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Risk Management Practices and Performance of Real Estate Construction Projects in Nakuru County, Kenya

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Abstract

Real estate development performance in Nakuru County continuously deteriorates, as evidenced by rising vacancy rates in outdated office buildings, restrained consumer spending due to the difficult economic climate, and competition from unofficial retail spaces in some submarkets. The study aimed at finding out how risk management practices influence the performance of real estate construction projects in Nakuru County. The research determined how technical risk management practices, financial risk management practices, market risk management practices and operational risk management practices affect the performance of real estate construction projects in Nakuru County. This research used a mixed-method study design with a population target of 45 ongoing and 25 completed real estate projects in Nakuru County. Using stratified simple sampling technique, a sample size of 25 ongoing and 15 completed real estate projects were selected. The study was affixed on strategic planning theory, Decision theory and risk/uncertainty bearing theory. The researcher used questionnaires to obtain data and suggestions from the respondents. A pilot study to assess the research instruments' accuracy and dependability was conducted in Nairobi County. The research utilized Cronbach's alpha to calculate the reliability coefficient of the questionnaires. Cronbach value greater than 0.7 was considered reliable. The gathered data was cleaned, coded, and accuracy checked for ease of analysis, and then subjected to descriptive analysis involving the calculation of mean, frequency distribution, and standard deviation. Using Pearson correlation analysis, the relationship between the dependent and independent variables was evaluated. Regression analysis was done using the analysis of variance technique (ANOVA). The study found that technical, operational, market, and financial risk management practices each had positive and substantial impacts, indicated by regression coefficients of 0.451, 0.313, 0.531, and 0.273, respectively. Further, the study established that these practices are crucial in managing various risks effectively, demonstrating their significant role in overall risk management strategies. . Constructed from the study findings, this study recommends that the Kenyan government should review all of the approvals that real estate developers need, formulate policies that regulate the construction sector by ensuring that real estate developers demonstrate their creditworthiness on their expected investments before granting any licenses. In addition, real estate developers should be encouraged to take advantage of staff empowerment through professional bodies that equips managers through risk management courses. Lastly, future studies conducted should concentrate on other risk variables not included in this study including legal and environmental risk management practices.

Keywords*: Risk Assessment, Project Performance, Construction Management, Real Estate Development, Mitigation Strategies*

1.0 Introduction

Construction of real estate projects contributes significantly to a nation's GDP expansion through its financial role and support of numerous production variables (Galati, 2011). This industry is well-known throughout the world for its efforts to raise the socio-economic wellbeing of its workforce and provide residents with better housing (Cytonn,2020).Whether it's land, buildings, or other permanent fixtures, as well as any minerals or water that may be present, everything that is permanently affixed to land is considered real estate. (Allessie, 2017). Development, leasing, and management of both commercial and residential properties are all part of real estate operations. Its development involves a great deal of uncertainties risks because of its distinctiveness, significant capital investment and complexity (Knight Frank, 2022). To increase the performance of the constructed real estate projects, it is crucial for stakeholders and investors involved to control these risks. Globally, the UK is expected to continue on a growth trajectory in terms of real estate project performance (Raynor & Whitzman, 2020). In China, the real estate industry is one of dynamic business with high-risks (Dawson, 2019). In contrast to China and Malaysia, where real estate construction projects perform poorly in terms of completion delays, designs, and excessive costs, the United Kingdom's and the United States' real estate sectors have benefited from the construction industry. The reason herein being that China and Malaysia conform standard practices in the construction sector (Dawson, 2019). Real estate industry in most African nations, including Ghana, Nigeria, Morocco and Ethiopia, has experienced problems with risk management. The real estate sector in Nigeria has experienced decreasing occupation demand since 2019 with the real estate developers reporting disparities between actual and expected income (Eroglu & Picak, 2018). Real estate construction projects in Africa are subject to a variety of hazards at every level of the project's execution; as a result, these threats should be recognized, assessed, and properly managed (Hessellund, 2017).

Despite the significance of real estate sector to the Kenyan economy, they face a variety of obstacles that call for reflection and knowledge of the necessary risk management practices (Smith, 2016). With many projects falling short of schedules, costs, quality, and targets, the industry has been painted as having a bad reputation at dealing with the unpleasant consequences of change. This study's specific objectives aimed at determining the influence of technical, financial, operational, and management market risks on how construction projects in Kenya's real estate industry perform. Specifically, the study was centered in Nakuru County and to recommend various policies based on the findings. In contrast to having a strategic location and being accessible by road and rail networks, Nakuru County has lagged behind Nairobi, Kisumu, and Mombasa in the real estate development. This, however, is set to change because of various development initiatives that have been started in the city, such as the construction of 505 affordable homes in the Bondeni slums and the upgrading of the Lanet airstrip into an airport (GoK, 2019). Due to its greater and promising future, this would further open the county of Nakuru for real estate development and investments (Knight Frank, 2022). This made it necessary to investigate how strategic risk management practices impacts the effectiveness of real estate development projects in Nakuru County.

A project, according to Ghahramanzadeh (2013), is an endeavor undertaken in order to create a product that is useful and brings about change. Project performance in the real estate sector is

defined in terms of time, cost, and quality. This aspect is qualified when it is performed well, finished within budget and on time. The project should also meet the expectations of the users, their quality requirements and technical specifications (Amoatey & Famiyeh, 2015). Quality, time, and cost are the foundations of project performance, yet they are insufficient for a fair assessment of project success (Koech, 2013). Because different projects have varied performance measurements, organizations should avoid limiting performance assessment by utilizing efficiency measures as the sole indications of project performance. Other requirements include technology transfer, environmental friendliness, health and safety (Bredin & Söderlund, 2013). The performance of projects in this study was operationalized in terms of cost-completed within budget, Time criteria: completed on time, Quality criteria-completed within established guidelines, return on investment in terms of income yield and client satisfaction, (KPDA, 2022).

The construction Authority of Kenya (2021) states that financial risk practices, technical risk identification, risk control practices, marketing risk assessment, and operational risk are the several types of risk management methods used in building projects. This study focused on technical risk management, market risk management, financial risk management, and operational risk management practices (KURA, 2019). Technical risks management practices are the actions undertaken by the management team to prevent project failure from risks associated with the purchase of a development site (Mukhtar, 2017). Building materials, building components, designs, and improved services have all benefited from technological advancements, but they can also cause unforeseen loss or profit. To give an example, new technology advancements increases demand in rental values and sales, but they will also require business owners to refurbish or rebuild their units in order to stay competitive (Muteti, 2017). In this study technical risk management practices were conceptualized to include; Design, drawing and specification practices, availability of materials and Site investigation. Financial risk management practices are steps taken to prevent risks that arise during the delivery of a real estate project including costs influenced fluctuations the exchange rates, inflation as well as inadequate funds from an investor or funding agent (Anton, Rodriguez, & Lopez, 2011). To prevent financial shortages, it is advisable to avoid clients with a history of late payments and poor financial standing whenever feasible. When estimating costs or pricing tender documents, it is essential to account for the costs associated with exchange rate fluctuations. Additionally, considering the unpredictability of inflation and its potential to significantly affect material prices and other expenses, it is crucial to factor in these considerations, as highlighted by Njogu, Ahmad, & Gwaya (2015). This approach can contribute to better financial planning and risk management in real estate construction projects.

The real estate project must be operated and maintained when it is finished in order for it to generate the anticipated revenue and fulfill all of its responsibilities (Fletchers & Pendleton, 2014). The operational management practices include the appointment of qualified personnel to manage the property, yearly operating expenses including salaries, utilities, contract services, administrative and management charges, and insurance policies. The practice of operational risk management in real estate development in Nakuru County has been conceptualized and measured through aspects such as lease management, management skills, solvency assessment, and training of project teams. Despite these measures, the performance of real estate development in the region has been deteriorating. This decline is evidenced by increasing vacancy rates in aging office

buildings, reduced consumer spending due to challenging economic conditions, and heightened competition from informal retail locations in certain submarkets (Knight Frank, 2019). Nakuru County had the lowest project performance node from 2013 to 2018, with an average yield of 5.9% compared to the market average of 6.7% (KHC, 2029). The poor performance of these construction projects may deter investors and financing institutions from investing in this sector, affecting the project's timely completion. In the long term, high cost risks will result in poor quality projects and a low investment return (Hass Consultant, 2019). With a population of 2,162,202 (KNBS, 2019), it is Kenya's third most populous county, hence bad construction project performance is a major issue for property developers and managers.

1.1 Statement of the Problem

According to Cytonn's 2021 real estate investment report, Nakuru County recorded the lowest rental yields in Kenya, with a return on investment rate of 6.1% per year, despite the real estate sector typically offering high returns. This figure is notably lower than those in Mombasa County at 8.4%, Kisumu County at 7.8%, Nairobi County at 8.1%, and Nyeri County, which had the highest yield at 8.6%. These figures emerge in the context of Nakuru County experiencing a rising population growth rate of 3.1% per annum, as per the Kenya National Bureau of Statistics (KNBS, 2019), which surpasses the national average of 2.6%.

The poor performance of real estate building projects has discouraged investors and financing institutions from investing in this sector, impacting the project's timely completion (Knight Frank, 2021). High cost risks as a result of limited credit facilities for investors in this industry have resulted in poor quality projects and low long-term investment returns (Hass consultant, 2019). This served as the foundation for this study, which sought to establish how risk management practices impact the performance of real estate building projects in Nakuru County and to make specific policy suggestions based on the findings.

Several risk management research strategies and the performance of real estate projects have been undertaken. Wan, Daud Zainol, and Mumin (2017) evaluated the effects of technically managing risk and performance of real estate projects. They discovered that much of the failure in project performance was related to a lack of appropriate risk management. Because the preceding research were done in advanced nations, their findings cannot be applied to a developing country, highlighting the need to learn how risk management techniques in Kenya effect real estate developments. The findings of Fletchers and Peridleton (2014), Fraenkael and Wallen (2015) studies on operational risk management practices on project performance contradicted those of Fredrick, Connor, and Kuratko (2016), who established that Real estate construction is not significantly impacted by operational risk management techniques. The goal of this study was to assess the condition in Nakuru County. Nasidi, Nketekete, Emuze, and Smallwoods (2016), discovered that market and financial risk management measures have a positive impact on the

success of building projects in developed countries. The studies utilized a longitudinal research design, which, while informative over time, does not elucidate the associations between variables. Meanwhile, effective risk management in real estate involves identifying potential disadvantages in transactions to develop appropriate risk response and mitigation strategies. (Ding, 2014). Similar research in Kenya focused on the road construction industry. Mwangi's (2019) research focuses on road building activities in Nairobi County. Odongo (2018) focused on Kisumu County's ICT development activities. This study aimed to fill the existing knowledge gap by examining how risk management practices influence the performance of real estate construction projects in Nakuru County. It provided empirical evidence on the degree to which these practices impact the performance of real estate projects in Nakuru County, Kenya, an area that has recently been granted city status..

1.2 Objectives of the study

1.2.1 General objective of the study

The study aimed at finding out how risk management practices affect real estate construction projects' performance in Nakuru County in Kenya.

1.2.2 Specific Objectives

1. To determine the effect of technical risk management practices on the performance of real estate construction projects in Nakuru county, Kenya
2. To find how operational risk management practices on the performance of real estate construction projects in Nakuru county, Kenya
3. To examine how market risk management practices influences the performance of real estate construction projects in Nakuru county, Kenya
4. To evaluate how financial risk management practices, influence the performance of real estate construction projects in Nakuru county, Kenya

1.3 Research Questions

1. To what extent does technical risk management practices influence performance of real estate construction projects in Nakuru County, Kenya?
2. What is the influence of operational risk management practices on the performance of real estate construction projects in Nakuru county, Kenya?
3. How does market risk management practices influence the performance of real estate construction projects in Nakuru county, Kenya?
4. How does financial risk management practices on the performance of real estate construction projects in Nakuru county, Kenya?

2.0 Literature Review

2.1 Theoretical Review

This section elaborates on the concepts explaining how risk management strategies impact the success of real estate construction projects. The framework of strategic planning theory served as the foundational theory for this research.

2.1.1 Strategic Planning Theory

Mintzberg advanced the theory in 1994 placing an emphasis on risk management planning (Fredrick, O'Connor, & Kuratko, 2016). The theory states that, real estate developers need a plan that allows them to take advantage of opportunities while limiting exposure to threats (Quaye et al., 2015). According to the theory, risk management is choosing the best course of action from a range of options to reduce the potential impact of threats to a project's success. Strategic planning is essential for real estate developers because they face numerous risks that could jeopardize the success of their construction projects (Hodgetts & Kuratko, 2018). The theory is relevant to the study as it illustrates the importance of minimizing exposure to potential threats in real estate construction projects, thereby reducing costs. This approach is vital for ensuring the timely delivery and completion of projects while adhering to the specified construction design and materials, which are key indicators of a project's success. As Kuratko & Hodgetts (2016) suggest, such measures are crucial for the successful execution of construction projects. Quaye et al. (2015) highlight that major risks in real estate projects include financial, market, technical, and operational risks. The concepts of this theory thus provide a framework to understand how strategic risk management practices influence the performance of real estate construction projects in Nakuru County.

2.1.2 Decision Theory

MacFarlane advanced the decision theory in 1995. According to the theory; property purchase and or development carry a lot of risk and are frequently characterized by a lot of complications and uncertainties (Roberts and Hennebery, 2017). Decision theory is pertinent to real estate investment decisions as it facilitates informed choices by taking into account the risks, challenges, and potential dangers inherent in real estate development. Aligning with this theory, Allessie (2017) posits that property development is a long-duration endeavor, deeply influenced by the cyclical nature of macro-economic factors such as taxation, interest rates, and inflation, which can significantly impact the investment's outcome. The study found relevance in the theory as it links how the performance of real estate construction project will be more achievable if real estate developer makes decision based on a comprehensive understanding of the country's macroeconomic environment and its impact on real estate investment. According to Yosaporn (2017), an investment risk could be mitigated using an appropriate real estate decision model that provides comprehensive data. According to the research, the decision theory could be used to describe how financial and technical risk management techniques affected real estate construction projects' performance.

2.1.3 Risk and Uncertainty -Bearing Theory

The theory was proposed by Professor Knight, in 1991, and later advanced by Wood (2015). It categorizes risks into two distinct types: those that are predictable (quantifiable) and those that are not. This concept of risk and uncertainty plays a vital role in the decision-making process, especially in determining how to effectively manage risks in various scenarios, including in the realm of real estate investment and development.. The theory states that a real estate developer doesn't necessarily choose the "best" plan, but rather the plan with the highest probability of success and the most profitable. A real estate developer must also be able to assess their surroundings through appropriate risk management practice. Applying the concept of this theory on the two categories of risks (predictable and unpredictable), Wood (2015), the research was able to explain the correlation between management practices and market risk management. This link is unpredictable and may be affected by unseen factors (unpredictable risk) and operational risk management practices which is often determined by factors such as management skills (Foreseeable risks) on the performance of real estate construction projects.

2.2 Empirical Review

2.2.1 Real Estate Construction Projects Performance on Technical Risk Management

Bouchellal (2016) looked at 277 French construction firms between 2006 and 2016 to determine the correlation between technical risk and real estate project success. The study used a Correlational research approach and established a negative relationship amongst home prices and site location, suggesting that bad site location and housing design will lead to a fall in real estate prices, negatively impacting the performance of real estate projects. The study found that poor management has a detrimental impact on property investments and suggested that businesses in the construction and real estate industries pay close attention to their managers.. Gordon (2011) conducted a study about the influence of technical management of risks in real estate in Ghana. The research method was descriptive, and the population of interest comprised 12 Accra-based construction firms. Companies' project managers, supervisors, and general managers completed the surveys. Descriptive analysis was used to the gathered data. The study findings showed that poor site investigations, ineffective management, and a lack of raw materials all negatively impacted the real estate industry. Because of its effect on ROI, technical risk impacts the real estate industry. This study aimed to inform policymakers and prospective real estate investors in Kenya about the dangers posed by technical issues that could compromise their investments.

Dargis and Bardauskiene (2015) sought to determine how technical risk management affected the success of North American real estate construction projects. Qualitative data was gathered through in-depth interviews with key development players and municipal budget officers. The study employed a descriptive research design.The study findings showed that mistakes made when creating a real estate entrepreneurial enterprise tend to snowball into insurmountable problems. As a result, the earliest phases of feasibility, appraisal, and planning are both the most crucial and susceptible to failure for the overall success of the entrepreneurial investment. The expense of developing new property is one of the risks that is often disregarded. Since the study included many North American countries, we cannot generalize their findings and recommendations. Thus,

technically examining the role of risk management in the success of Kenyan and Nakuru County-specific real estate development projects is essential.

The study by Koirala (2012) sought to examine the impact of technical risk management on Information and Communication Technology (ICT) initiatives in Nairobi County, Kenya. Employing a case study research design, the study used questionnaires and interviews to evaluate the effectiveness of risk management practices in ensuring the timely and profitable completion of building projects. Descriptive and content analysis methods were applied to analyze the data. The findings highlighted that multiple factors contribute to technical risk, including potentially insufficient management by construction teams and a lack of thorough understanding of project documentation. This inadequacy might explain some challenges encountered in real estate ventures. Further, the study observed that inexperienced consultants and contractors, who often imprint their personal preferences in designs and constructions, might not always meet client expectations.. In Kenya's real estate industry, Mbugua (2020) examined the impact of technical risks on project performance between 2015 and 2019. The study, which employed a causal research methodology, and discovered erratic relationships between real estate investment, client management, and design. Consumers positively correlate the introduction of new house models with a rise in housing demand. Previous research revealed a bidirectional connection between architectural plans and economic growth. Further investigation in a different study in Kenya was necessary to get credible data on the impact of technical risk on real estate investment in the country.

2.2.2 Operational Risk Management and Performance of Real Estate Construction Project

Samad (2013) study on influence of operational risks on the execution of real estate construction projects in India between 2000 and 2012 using data from secondary sources found that decreased customer satisfaction is associated with decreased profitability and cash flow. The financial health of the involved firms was the focus of the analysis. Current study examined performance indicators like return on investment, cost, quality, and customer satisfaction. Between 2010 and 2013, Nissen (2014) researched construction projects performance and the completion of infrastructure projects in Canada. In the study, co-integration and causality tests were applied to secondary data to identify various factors contributing to the delays in completing infrastructure projects. These factors included reduced funding from sponsors, communication breakdowns, delayed fund disbursement, inadequate site management by contractors, and prolonged legislative processes. Additionally, a pipeline project linking Florida State and the Bahamas in the United States experienced delays attributed to design alterations, as reported by SNL Financial (2010). This research sheds light on the complexities of infrastructure project management and the challenges that can impact timely completion.

Meseko (2014) studied the connection between financial performance and operational risk management in Tanzania's real estate industry. With 36 certified real estate businesses as its target population, the study used a descriptive research methodology. Between 2009 and 2013, financial records of real estate companies provided secondary data. The results of the study showed that there were the financial performance variations in the independent variables' correlations with real estate companies. The analysis's findings demonstrated a negative correlation between real estate

firms' financial performance and credit risk and bankruptcy risk, but a positive correlation between working viability and real estate corporations' financial performance. The current study's goal is to collect data regarding the circumstances in Kenya because it was carried out in Tanzania. Allessie (2017) examined the connection between operational risk management practices and real estate development in Uganda. The study's target group risk management employees. The study showed that operational risk management, the administrative environment, and administrative performance were significantly and favorably correlated. Additionally, regression analysis revealed that operational risk management and administrative structure were substantial determinants of organizational success. This analysis had to include additional operational risks because not all operational risk mitigation strategies were used in the previous study.

2.2.3 Market Risk Performance and Management of Construction Projects

Aarthipriya (2019) analyzed the influence of market risk on real estate projects in Pakistan from 2007 to 2017 and found that identifying and assessing market risks affects project outcomes such as completion under budget, on time. Research in a third-world country like Kenya was needed to compare the results. According to a study by Singh and Hong (2020) in Brazil on the effects of market risks and real estate project performance from 2011 to 2017. This study used regression analysis of data obtained from questionnaires. In addition, the research found that Brazilian real estate firms' approaches to risk management were not formal or systematic but rather firefighting-based, emphasizing risk avoidance. Previous research conducted in Brazil provides valuable insights, but it's crucial to gain an understanding of the specific context in Kenya. Aimable, Shukla, and Oduor (2015) conducted a study on the impact of risk management programs on the successful completion of construction projects in Rwanda. Their research employed a descriptive research design and involved a sample of 300 project team members from four distinct counties. This study findings contribute to the broader understanding of risk management practices in the construction industry.. For the sample of this study, 142 participants in total were selected at random. The data for the study was gathered through a combination of structured questionnaires, reviews of pertinent literature, and in-depth interviews. Qualitative methods were then used for analysis. The study findings established that preventive method had an impact on construction companies' performance, according to the study. Nonetheless, the study on building projects was carried out in Rwanda, a country with a different political and historical context than Kenya.

Omondi (2016) conducted a study examining the influence of market risk management on road construction project outcomes in Kenyan cities. Utilizing international data from 2005 to 2015, the study applied regression analyses to assess the impact. The findings indicated that market management risks significantly affect the results of construction projects in Kenya's real estate industry. However, these risks were found to have a negligible effect on the country's GDP growth. Additionally, the study explored how market feasibility influences real estate investment in Kenya, revealing mixed outcomes. While the prior research utilized real estate data collected at a more modest real estate and infrastructure growth, the current research will use information collected during the current real estate and infrastructure bubble in the country. Primary data sources will be used to get the necessary information for this project.

2.2.4 Financial Risk Management and Performance of Real Estate Construction Project

Odeyinka Aladapo (2013) investigated Nigerian construction projects' pre- and post-contract phases to determine the relative likelihood and impact of financial risk variables. This research ranked the relative indices calculated from the survey responses. The research showed that financial worries significantly affect property performance. Determining how such hazards affect the growth of real estate in Nakuru city, and to suggest specific policy solutions for the highlighted problems was essential because the study above was conducted across a large geographical area, and its recommendations cannot be generalized. By analyzing the effects of inflation on financial risk management strategies and property growth in Brazil from 2001 to 2011, Bittencourt (2011) shows that inflation undermines economic expansion and exacerbates income disparities in the country. Using a generational model with overlapping generations, the researchers found that the uncertainty around future inflation reduces returns and contributes to high house prices. The study's inability to predict outcomes is due to the inclusion of a panel time-series analysis. Since Kenya is the focus of this research, we will need to employ descriptive and correlational methods.

Debelle (2014) analyzed how loan rates influenced property growth in Italy. The study adopted a case study design; the participants were construction firms, their clients, and their consultants. It was determined that 104 respondents were adequate to represent the sample size. The study findings showed that a decline in demand for real estate assets occurs when interest rates rise because investors' purchasing power decreases. According to studies done in emerging markets, interest rates are the most critical factor in determining whether or not a real estate investment will provide a return. In order to objectively examine how financial risk has affected real estate development rates in Kenya, especially in Nakuru city, the current study is necessary because the findings cannot be extrapolated from a study conducted in a developed country to a developing country like Kenya. Dabara (2014) looked into how changes in currency rates affected the profitability of Nigerian commercial real estate investments from 2005 to 2010. The study used a simple random selection technique to collect data from 169 participants. The study employed a combination of structured questionnaires, examinations of relevant literature, and in-depth interviews According to the numbers, changes in a country's currency value have little impact on real estate. The study findings suggest that real estate can serve as a safeguard against volatile currency exchange rates. However, it's important to note that this study examined a limited sample of Nigerian enterprises, and its conclusions may not be applicable on a national scale. In a separate study conducted between 2000 and 2010, Omboi (2011) investigated the influence of debt, delayed payments, and project expenses on the outcomes of real estate construction projects in Kenya.. The results showed that increased financial risks had a detrimental effect on real estate prices. The prior research focused on debt repayment and property development, which needs to capture their true long-term causality. This research shows a holistic perspective on financial risks associated with real estate development in Nakuru, Kenya, by including debt repayment as one of these variables.

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2.3 Conceptual Framework

Figure 1 presents the conceptual framework

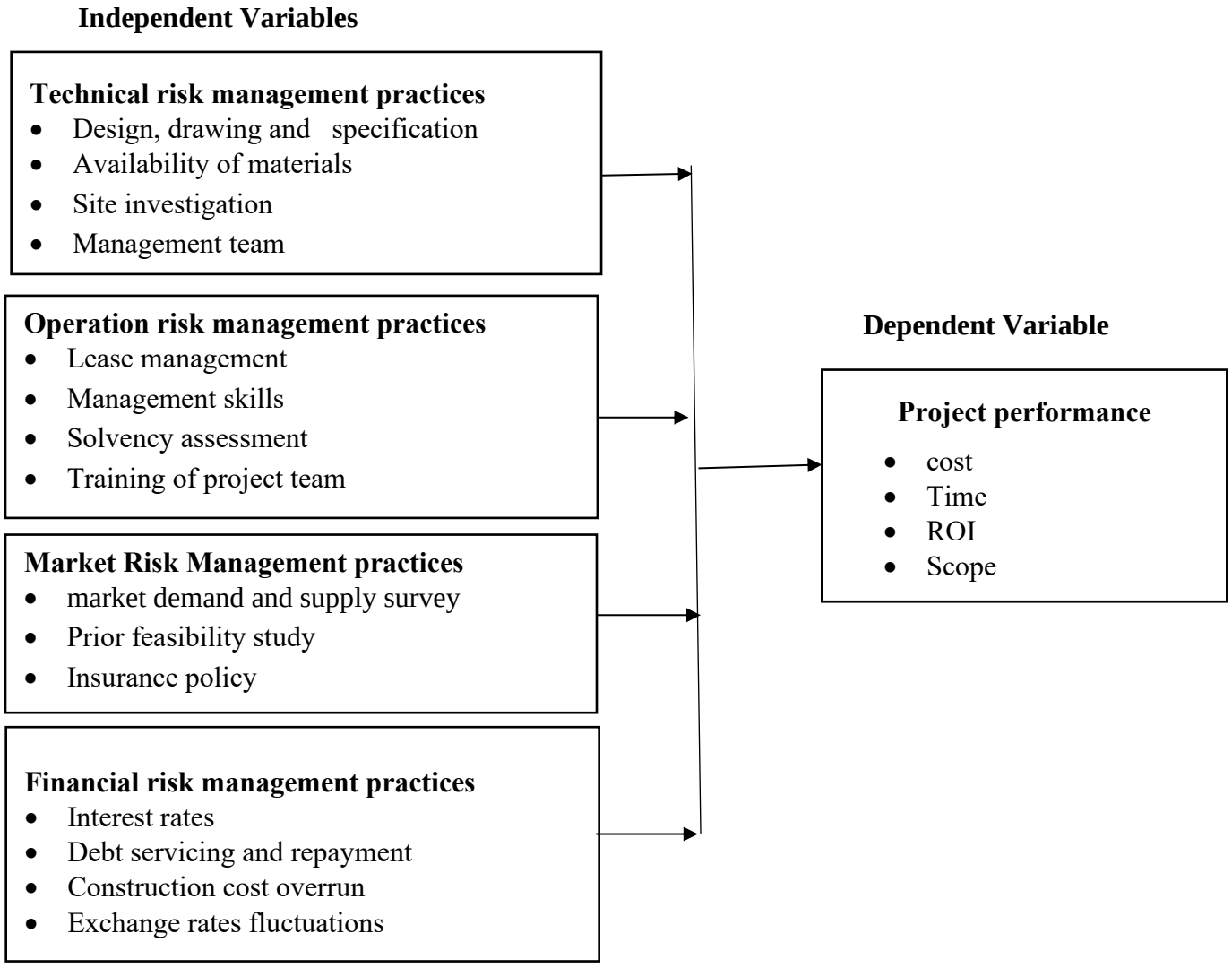

Figure 1 Conceptual framework

Source (Researcher, 2023)

3.0 Research Methodology

Mixed-method research design was used for this research. Mugenda and Mugenda (2018) state that the mixed-method research design is the best approach for explaining the causal relationship between the independent and dependent variables in research. This study's target population comprised 45 ongoing and 25 completed real estate projects in Nakuru County. Target respondents

for the study included 300 personnel involved in real estate construction projects. The different categories included project managers, project supervisors, project engineers, and staffs. In this study, stratified sampling technique was used. Creswell (2012) argues that an adequate representation of the population of interest should be the first consideration when choosing a sample size. The dependent and independent variables were conceptualized into measurable qualities and synthesized into a conceptual framework to confirm the content and construct validity of the structured questionnaires. Managers and supervisors were given the conceptual framework and questionnaires. Following the review process, invalid questions were eliminated from the final surveys.During the pilot test, the reliability test was considered, and the research used Cronbach's alpha (α) to assess the data analysis (Yin, 2017).The researcher ensured that the respondents were free to answer the questions by informing them the objectives of this scholarly work. With SPSS version 20, the gathered questionnaires were coded and examined. Tables, graphs, and charts presented the summarized results. To find out how well the explanatory variables predicted the result, the ANOVA technique was applied. The correlation between procedures in performance and risk management practices of real estate construction projects in Nakuru County was examined. Using the Variance Inflation Factor (VIF) test, multi-collinearity was examined.

4.0 Findings and Discussions

4.1 Descriptive Statistics

The descriptive findings about how technical risk management techniques affect real estate construction projects in Kenya's Nakuru County are summarized as follows;

Table 1: Technical Risk Management Practices On the Performance of Real Estate Construction Projects

Technical risk management practices		S.A	A	U	D	S.D	Total	Mean	S.D
The company conducts a thorough site inspection.	F	49	67	4	6	9	137	3.84	1.84
	%	35.8	48.9	2.9	4.4	6.6	100		
The organization makes certain that there is always an appropriate quantity of building materials available.	F	34	66	10	10	7	137	3.79	1.74
	%	24.8	48.1	7.3	7.3	5.1	100		
The firm obtains duplicates of all land purchase, possession, and due diligence paperwork.	F	65	55	4	10	3	137	3.96	1.83
	%	47.4	40.1	2.9	7.3	2.1	100		
The real estate firm promptly receives the required building approvals.	F	34	63	6	21	13	137	4.05	1.98
	%	24.8	46	4.4	15.3	9.5	100		
Every phase includes a deadline within which the business must accept customer revisions to the plan and specifications.	F	22	71	8	25	11	137	3.78	1.75
	%	16.1	51.8	5.8	18.2	8	100		
The firm recruits a capable management team.	F	38	73	11	8	7	137	3.89	1.65
	%	27.7	53.3	8	5.8	5.1	100		
The firm keeps track of its maintenance, repair, and renovation spending.	F	23	67	5	29	11	137	2.52	1.186
	%	16.7	48.9	3.6	21.2	8	100		

Source (Research study, 2023)

When asked if the company performed a comprehensive site inspection, 116 (84.7%) of the respondents said they did, while only 21 (15.3%) disagreed, according to the study's findings. This was confirmed by the results (Mean=3.84 and SD=1.84). When asked if the organization makes sure that there is always an adequate supply of building supplies, the majority of respondents gave their answers. Out of 100 respondents, 73% agreed and 27% disagreed, according to the study findings (Mean=3.79; SD=1.74). Additionally, respondents were asked if the business obtains duplicates of all crucial documents related to ownership, due diligence, and land purchases. The study results, corroborated by the (Mean=3.96; SD=1.83), showed that 120 people (87.6%) agreed while 17 people (12.4%) disagreed. Furthermore, the study's findings demonstrated that, according to the mean of 4.05 and SD of 1.98), 40 (2.33%) of the feedback disagreed with the assertion that the real estate firm rapidly obtains the necessary building approvals (70.8%) of the respondents agreed. 93 respondents, or 67.9%, agreed, to limited deadlines in design specification by clients, while 44 respondents, or 32.1%, disagreed, with support from (Mean = 3.78 and S. D = 1.75). Additionally, the study results showed that 111 respondents (81%) agreed that the company hires competent management personnel, whereas 26 respondents (19%) disagreed. Collectively, the study's results demonstrate that 34 respondents (79.07%) agreed while 9 disagreed with the practice of tracking requests for spending above the budget. Additionally, 40 respondents (93.02%) agreed, with only 3 dissenting, that budgets are monitored and adjusted throughout the year.The mean values of 4.03, 3.96, and 3.83, with SDs of 0.348, 0.341, and 1.072, respectively, are consistent with one another. The findings of the research show that technical risk management techniques have a major impact on the real estate construction projects performance. Table 2 provides a summarized descriptive analysis on operational risks management practices and real estate construction projects.

Table 2: Operational Risk Management Practices and Performance of Real Estate Construction Projects

Statement		S.A	A	U	D	S.D	Total	Mean	S.D
The firm frequently evaluates the solvency of its current customers.	F	13	71	15	28	10	137	3.64	1.63
	%	9.5	51.8	10.9	20.4	7.3	100		
The firm continuously monitors the lease maturity assessment.	F	23	82	7	21	4	137	3.84	1.79
	%	16.8	59.9	5.1	15.3	2.9	100		
To prevent rising interest rates, the company service its debt.	F	34	75	6	17	5	137	3.96	1.83
	%	24.8	54.7	4.4	12.4	3.6	100		
The firm uses a good method for keeping records.	F	35	64	11	12	15	137	3.78	1.75
	%	25.5	46.7	8	8.8	10.9	100		
The organization offers real estate management training to its workers	F	15	71	9	28	14	137	3.89	1.65
	%	10.9	51.8	6.6	20.4	10.2	100		

Source (Research study, 2023)

61.3% of the respondents agreed that their company regularly assesses the solvency of its existing clients while 39 (61.3%) disagreed, according to the study's findings. The data (Mean = 3.64 and SD = 1.63) corroborated this. Additionally, respondents were inquired whether they believed the organization should consistently monitor the lease maturity evaluation. The study's findings

showed that, out of 105 respondents, 76.6% agreed and 32 disapproved (Mean=3.84; SD=1.79). In response to a follow-up question regarding whether the company should service its debt in order to prevent rising interest rates, 109 respondents (or 79.6%) agreed, while 28 respondents (20.4%) disagreed, as indicated by the mean of (Mean=3.96; SD=1.83). Furthermore, according to the study's mean of (Mean=3.78; SD=1.75), 103 respondents, or 75.18% of the sample, agreed that the company employs an effective system for keeping records, while 34 respondents, or 24.8%, disagreed. Ultimately, the study's conclusions demonstrated that 86 (62.8%) respondents agreed and 51 (37.2%) disagreed that the organization provides real estate management training to its constituents. Based on (Mean=3.89; SD=1.65), all are supported. These findings reveal a significant correlation between operational risk management practices and the performance of real estate construction projects. These results align with the research conducted by Murphy (2019), who identified a substantial relationship between operational risk management techniques and the performance of real estate projects. The study investigated the impact of market risk management strategies on real estate development initiatives in Nakuru County, Kenya. The results of this study are presented in Table 3.

Table 3: Descriptive Statistics Results on Real Estate Construction Projects' Market Risk Management Practices and Performance

Statement		S.A	A	U	D	S.D	Total	Mean	S.D
The real estate firm does a thorough feasibility analysis before the project is started.	F	32	67	12	18	8	137	3.80	1.47
	%	23.4	48.9	8.8	13.1	5.8	100		
Our company is covered by a market risk insurance policy.	F	33	66	4	23	11	137	4.03	1.93
	%	24.1	48.2	2.9	16.8	8	100		
Our firm regularly engages in market research	F	21	59	11	32	14	137	3.79	1.44
	%	15.3	43.1	8	23.4	10.2	100		
Our Agent has a staff for marketing and advertising.	F	23	71	12	18	13	137	3.87	1.51
	%	16.8	51.8	8.8	13.1	9.5	100		
At the conclusion of construction, our organization conducts an extensive market demand and supply survey.	F	28	69	6	22	12	137	4.04	1.94
	%	20.4	50.3	4.4	16.1	8.8	100		
Reviewing marketing data from consultants and developers of real estate	F	26	57	12	26	16	137	3.74	1.67
	%	15.3	41.6	8.8	19	15.3	100		

Source (Research study, 2023)

The respondents were asked if they thought the real estate company conducted a thorough feasibility research before beginning the project. Study results revealed that 99 respondents (72%) agreed, while 12 respondents (8.8%) were unsure and 26 respondents (19%) disagreed. The data (Mean = 3.80 and SD = 1.47) supported this. Additionally, the researcher asked the respondents to provide opinions on their organization's market risk insurance policy. As a result, the study, 99 people, or 72.3%, agreed, and 38 people, or 27.7%, disagreed (Mean=4.03 and SD=1.93). When respondents were asked if their company conducted market research on a regular basis, the study's

results indicated that 80 (58.37%) of them agreed and 57 (41.6%) disagreed, with the mean (Mean=3.79; SD=1.44) supporting the latter conclusion. Furthermore, the study's findings demonstrated that, according to the mean of (Mean=3.87; SD=1.51), 94 respondents, or 68.6%, agreed that agents had staff members for marketing and advertising, while 31.4% disagreed. The results also showed that 40 (29.2%) respondents disagreed with the statement that the firm does a thorough market demand and supply survey towards the end of construction, while 97 (70.8%) agreed. Lastly, the study's results demonstrated that, as indicated by (Mean=3.74; SD=1.64), 83 (60.6%) of the respondents agreed and 54 (39.40%) disagreed that their companies review the marketing data from consultants and real estate developers. The study examined how market risk management strategies affected real estate development initiatives in the county of Nakuru, Kenya. The table that follows shows the outcomes. The effect of financial risk management techniques on real estate development projects' performance in Nakuru, Kenya. The results were displayed in the table 4 that follows.

Table 4: Financial Risk Management Practices and The Performance of Real Estate Construction Projects.

Statement		S.A	A	U	D	S.D	Total	Mean	S.D
The firm verifies and demonstrates the client's creditworthiness.	F	32	69	13	20	3	137	3.64	1.63
	%	23.4	50.4	9.5	14.6	2.2	100		
The company consistently follows up on payments.	F	34	65	5	26	7	137	3.84	1.79
	%	24.8	47	3.6	19	5.1	100		
We borrow all the money we need at a set rate.	F	8	22	16	76	15	137	3.96	1.83
	%	5.8	16.1	11.7	55.5	10.9	100		
The company maintains and creates financial reports	F	37	75	2	27	6	137	3.78	1.75
	%	27	54.7	1.5	19.7	4.4	100		
Fluctuation in exchange rates is considered as a major financial risk	F	23	67	14	20	13	137	3.89	1.65
	%	16.8	48.9	10.2	14.6	9.5	100		
Rising interest rates affects planning for the projects	F	34	79	8	11	5	137	3.71	1.52
	%	24.8	57.7	5.3	8	3.6	100		

Source (Research study, 2023)

When asked if the firm validates and demonstrates the client's creditworthiness, 101 respondents (73.7%) agreed, while 36 respondents (26.3%) disagreed, according to the study's findings. The data (Mean = 3.64 and SD = 1.63) corroborated this. Furthermore, participants were requested to provide their thoughts on how frequently the business follows up on payments. According to the study's results, 38 respondents, or 27.7%, disagreed, while 99 respondents, or 72.3%, agreed (Mean=3.84; SD=1.79). When respondents were asked again if they borrow all the money they need at a fixed rate, the study's findings showed that 30 respondents (or 21.9%) agreed and 107 respondents (or 78.1%) disagreed, with a mean of (Mean=3.96; SD=1.83). Moreover, 112 (81.8%) of those who responded agreed that the enterprise maintains and generates financial reports, while 25 (18.2%) disagreed, based on the study's mean (Mean = 3.78; SD = 1.75). Furthermore, the findings demonstrated that although 47 respondents, or 34.3%, disagreed (Mean = 3.89 S.D = 1.65), 90 respondents, or 65.7%, agreed that exchange rate fluctuations pose a significant financial risk. In conclusion, the study's findings showed that, as shown by (Mean = 3.71; SD = 1.52), 113

respondents, or 82.5%, agreed and 24 respondents, or 17.5%, disagreed that project planning impacted by rising interest rates. The study's findings reveal a strong correlation between financial risk management strategies and the performance of real estate construction projects. This aligns with the research conducted by Njaramba, Gachanja, and Mugendi (2018), which also identified a significant relationship between the performance of real estate construction projects and the application of financial risk management techniques. The confidence interval, mean, and standard deviation values for each variable, and standard error of the mean were all computed in order to better understand the distribution of the variables in the sample under investigation. Therefore, while dispersion metrics like variance, range, and standard deviation were computed to understand the spread or variability of the variable distribution, central tendency metrics provided a summary of the complete set of data. The observations are summarized in Table 5.

Table 5: Real Estate Construction Projects Performance Descriptive Statistics

Variable	S.A	A	U	D	S. D	Mean	S.E (mean)	SD	Variance	N
The overall costs incurred during the construction of real estate projects was minimized						0.326	0.064	0.228	0.052	137
The construction projects were timely completed.						0.868	0.039	0.201	0.440	137
The real estate constructed projects are of required quality and standard						0.553	0.043	0.246	0.261	137
Risk management practices reduces disputes						0.721	0.025	0.503	0.353	137
Practices in risk management boosted the satisfaction of stakeholders with the finished building						0.752	0.014	0.171	0.499	137
There is high return and yields from the real estate constructed projects						0.822	0.046	0.553	0.506	137

Source (Research study, 2023)

Some respondents noted that employing financial risk management strategies led to a reduction in the overall costs incurred during the construction of real estate projects. . This was demonstrated respectively by (mean = 0.326, SD = 0.228) and wide variance from the mean evidenced by variance value of 0.052 Despite that, a bigger percentage of the respondents observed that the construction projects were completed on time (mean = 0.868, SD = 0.201). The real estate constructed projects were of required quality and standard [(mean = 0.553, SD = 0.246)], Risk management practices reduced disputes [(mean = 0.721, SD = 0.503)]. Similarly, most of the respondents agreed that Practices in risk management boosted the satisfaction of stakeholders in the finished building. This was demonstrated by [(mean = 0.752, SD = 0.171)] and small variance from the mean evidenced by variance value of 0.499. Lastly the study established that there is high return and yields from the real estate constructed projects evidenced by (mean = 0.822, SD = 0.553 and Variance = 0.5

4.2 Inferential Statistics

The study utilized inferential analysis to ascertain the correlation between the variables. Pearson's product moment was utilized for correlation analysis and two-way ANOVA was used for regression analysis in the study. Following analysis, the following conclusions were reached. The study employed Pearson's product correlation analysis to examine the connection between risk management procedures and the outcomes of real estate development projects in Nakuru County, Kenya. Correlation analyses were conducted on all the independent variables, which included financial, market, operational, and technical risk management practices, to ascertain their association with the dependent variable, which is the performance of real estate construction projects. Table 6 displays the results.

Table 6: Correlation Analysis results

		Performance of real estate construction projects	technical risk management Practices	Operational risk management practices	Market risk management practices	Financial risk management practices
Performance of real estate construction projects	Pearson Correlation	1.000				
	Sig.(2-tailed)	0.000				
	N	137				
technical risk management Practices	Pearson	0.507	1.000			
	Sig	0.001				
	N	137				
Operational risk management practices	Pearson	0.637	0.531	1.000		
	Sig	0.003	0.443			
	N	137				
Market risk management practices	Pearson	0.687(*)	0.345	0.424	1.000	
	Sig	0.000	0.756	0.696		
	N	137				
Financial risk management practices	Pearson	.507(**)	.637(**)	.687(**)	.434(**)	1.000
	Sig.	0.000	0.000	0.000	0.000	0
	N	137				

Source (Research study, 2023)

The study findings demonstrated that real estate construction projects performance in Nakuru County was positively correlated with technical risk management practices in a statistically significant way ($r=0.507$, $p<0.01$). A statistically significant positive correlation ($r=0.637$; $p<0.01$) was found when the performance of real estate construction projects was analyzed in relation to

operational risk management practices. The study findings demonstrated a statistically significant positive correlation between real estate construction project performance and market risk management strategies ($r=0.687$; $p<0.01$). The results of the study showed that financial risk management strategies and real estate construction performance had a statistically significant positive correlation ($r=0.507$, $p<0.05$). These results are in line with those of (Meseko, 2014), who found that risk management procedures and real estate construction project performance in Nairobi County were positively correlated. Additionally, the outcomes align with the research conducted by Nissen (2014), who examined the connection between technical risk management and project performance in real estate development projects and found that inadequate risk management practices contributed significantly to project performance failure. The study assessed the data to determine whether or not independent variables were presumed to be related. The results of the Multi-collinearity test (VIF) showed that the four constructs' tolerances varied from 0.252 to 0.502. The range of the VIF scores was 1.73 to 3.97.

Table 7: Multi-collinearity Results

Model	**Collinearity Statistics**	
	Tolerance	VIF
(Constant)		
Performance of real estate construction projects	.294	3.401
Technical	.278	3.595
Operational	.252	3.969
Market	.502	1.990
Financial	.554	4.134

Source :(Research Study, 2023)

With respect to the other independent variables, financial risk management practices exhibited the strongest correlation (VIF = 4.134, tolerance = 0.554). Operational risk management techniques showed the second-best correlation (Tolerance = 0.252, VIF = 3.969) with other independent variables. The least amount of correlation was found between market risk management and the other independent factors, tolerance = 0.502 and VIF = 1.990. The tolerance statistics of this model are all significantly higher than 0.2, and all of its VIF values are below 10, indicating the absence of collinearity. Thus, the variance was substantially independent from each independent component and all factors in the prediction model were included. The multi-collinearity assumption is thus met. The findings were within the usual range, indicating that the explanatory factors were free from multicollinearity. Regressing the data produced the results as shown in Table 8:

Table 8: Model Summary

Model summary [a]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921[a]	0.648	0.652	2.312

a. Predictors: (Constant), Technical, Operational, Market and Financial risk management practices

b. Dependent Variable: Real estate construction projects performance

Table 9: ANOVA

R-square, which was obtained from the model summary in the regression analysis findings in table 9 above, indicated which model fit the data the best. The percentage of variance in the dependent variable is represented by the R square (the performance of construction projects in real estate) that can be anticipated based on the independent variables (risk management techniques pertaining to technical, operational, market, and financial aspects). The study dependent variable, the real estate construction projects performance was determined to be affected by changes in the independent variables by as much as 64.8%, according to the findings.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	228.550	4	57.137	7.864	.000[a]
	Residual	937.279	129	7.266		
	Total	1165.828	133			

Table 10: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.391	0.124		3.153	0.001
Technical risk management	0.451	0.164	0.304	2.75	0.000
Operational risk management practices	0.313	0.156	0.494	2.006	0.000
Market risk management	0.531	0.241	0.457	2.203	0.000
Financial risk management	0.273	0.115	0.231	2.348	0.002

Regression analysis was used to find each variable's beta coefficient values. The coefficient results in table 10 demonstrated how changes of one unit in the independent variable result in changes of the dependent variable. The analysis reveals from Table 10 coefficient regression results Real estate construction projects performance in Nakuru County was positively and significantly impacted by technical risk management approaches, as shown by (β=0.391; p = 0.001<0.05). The implementation of operational risk management practices significantly enhanced the real estate

construction projects' performance in Nakuru County, as pointed out by the β value of 0.313 and the significance p value of 0.00<0.05. Real estate construction projects performance in Nakuru County was established to be positively and significantly impacted by market risk management strategies, as demonstrated by the following: β = 0.531; P <0.05. In the end, it was found that financial risk management techniques significantly improved the performance of Nakuru County's real estate construction projects (β=0.273; p value 0.00<0.05). The following is an outline of the regression model for academic project performance.

$Y = 0.391 + 0.451X_1 + 0.313 X_2 + 0.531 X_3 + 0.273 X_4$

The constant value of 0.391 indicates that real estate construction project performance will increase by 0.391 units even if all independent variables in the study are held constant. With all other things being equal the coefficient value of 0.451 units for technical risk management practices indicates that a unit upsurge in these practices results in a 0.451 unit improvement in the real estate construction projects' performance in Nakuru County. This can be attributed to the attraction of real estate buyers towards new home designs, strategic locations, and excellent client management, all of which constitute essential elements of technical risk management practices.. These results are consistent with those of Dargis and Bardauskiene (2015), who found that inadequate site studies, incompetent management, and a shortage of raw materials had a detrimental influence on the real estate sector. In a similar vein, (Muteti, 2017) found that consumers positively associate new home models with an increase in housing demand. With all other factors held constant, an increase of one unit in operational risk management practices will improve the performance of real estate construction projects in Nakuru County by 0.313 units, according to the operational risk management practices' coefficient value of 0.313 units. As such, in order for real estate project managers to generate the expected revenue and fulfill all of their responsibilities during the construction phase, they must properly manage their return on investment, cost, and quality (Fletchers & Pendleton, 2014). Likewise, effective handling of annual running costs such as payroll, utilities, contract services, management and administrative fees, and insurance coverage improves real estate and construction project performance. The study results align with Njogu, Ahmad, and Gwaya (2015) findings, indicating a positive correlation between operational viability and financial performance in real estate corporations. Conversely, credit risk and bankruptcy risk displayed negative correlations with the financial performance of real estate construction firms, consistent with their research. Similarly, Allesie (2017) study emphasized the significance of administrative structure and operational risk management procedures as crucial determinants of success in real estate construction projects..

The market risk management approaches exhibited the highest coefficient value of 0.531. This implies that, under the assumption that all other dynamics remain constant, a one-unit escalation in these approaches will translate into a 0.531-unit boost in real estate construction projects performance of in Nakuru County. The results suggest that conducting thorough research on the supply and demand conditions for projects by construction companies is essential for the success of real estate building projects in Nakuru County. It is crucial to identify the specific market sector, considering aspects like usage, geographical location, and technical submarkets, and to understand the needs of potential clients. This approach significantly influences the market's absorption rate of the real estate developer's investments, as noted by Wiegelmann (2012). The relevance of these

findings is underscored by the trend among Nakuru County real estate developers to design and construct homes that align with customer preferences, ensuring that developments offer the features, amenities, or conveniences desired by buyers. This alignment can lead to properties being rented more frequently or experiencing higher tenant turnover, thereby enhancing cash flow. However, neglecting these aspects may result in reduced effectiveness of the investments.

5.0 Summary

The study investigated the impact of risk management on real estate construction projects in Nakuru County, Kenya, focusing on technical, operational, market, and financial aspects. It employed a mixed method approach rooted in strategic planning theory. Findings indicated that technical risk management is positively linked to project performance with a regression coefficient of 0.451. Similarly, operational risk management practices had a positive correlation, with a coefficient of 0.313. Market risk management also showed a positive effect, with a coefficient of 0.531. Lastly, financial risk management practices were positively associated with project performance, reflected by a coefficient of 0.273.

6.0 Conclusions

The study concludes that in Nakuru County, Kenya, technical risk management has a significant, moderately positive impact on real estate construction project performance. It further concludes that operational risk management techniques have a moderately positive effect on project performance. Additionally, market risk management strategies are significantly and positively influential on project performance. Lastly, the study concludes that effective financial risk management practices exert a substantial positive influence on the overall performance of real estate construction projects in the region. This underscores the critical importance of implementing sound financial risk management strategies to ensure successful project outcomes, including cost-effectiveness, timely completion, and enhanced project efficiency.

7.0 Recommendations

The study recommends that real estate developers in Nakuru County, Kenya, engage in comprehensive technical risk management, including detailed environmental analysis and site research, to ensure project success. It advises that the government streamline the approval processes, possibly through a single contact point, to reduce bureaucratic hurdles. The study also calls for strict financial risk management practices, suggesting annual compliance certifications for developers. The study recommends the implementation of educational initiatives focused on operational risk management within the real estate sector. This emphasizes the need for real estate professionals to be well-versed in identifying and mitigating operational risks to ensure project success. Additionally, the study underscores the critical role of reliable market data in guiding real estate investments. Access to accurate market information is essential for developers to make informed decisions, align their projects with market demand, and strategically position their investments for optimal returns.

REFERENCES

Aarthipriya, V., Chitra, G., &Poomozhi, J. (2020). Risk and its impacts on time and cost in construction projects. *Journal of Project Management*, 5(4), 245-254. https://doi.org/10.5267/j.jpm.2020.6.002

Allessie.J.S., (2017). Lending Rates and its impact on Economic Growth in East Africa. *Journal of Economics and Sustainable Development* Vol5 (19) pp 89-95.

Dawson, C. (2019). Introduction to research methods: A practical guide for anyone undertaking a research project. London: *Robinson. Development in Developing Countries:* The Case of the Kingdom of Bahrain.

Debelle.K.D., (2014) Inflation and Real Estate investment in Italy multinational firms in Italy countries : *concepts, history, and data* (No. w8665).

Ding, J. (2014). An Empirical Analysis of Factors Affecting Chinese Real Estate Prices, School of Economic and Management, *Central China Normal University*.

Ding, J. (2014). *An Empirical Analysis of Factors Affecting Chinese Real Estate Prices*, School of Economic and Management, Central China Normal University.

Eroglu, O., &Picak, M. (2011). Entrepreneurship: National culture and Turkey. *International Journal of Business and Social Science, 2*(16), 146–151.

Fletchers, P., &Peridleton, A. (2014). Identifying and managing project finance risks: Overview. *(UK) Practical Law*. Retrieved December 10, 2017, from UK practical law.com/5-564-5045.

Fraenkael, J., &Wallen, N. (2015). *How to design and evaluate research in education* (9th Ed.). New York: McGraw-Hill. framework in dissertation: Research creating the blueprint for your "House".

Fredrick, H., O'Connor, A., &Kuratko, D. F. (2016). Entrepreneurship: Theory, process and practice (4th Ed.). Cengage Learning Australia Pty Ltd. Australia. Ennouri, W. (2013). Risk management: New literature review. *Polish Journal ofManagement Studies, 8*, 288-297.

Ghahramanzadeh, M. (2013). *Managing risk of construction project: A case study of Iran*. Unpublished PhD Thesis. *University of East London. Retrieved March 27,2017, roar.uel.ac.uk/3502/1/2013_PhD*_Ghahramanzadeh.pdf

Grant, C., &Osanloo, A. (2014). Understanding, selecting and integrating a theoretical framework in dissertation: Research creating the blueprint for your "House". *Administrative Issue: Connecting Education, Practice and Research, 4*(2), 12 – 26. https://doi.org/10.5929/2014.4.2.9

Kenya Property Developers and Hass Consultant Report.(2019). *Annual Report.*

KNBS.(2020). Economic Survey 2020. *Kenya National Bureau of Statistics*.The economy due to COVID-19 pandemic in 2020

Knight Frank Global Cities Report (2018). *Enabling Environment for Stimulating Investment for Competitive cities*Global House Price Index.

Koech, L. (2013). *The Effect of Real Estate Development on the Growth of Estate Agents in Nakuru Municipality*. MBA Project, Kenyatta University, Kenya.

Meseko A. A. (2014). Opportunities & Risks for Foreign Real Estate Developers in Nigeria. International *Journal of Economics, Commerce and Management, 2* (7), 1-6.

Muteti, J. (2017). *Relationship between financial risk management and financial performance.* [Master's Thesis, University of Nairobi]. http://hdl.handle.net/11295/74748 Nairobi. Government Printers.

Nissen, M. (2014). Organisational design for dynamic fit: A review and projection. Journal of Organisation DESIGN JOD, 3(2), 30-42. https://doi.org/10.7146/jod.8196

Njaramba S. G., Gachanja, P., &Mugendi, C. (2018). *The sources of housing prices growth in Kenya.* International Journal of Economics, 3(1, 2) 7-30.

Njogu, P. M., Ahmad, A., &Gwaya, A. (2015). *Identifying key risk influencing project delivery in Kenya from contractors' perspective.* International Journal of Soft Computing and Engineering, 5(4), 64 – 72.

Nketekete, M., Emuze, F., &Smallwoods, J. (2016). *Risk management in public sector construction projects: Case studies in Lesotho.* Actastructilia, 23(2), 1-24. https://doi.org/10.18820/24150487/as23i2.1

ohwomu, I. J., Hammond, F., Shofoluwe, M., Ejohwomu, O. A., &Akinwumi, I. (2013). A quantitative assessment of risk management: Practices of general contractors in Nigeria. *2nd International Conference on InfrastructureDevelopment in Africa*. Johannesburg, South Africa, 233- 239. project management failures in Kenya. International Journal of Soft Computing

UN report (2012). Sustainable Development in Kenya: Stocktaking in the run up to Rio+20. *https://sustainabledevelopment.un.org/content/documents/985kenya.pdf*

UNCTAD.(2015). *Global Investment Trends Monitor.United Nations. New York and Geneva:* United Nations Conference on Trade and Development Publications.

World Bank (2017).*Global real estate reports*. Retrieved from data.worldbank.org