2019) contend that participants' ages are important factors in determining how they see particular issues.

4.1.4 Highest Level of Education

Table 4. 4 Highest Level of Education

Category	Frequency	Percentage
Certificate	6	12
Diploma	10	20
Undergraduate Degree	22	44
Postgraduate Degree	12	24
Total	50	100

Source: Author (2024)

The examination of the participants' educational backgrounds is shown in Table 4.4. 44% had finished an undergraduate degree, 24% had a postgraduate degree, 20% had a diploma and 12% of the participants had a certificate. The fact that the majority of respondents had finished their undergraduate degrees suggests that the company was looking for qualified professionals since they possessed the information and abilities needed to reply to the study questions. The relevance of taking the participants' educational level into account is shown by the observation made by Kothari (2014) that a person's educational background plays a critical role in shaping their answer.

4.1.5 Duration of Working

Table 4. 5 Duration of Working

Category	Frequency	Percentage
2 years and below	4	8
3 to 5 years	6	12
6 to 8 years	10	20
9 to 11 years	8	16
12 years & above	22	44
Total	50	100

Source: Author (2024)

Table 4.5 presents the data analysis of the respondents' time spent working for the company. According to the findings, 44% of participants had worked for a company for 12 years and above, 20% of participants had worked for a company for 6-8 years, 16% of participants had worked for a company for 9-11 years, 12% of participants had worked for a company for 3-5 years, 8% of participants had worked for a company for 2 years and below. This shows that the responders had a lot of experience working for the company, which would probably increase the accuracy of the information gleaned from them. As Kombo and Tromp (2019) point out, an employee's length of employment plays a critical role in defining their degree of knowledge inside a company and, consequently, their capacity to offer thoughtful solutions to research questions. As Kothari (2004) emphasizes, it is crucial to understand the participants' degree of expertise in a given environment while doing data analysis since it might affect the validity and reliability of the results.

4.1.6 Descriptive Analysis of Study Variables

Table 4. 6 Risk identification and the successful completion of affordable housing projects in Nairobi County

S	Statement	Mean	SD
/			
N			
1	Early risk identification significantly improves the timely completion of affordable housing projects	4.32	.487
2	Identifying risks during the planning stage helps in preventing project delays	4.32	.724
3	The comprehensiveness of risk identification improves the allocation of resources and budgeting	4.76	.147
4	Proper risk identification helps avoid budget overruns in affordable housing projects	4.32	.296

Table 4.6 shows the participants' opinions on the association between risk identification and the successful completion of affordable housing projects in Nairobi

County. Respondents agreed that early risk identification significantly improves the timely completion of affordable housing projects (M=4.32, SD=.487). On the statement that identifying risks during the planning stage helps in preventing project delays (M=3.76, SD=.724). On the statement that the comprehensiveness of risk identification improves the allocation of resources and budgeting (M=4.32, SD=.147). On the statement that proper risk identification helps avoid budget overruns in affordable housing projects (M=4.32, SD=.296). The average was 4.34 overall. Smith (2018) supports the findings that early identification of risks such as budget overruns, design flaws, and regulatory issues significantly enhanced the likelihood of timely project completion. The study revealed that the proactive identification and mitigation of risks at the planning stage helped to minimize delays and cost escalations. In conclusion, the study emphasized that a structured approach to risk identification leads to better resource allocation, improved project timelines, and overall project success in the affordable housing sector.

4.1.6.2 Risk evaluation and the accomplishment of Nairobi County's affordable housing projects

Table 4. 7 Risk evaluation and Nairobi County's affordable housing projects' successful completion

S	Statement	Mean	SD
N			
1	Conducting a thorough risk assessment at the start of the project increases the chances of successful completion	4.32	.487
2	Risk assessment ensures that potential regulatory and legal challenges are identified and managed effectively	4.32	.430
3	Assessing risks throughout the project lifecycle helps in minimizing delays and disruptions	4.35	.368
4	The identification and assessment of environmental risks improve project sustainability and completion.	4.38	.371

Table 4.7 shows the participants opinions on the association between risk assessment and the successful completion of affordable housing projects in Nairobi County. Respondents agreed that conducting a thorough risk assessment at the start of the project increases the chances of successful completion (M=4.32, SD=.847). On the statement that risk assessment ensures that potential regulatory and legal challenges are identified and managed effectively (M=4.32, SD=.430). On the statement that assessing risks throughout the project lifecycle helps in minimizing delays and disruptions (M=4.35, SD=.368). On the statement that the identification and assessment of environmental risks improve project sustainability and completion. (M=4.38, SD=.371). The average was 4.33 overall. This is consistent with a Schneider (2018), the study found that thorough risk assessments, particularly during the project planning and design stages, were crucial in identifying potential delays related to material procurement and regulatory compliance. The study revealed that projects that conducted detailed risk assessments early on had a higher likelihood of staying on schedule and within budget. In conclusion, the study emphasized that the integration of formal risk assessment procedures significantly improves project outcomes, leading to the timely and successful completion of affordable housing projects.

4.1.6.3 Risk reduction and Nairobi County's affordable housing projects' successful completion

Table 4. 8 Reducing risks and successfully completing Nairobi County's affordable housing projects

S	Statement	Mean	SD
N			
1	Implementing risk mitigation strategies helps ensure that affordable housing projects are completed on time	4.32	.147
2	Effective risk mitigation measures reduce the likelihood of budget overruns in affordable housing projects	4.35	.368
3	Having contingency plans in place improves the ability to handle unexpected issues during the project	4.32	.238

S	Statement	Mean	SD
4	Regular review and updating of risk mitigation plans contribute to maintaining project timelines and quality	4.32	.501

Table 4.8 shows the participants' views on the association between risk mitigation and the successful completion of affordable housing projects in Nairobi County. Respondents agreed that implementing risk mitigation strategies helps ensure that affordable housing projects are completed on time (M=4.32, SD=.147). On the statement that effective risk mitigation measures reduce the likelihood of budget overruns in affordable housing projects (M=4.35, SD=.368). On the statement that having contingency plans in place improves the ability to handle unexpected issues during the project (M=4.32, SD=.238). On the statement that regular review and updating of risk mitigation plans contribute to maintaining project timelines and quality (M=4.32, SD=.501). The average was 4.3 overall. The results include a research conducted by Johansen (2020), found that projects that implemented comprehensive risk mitigation measures, such as contingency planning for financial risks and ensuring flexibility in project timelines, experienced fewer delays and budget overruns. The study revealed that effective risk mitigation strategies allowed for quicker response times to unforeseen challenges, such as supply chain disruptions and labor shortages, ensuring projects were completed on time.

4.1.6.4 Risk assessment and Nairobi County's affordable housing projects' successful completion

Table 4. 9 Nairobi County's affordable housing projects' successful completion and risk monitoring

S	Statement	Mean	SD
1	Regular risk monitoring helps in identifying potential issues early, improving project	4.32	.487

S / N	Statement	Mean	SD
	completion rates		
2	Ongoing monitoring of project risks allows for timely adjustments to project plans, reducing delays	4.32	.430
3	Effective risk monitoring improves communication and coordination among project team members	4.35	.368
4	Frequent risk assessments during the project lifecycle help in mitigating unforeseen challenges.	4.38	.371

The participants' opinions regarding the relationship are shown in Table 4.9 uncovered that risk monitoring and the successful completion of affordable housing projects in Nairobi County. Respondents agreed that regular risk monitoring helps in identifying potential issues early, improving project completion rates (M=4.32, SD=.847). On the statement that ongoing monitoring of project risks allows for timely adjustments to project plans, reducing delays (M=4.32, SD=.430). On the statement that effective risk monitoring improves communication and coordination among project team members (M=4.35, SD=.368). On the statement that frequent risk assessments during the project lifecycle help in mitigating unforeseen challenges. (M=4.38, SD=.371). The average was 4.33 overall. This is consistent with a Lim (2020) study which uncovered that projects with consistent risk monitoring practices were more successful in identifying potential threats, such as financial mismanagement and supply chain disruptions, allowing for immediate corrective action. The study revealed that continuous risk monitoring enabled project teams to track and mitigate risks in real time, leading to fewer project delays and cost overruns.

4.1.6.5 Nairobi County's affordable housing initiatives were successfully completed.

Table 4. 10 The accomplishment of Nairobi County's affordable housing initiatives

S	Statement	Mean	SD
1	Proper project planning leads to the successful completion of affordable housing projects	4.31	.486
2	Adequate funding is crucial for the successful completion of affordable housing projects	4.32	.724
3	The local community's involvement guarantees that housing projects be completed successfully.	4.76	.147
4	The availability of skilled labor is essential for the success of affordable housing projects	4.30	.294

Table 4.10 displays the respondents' views on the successful completion of affordable housing projects in Nairobi County. Respondents agreed that proper project planning leads to the successful completion of affordable housing projects (M=4.31, SD=.486). On the statement that adequate funding is crucial for the successful completion of affordable housing projects (M=3.76, SD=.724). On the statement that participation of the local community ensures the successful completion of housing projects (M=4.32, SD=.147). On the statement that the availability of skilled labor is essential for the success of affordable housing projects (M=4.30, SD=.294). The overall mean was 4.34. The results are backup by Anderson (2018), the research found that projects that integrated risk management practices, such as early risk identification and continuous monitoring, were more likely to meet their timelines and stay within budget. The research uncovered that risk management mitigated the impact of unexpected costs, regulatory changes, and material shortages. The survey remarked that systematic risk management is crucial in preventing common challenges in affordable housing projects, significantly increasing the likelihood of their timely completion.

4.2 Limitations of the Study

Given the time constraints of organizational personnel, the researcher utilized a questionnaire-based approach for data collection. This method allowed for efficient participation by minimizing disruptions to employees' schedules while ensuring the timely and effective gathering of data.

The researcher faced recruitment challenges as some respondents viewed the study as an inconvenient time commitment. In order to resolve this, the researcher emphasized the significance of the study and gave participants the assurance that their responses would remain private. Emphasizing the academic nature of the research also helped ease concerns and encouraged greater participation.

4.3 Chapter Summary

Out of a sample of 60 respondents, 50 completed surveys, yielding a high response rate of 83%. Demographic and study-related information about the participants was gathered and arranged in tables for display. The data was analyzed using a two-pronged statistical strategy, which combined descriptive methods to explain and summarize the findings with inferential methods to make inferences and possibly extrapolate the findings to a larger population.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This section lays out the key takeaways from the research. It begins by summarizing the data analysis, then draws conclusions based on those findings. Finally, the chapter offers recommendations that leverage the research results to propose practical steps or improvements for the area under investigation.

5.1 Summary of the Findings

5.1.1 Risk Identification

The survey aimed to find out how risk identification affected Nairobi County's affordable housing projects' successful completion. According to the report, Nairobi County's affordable housing projects were completed successfully in large part due to efficient risk identification. By proactively identifying potential risks such as financial constraints, regulatory challenges, and construction delays, project teams were able to implement timely mitigation strategies, ensuring smoother project execution and minimizing disruptions. This process ultimately improved project timelines, cost management, and overall project outcomes. The findings are supported by Smith (2018), the study found that early identification of risks such as budget overruns, design flaws, and regulatory issues significantly enhanced the likelihood of timely project completion. The study revealed that the proactive identification and mitigation of risks at the planning stage helped to minimize delays and cost escalations.

5.1.2 Risk Assessment

The study's objective was to assess the effect of risk assessment on the successful completion of affordable housing projects in Nairobi County. This is in line with a study by Schneider (2018), the study found that thorough risk assessments, particularly during the project planning and design stages, were crucial in identifying potential delays related to material procurement and regulatory compliance. The study revealed that projects that conducted detailed risk assessments early on had a higher likelihood of staying on schedule and within budget. This is in line with a study by Schneider (2018), the study found that thorough risk assessments, particularly during the project planning and design stages, were crucial in identifying potential delays

related to material procurement and regulatory compliance. The study revealed that projects that conducted detailed risk assessments early on had a higher likelihood of staying on schedule and within budget.

5.1.3 Risk mitigation

The scholarship's goal was to assess the impact of risk mitigation on Nairobi County's affordable housing projects' successful completion. The results showed that successful risk mitigation techniques played a major role in Nairobi County's affordable housing projects' successful completion. Implementing measures such as contingency planning, contractual safeguards, and continuous monitoring of project risks helped reduce the impact of unforeseen challenges. By addressing risks proactively, project managers were able to minimize disruptions, maintain project timelines, and control costs, ultimately ensuring smoother project execution and completion. The findings are consistent with a study by Johansen (2020), the study found that projects that implemented comprehensive risk mitigation measures, such as contingency planning for financial risks and ensuring flexibility in project timelines, experienced fewer delays and budget overruns. The study revealed that effective risk mitigation strategies allowed for quicker response times to unforeseen challenges, such as supply chain disruptions and labor shortages, ensuring projects were completed on time.

5.1.4 Risk Monitoring

The results' objective was to explore the effect of risk monitoring on Nairobi County's affordable housing projects' successful completion. The results showed that ongoing risk management was essential to Nairobi County's affordable housing projects' successful completion. Regular tracking of potential risks and timely adjustments allowed project teams to identify emerging issues early, implement corrective actions, and prevent project delays or cost overruns. Effective risk monitoring helped maintain project alignment with objectives, ensuring that housing projects were completed on time and within budget. This is in line with a study by Lim (2020), the study found that projects with consistent risk monitoring practices were more successful in identifying potential threats, such as financial mismanagement and supply chain disruptions, allowing for immediate corrective action.

5.2 Recommendations

The research endorses that affordable housing projects in Nairobi County implement a systematic and proactive approach to risk identification. This should involve the use of comprehensive risk assessment tools and techniques to anticipate potential challenges early in the project lifecycle. Project stakeholders, including contractors, government agencies, and community representatives, should be involved in collaborative discussions to identify risks from multiple perspectives. Regular risk identification sessions should be held throughout the project, and a centralized database for documenting and updating identified risks should be established to ensure timely and effective risk management.

The study recommends that affordable housing projects in Nairobi County adopt a thorough and continuous risk assessment process to enhance project success. This should include the use of both qualitative and quantitative risk assessment techniques to evaluate the potential impact and likelihood of identified risks. Project teams should be trained in risk assessment methodologies, ensuring they can accurately prioritize risks based on their severity and urgency. Furthermore, risk assessments should be revisited at key project milestones to address any new or evolving risks, enabling more informed decision-making and improving overall project resilience and outcomes.

The study recommends that affordable housing projects in Nairobi County implement proactive and comprehensive risk mitigation strategies to ensure successful project completion. This includes developing detailed risk mitigation plans that outline specific actions for addressing identified risks, assigning responsibility to appropriate team members, and setting clear timelines for mitigation efforts. Additionally, the study suggests incorporating contingency planning and allocating sufficient resources, such as time and budget, to handle unexpected risks. Regular training on risk mitigation practices should also be conducted to ensure that all project stakeholders are equipped to handle potential challenges effectively and minimize disruptions to project timelines and objectives.

The study recommends that robust risk monitoring systems be established for affordable housing projects in Nairobi County to ensure their successful completion. This involves implementing continuous monitoring frameworks that track identified

risks throughout the project lifecycle, allowing for timely identification of new risks and assessment of existing ones. The study suggests regular reviews and updates of the risk management plan, along with the use of key performance indicators (KPIs) to measure risk management effectiveness. Additionally, it is crucial to foster a culture of open communication among project stakeholders to facilitate the reporting of risks and issues as they arise. Training sessions should also be organized to enhance the skills of project teams in effective risk monitoring practices, ensuring that all members are aware of their roles in managing risks.

5.3 Conclusion

The research concludes that effective risk identification is critical for the successful completion of affordable housing projects in Nairobi County. It highlights that early and thorough identification of potential risks allows project managers to develop appropriate strategies to address these challenges proactively. The findings indicate that projects with well-established risk identification processes are more likely to stay within budget, meet timelines, and achieve desired quality standards. In order to guarantee a thorough grasp of potential problems, the study also highlights how crucial it is to include all stakeholders in the risk identification process. In the end, encouraging a proactive approach to risk detection greatly raises the possibility that projects in the affordable housing sector will be successful.

As per the results, successful risk assessment is essential to the accomplishment of Nairobi County's affordable housing initiatives. It illustrates how methodical risk assessment enables project teams to rank possible problems according to their impact and likelihood, allowing resources to be allocated to effectively handle the most important risks. The findings indicate that projects that integrate comprehensive risk assessment processes are better equipped to navigate challenges, leading to enhanced project performance, adherence to timelines, and budgetary compliance. Additionally, the study underscores the need for continuous risk assessment throughout the project lifecycle, ensuring that emerging risks are promptly identified and managed, thereby contributing to overall project success in the affordable housing sector.

The research remarks that good risk mitigation techniques are necessary for Nairobi County's affordable housing projects to be completed. It emphasizes that taking

proactive steps to recognize, evaluate, and manage any risks greatly lowers the possibility of project delays, cost overruns, and quality problems. The findings reveal that projects employing robust risk mitigation plans tend to achieve their objectives more consistently, ensuring that resources are utilized efficiently and stakeholders' expectations are met. Furthermore, the study emphasizes the prominence of fostering a risk-aware culture within project teams, as this approach enhances collaboration and responsiveness to unforeseen challenges, ultimately leading to improved project outcomes in the affordable housing sector.

The study concludes that effective risk monitoring is crucial for the successful completion of affordable housing projects in Nairobi County. It demonstrates that continuous oversight and evaluation of potential risks throughout the project lifecycle allow for timely interventions, which can mitigate negative impacts on project timelines and budgets. The findings indicate that projects with robust risk monitoring practices are more likely to adapt to emerging challenges, maintain quality standards, and achieve their intended objectives. Additionally, the study underscores the significance of integrating risk monitoring into regular project management processes, as this fosters accountability, enhances communication among stakeholders, and ultimately contributes to more successful project outcomes in the affordable housing sector.

5.4 Areas of Further Studies

Further studies on the effect of risk management practices on the successful completion of affordable housing projects in Nairobi County could benefit from a comparative analysis of different risk management frameworks. This research could evaluate traditional risk management approaches against more innovative, technology-driven solutions. By examining various methodologies, researchers can identify best practices that have proven effective in similar contexts. This comparative analysis could provide valuable insights for policymakers and project managers, enabling them to select the most suitable risk management strategies tailored to the unique challenges of affordable housing projects.

Another area for further exploration is the impact of stakeholder engagement on risk management practices. Understanding how collaboration with community members, local governments, and other stakeholders' influences project outcomes can be crucial

for successful housing initiatives. Future studies could focus on the dynamics of stakeholder relationships and their roles in identifying, assessing, and mitigating risks. By emphasizing community involvement, this research can highlight the importance of participatory approaches in risk management, potentially leading to improved project success rates and community satisfaction with affordable housing developments.

Additionally, longitudinal studies that track affordable housing projects over time could provide valuable insights into the long-term effects of risk management practices. These studies could assess how early identification and mitigation of risks influence project sustainability and the overall satisfaction of residents. Understanding the correlations between risk management efforts and project outcomes over time will contribute to a comprehensive knowledge base, helping project managers and stakeholders make informed decisions. Furthermore, research on the integration of emerging technologies, such as data analytics and building information modeling (BIM), in risk management practices could reveal innovative solutions that enhance the efficiency and effectiveness of affordable housing projects in Nairobi County.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

SECTION A: GENERAL INFORMATION

Please check the corresponding box or provide an explanation in the designated sections to respond to the following questions.

1. Gender

Male	{ }
Female	{ }

2. Age in Years

21- 30 years	{ }
31- 40 years	{ }
41- 50 years	{ }
51- 60 years	{ }
Above 61 years	{ }

3. Indicate your educational level?

Certificate	{ }
Diploma	{ }
Undergraduate Degree	{ }
Postgraduate Degree	{ }

4. For how long have you been working for this organization?

2 years and below	{ }
3-5 years	{ }
6-8 years	{ }
9-11 years	{ }
12 years & above	{ }

SECTION B: RISK IDENTIFICATION

5. To what extent do you personally agree with the following claims about how risk identification influences the successful completion of affordable housing projects in Nairobi County?

Please rate your degree of agreement with each of the following ratios from 1 to 5, where Strongly Agree equals 5, Agree equals 4, Neutral equals 3, Disagree equals 2, and Strongly Disagree equals 1.

S/N	Statement	SA	A	N	D	SD
1	Early risk identification significantly improves the timely completion of affordable housing projects.					
2	Identifying risks during the planning stage helps in preventing project delays.					
3	The comprehensiveness of risk identification improves the allocation of resources and budgeting.					
4	Proper risk identification helps avoid budget overruns in affordable housing projects.					

SECTION C: RISK ASSESSMENT

6. To what extent do you personally agree with the following assertions regarding how risk assessment's impact on efficiency influences Nairobi County's affordable housing projects' successful completion?

Please rate your degree of agreement with each of the following ratios from 1 to 5, where Strongly Agree equals 5, Agree equals 4, Neutral equals 3, Disagree equals 2, and Strongly Disagree equals 1.

No.	Statement	SA	A	N	D	SD
1	Conducting a thorough risk assessment at the start of the project increases the chances of successful completion.					
2	Risk assessment ensures that potential regulatory and legal challenges are identified and managed effectively.					
3	Assessing risks throughout the project lifecycle helps in minimizing delays and disruptions.					

4	The identification and assessment of environmental risks improve project sustainability and completion.					
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SECTION D: RISK MITIGATION

7. How much do you myself agree with the subsequent proclamations on how risk mitigation influence the successful completion of affordable housing projects in Nairobi County?

Please rate your degree of agreement with each of the following ratios from 1 to 5, where Strongly Agree equals 5, Agree equals 4, Neutral equals 3, Disagree equals 2, and Strongly Disagree equals 1.

S/N	Statement	SA	A	N	D	SD
1	Implementing risk mitigation strategies helps ensure that affordable housing projects are completed on time					
2	Effective risk mitigation measures reduce the likelihood of budget overruns in affordable housing projects.					
3	Having contingency plans in place improves the ability to handle unexpected issues during the project.					
4	Regular review and updating of risk mitigation plans contribute to maintaining project timelines and quality.					

SECTION E: RISK MONITORING

8. How much do you myself agree with the subsequent proclamations on how risk monitoring influence the successful completion of affordable housing projects in Nairobi County?

Please rate your degree of agreement with each of the following ratios from 1 to 5, where Strongly Agree equals 5, Agree equals 4, Neutral equals 3, Disagree equals 2, and Strongly Disagree equals 1.

S/N	Statement	SA	A	N	D	SD
1	Regular risk monitoring helps in identifying potential issues early, improving project completion rates.					
2	Ongoing monitoring of project risks allows for timely					

	adjustments to project plans, reducing delays.					
3	Effective risk monitoring improves communication and coordination among project team members.					
4	Frequent risk assessments during the project lifecycle help in mitigating unforeseen challenges.					

SECTION F: THE SUCCESSFUL COMPLETION OF AFFORDABLE HOUSING PROJECTS IN NAIROBI COUNTY

9. How much do you for myself agree with the subsequent proclamations on how risk monitoring influence the successful completion of affordable housing projects in Nairobi County?

Please rate your degree of agreement with each of the following ratios from 1 to 5, where Strongly Agree equals 5, Agree equals 4, Neutral equals 3, Disagree equals 2, and Strongly Disagree equals 1.

S/N	Statement	SA	A	N	D	SD
1	Proper project planning leads to the successful completion of affordable housing projects.					
2	Adequate funding is crucial for the successful completion of affordable housing projects.					
3	Involvement of the local community ensures the successful completion of housing projects.					
4	The availability of skilled labor is essential for the success of affordable housing projects.					

THANK YOU FOR YOUR TIME AND PARTICIPATION

APPENDIX II: RESEARCH BUDGET

TASK/ITEM	AMOUNT (KES)
Printing	2,000.00
Binding	500.00
Airtime	1,000.00
Transport	2,500.00
Miscellaneous	4,000.00
Total	10,000.00

Source: Author (2024)

APPENDIX III: WORK PLAN

Activity	July 2024	Aug 2024	Sep 2024	Oct 2024
Project Writing				
Data Collection				
Analyzing Data				
Project Submission and Defending				

Source: Author (2024)

APPENDIX IV: PLAGIARISM REPORT



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