

Journal of

Entrepreneurship and Project Management

(JEPM)

Project Risk Management Strategies and Project Performance in Health Non-
Governmental Organizations in Nairobi City County, Kenya



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Project Risk Management Strategies and Project Performance in Health Non-Governmental Organizations in Nairobi City County, Kenya

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Accepted: 14th June, 2026, Received in Revised Form: 20th June, 2026, Published: 3rd July, 2026

ABSTRACT

Purpose: This study sought to assess the influence of project risk management strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya. Specifically, the study sought to assess the influence of risk response strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya and to establish the influence of risk control strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya. This study was guided by Resource-Based View (RBV) Theory and Control Theory.

Methodology: The study used descriptive research design. The unit of analysis was ten (10) NGOs in the health sector in Nairobi City County. The total target population for this study therefore comprised of 110 employees at different project managerial levels currently working with the ten health sector NGOs. The study used census method since the target population is small. This research used questionnaires to collect primary data. The pilot study was carried out on 11 respondents. SPSS was used to analyze the data collected from the field. Quantitative data collected was analyzed using descriptive statistics techniques.

Findings: The study found that risk response strategies have a positive and significant effect on project performance in health non-governmental organizations in Nairobi City County, Kenya. The study also found that risk control strategies have a positive and significant effect on project performance in health non-governmental organizations in Nairobi City County, Kenya.

Unique Contribution to Theory, Practice and Policy: Based on the findings, the study recommends that the management of health non-governmental organizations in Kenya should strengthen risk control strategies by establishing continuous monitoring and control mechanisms that track identified risks, assess the effectiveness of implemented responses, and detect emerging risks throughout the project lifecycle. In addition, the study recommends that the management of health non-governmental organizations in Kenya should implement well-defined and timely risk response strategies by developing and regularly updating risk response plans that clearly outline mitigation, avoidance, transfer, or acceptance actions for prioritized risks.

Key Words: *Risk Response Strategies, Risk Control Strategies, Project Performance, Non-Governmental Organizations*

Background of the Study

Health sector NGOs (Non-Governmental Organizations) are vital actors in the global health landscape, particularly in low- and middle-income countries where healthcare systems often face significant resource and access limitations. According to the World Bank, over 50% of people in Sub-Saharan Africa lack access to essential healthcare services. In response, health NGOs help close this gap by providing critical services such as immunizations, maternal care, HIV/AIDS prevention, and emergency relief (Wabomba, 2022). For example, in 2022 alone, Médecins Sans Frontières (Doctors Without Borders) conducted over 10 million outpatient consultations worldwide and treated more than 2.6 million cases of malaria. Health NGOs also play a central role in disease prevention and health education. PATH, a global NGO, has contributed to the distribution of more than 1 billion doses of the MenAfriVac vaccine, which has helped nearly eliminate meningitis A in 26 African countries. These contributions are not only lifesaving but also help reduce the long-term strain on national healthcare budgets by preventing large-scale outbreaks (Aduma & Kimutai, 2023).

Beyond direct service provision, health NGOs are instrumental in responding to public health emergencies and building community resilience. During the COVID-19 pandemic, NGOs played an essential role in vaccine outreach, public health messaging, and delivery of personal protective equipment, especially in vulnerable regions. UNICEF, often working in partnership with smaller NGOs, delivered over 1 billion COVID-19 vaccine doses to low-income countries through the COVAX initiative. In addition, health NGOs help address chronic health burdens: the Global Fund, working with local NGOs, has saved an estimated 59 million lives since 2002 by funding HIV, tuberculosis, and malaria programs. Mental health is another emerging focus—NGOs like BasicNeeds have reached over 700,000 people with community-based mental health support. These projects not only improve immediate health outcomes but also enhance long-term development by increasing productivity, reducing poverty, and promoting equity (Kinyua, Ogollah & Mburu, 2024).

Project Risk Management Strategies are vital in ensuring that potential risks are effectively handled throughout the life cycle of a project. These strategies help in minimizing the negative impacts of risks and ensuring that projects are completed on time, within scope, and on budget (Hashimu, 2022). The risk management process generally includes four main strategies: Risk Identification, Risk Assessment, Risk Response, and Risk Control. Risk Identification Strategies involve the systematic process of recognizing potential risks that could impact a project. This step is crucial because it allows project managers and teams to anticipate problems before they arise (Tayebwa & Ongesa, 2024). Common techniques for identifying risks include brainstorming sessions with stakeholders, reviewing past project documents for similar risks, conducting interviews with experts, and using tools like SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis. Additionally, project teams can use risk checklists, flowcharts,

or cause-and-effect diagrams to help uncover risks early in the planning phase. Identifying risks early helps to establish a solid foundation for addressing them and avoiding surprises later in the project (Aduma & Kimutai, 2022).

Risk Assessment Strategies focus on analyzing the likelihood and potential impact of identified risks. Once risks are identified, it's important to assess how probable each risk is and how significantly it would affect the project if it were to occur (Opiyo & Mutwiri, 2024). Risk assessment often involves qualitative and quantitative techniques. In qualitative risk assessment, risks are categorized based on their likelihood and impact, often using a risk matrix. In quantitative risk assessment, numerical data such as probabilities and financial impact are used to evaluate risks in more detail. This analysis helps prioritize risks, allowing project managers to focus on those with the greatest potential impact on the project (Kinyua, Ogollah & Mburu, 2024).

Risk Response Strategies are the actions taken to mitigate, transfer, avoid, or accept risks based on their assessment. Once the risks are evaluated, project managers can determine the best course of action. Risk mitigation strategies are employed to reduce the likelihood or impact of a risk, such as by adding additional resources or adjusting the project plan (Wabomba, 2022). Risk transfer involves shifting the risk to another party, for instance, through insurance or subcontracting. Risk avoidance may entail changing the project plan to eliminate the risk entirely, while risk acceptance involves acknowledging the risk and preparing to deal with its consequences if it materializes. The choice of response strategy depends on the risk's nature, the project's resources, and the project team's tolerance for risk (Njuguna, 2023).

Risk Control Strategies are put in place to monitor, track, and manage risks throughout the project's execution. These strategies ensure that identified risks are regularly reassessed and that response plans are effectively implemented (Roque & Marly, 2023). This process involves continuous monitoring of risk triggers and the effectiveness of mitigation actions. Control strategies might include regular risk reviews, audits, and updates to the risk management plan. In addition, contingency plans are often developed as part of risk control, enabling quick action if a risk occurs. By maintaining a flexible approach and being prepared for changes, project teams can ensure that they remain responsive to emerging risks, thus keeping the project on track despite challenges (Tamutaran & Khan, 2024).

Health Non-Governmental Organizations (NGOs) play a vital role in supplementing public health services in Nairobi City County, Kenya. As the capital and most populous city in the country, Nairobi faces significant healthcare challenges including overcrowded public hospitals, high disease burden, and health disparities among informal settlements (Aduma & Kimutai, 2022). Health NGOs step in to address gaps in healthcare access, offering services such as disease prevention, maternal and child health, sexual and reproductive health, and community

health education. Their presence is particularly impactful in slum areas like Kibera and Mathare, where public health services are often stretched thin (Opiyo & Mutwiri, 2024).

A number of prominent local and international NGOs operate within Nairobi. Organizations such as AMREF Health Africa, Médecins Sans Frontières (MSF), and Marie Stopes Kenya have established programs that focus on both direct healthcare delivery and long-term health system strengthening (Kinyua, Ogollah & Mburu, 2024). These organizations run clinics, mobile health services, and public health campaigns. They also collaborate with government bodies and local stakeholders to ensure alignment with national health goals and to enhance sustainability of their interventions. Many of these NGOs also engage in research and innovation, which contributes to policy formulation and improved healthcare practices (Wabomba, 2022).

Funding and sustainability are critical aspects influencing the operations of health NGOs in Nairobi. Most organizations rely on donor funding from international agencies, governments, and private foundations, which can fluctuate due to changing global priorities (Njuguna, 2023). To navigate this, some NGOs are diversifying their funding sources through social enterprises or partnerships with the private sector. The dynamic nature of urban health needs in Nairobi—ranging from communicable diseases like HIV/AIDS and TB to rising cases of non-communicable diseases—requires these organizations to be flexible and adaptive in their program design and implementation (Aduma & Kimutai, 2022).

Despite their significant contributions, health NGOs in Nairobi face challenges such as regulatory hurdles, competition for funding, and the need for better coordination with government services. Fragmentation in service delivery can sometimes lead to duplication of efforts or gaps in care (Opiyo & Mutwiri, 2024). To enhance effectiveness, there is a growing push for better integration of NGO services with Kenya's devolved healthcare system. Overall, health NGOs remain crucial players in Nairobi's healthcare landscape, offering essential services to underserved populations and driving innovations that benefit the broader health sector (Kinyua, Ogollah & Mburu, 2024).

Statement of the Problem

Non-governmental organizations (NGOs) play a pivotal role in Kenya's health sector, particularly in Nairobi City County. They complement government efforts by providing essential health services, especially in underserved urban areas. According to the NGOs Co-ordination Board, Nairobi hosts the highest number of NGOs in the country, with 1,252 registered entities. In the last financial year, NGOs received Ksh 165.9 billion in funding, with the health sector receiving the largest share—over Ksh 13 billion for general health promotion, Ksh 10 billion for HIV/AIDS initiatives, and Ksh 4.2 billion for population and reproductive health programs. These figures underscore the significant contribution of NGOs to the health landscape in Nairobi and the nation at large (KNBS, 2024).

Despite their substantial contributions, health-focused NGO projects in Nairobi face persistent challenges that hinder optimal performance. Common issues include cost overruns, time delays, and scope creep. For instance, a study on youth community-based organizations in Nairobi revealed that only 35% of projects were completed on time, while 60% exceeded their budget estimates by an average of 15%. These inefficiencies not only strain financial resources but also compromise the quality and timeliness of health services delivered to the community. Further compounding these challenges, a study on the performance of NGO projects in Nairobi County indicated that nearly all projects were not accomplished within the estimated timeline, quality, and budget. Additionally, the NGOs Coordination Board reported that out of Ksh 172.1 billion spent by NGOs in the financial year 2018/2019, only 30% could be accounted for, highlighting issues of misappropriation and financial inefficiencies (KNBS, 2023).

Effective project risk management strategies are crucial for enhancing project performance. However, there remains a gap in the consistent application of these strategies across health NGOs in Nairobi. Many organizations lack structured risk management frameworks, leading to recurring project inefficiencies. Various studies have been conducted in different parts of the world on project risk management strategies and project performance. For instance, Opiyo and Mutwiri (2024) in Kenya conducted a study on project risk management strategies and performance of youth community based organization projects in Nairobi City County. Aduma and Kimutai (2022) in Kenya researched on project risk management strategies and project performance at the National Hospital Insurance Fund and Kinyua, Ogollah and Mburu (2024) in Kenya researched on the effect of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi. However, none of these studies focused on risk identification strategies, risk assessment strategies, risk response strategies and risk control strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya. To fill the highlighted gaps, the current study sought to assess the influence of project risk management strategies (risk identification strategies, risk assessment strategies, risk response strategies and risk control strategies) on project performance in health non-governmental organizations in Nairobi City County, Kenya.

General Objective

The general objective of the study was to assess the influence of project risk management strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya

Specific Objectives

- i. To examine the influence of risk response strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya
- ii. To establish the influence of risk control strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya

Theoretical Framework

This study was guided by Resource-Based View (RBV) Theory and Control Theory

Resource-Based View (RBV) Theory

The Resource-Based View (RBV) Theory, developed by Jay Barney (1991), focuses on the internal resources of an organization as the primary source of competitive advantage and performance. According to RBV, an organization's success is largely determined by how well it acquires, develops, and utilizes resources that are valuable, rare, inimitable, and non-substitutable (VRIN). These resources can be both tangible, such as financial capital and equipment, and intangible, such as managerial expertise, organizational culture, and risk management capability. In project risk management, RBV implies that an organization's ability to respond to risks depends significantly on the internal capacity and quality of its resources (Mohammad, Jati, & Asri, 2024).

In the setting of Health NGOs in Nairobi City County, RBV Theory helps explain performance variations across organizations facing similar external risks. NGOs with strong financial management systems, experienced staff, and established stakeholder relationships are more likely to implement effective risk response strategies such as mitigation, transfer, or avoidance. These organizations are better positioned to maintain stability and performance in the face of uncertainties. For example, a well-resourced NGO may have contingency funds and logistical support that enable a rapid response to health emergencies, while under-resourced counterparts may experience delays and inefficiencies. RBV emphasizes the strategic importance of investing in organizational capabilities as a way to enhance project resilience and ensure sustainable health outcomes (Kinyua, Ogollah, & Mburu, 2024). The theory was used to examine the influence of risk response strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya.

Control Theory

Control Theory, developed by Travis Hirschi (1969), is centered on the process of setting standards, measuring actual performance, comparing it with the set standards, and implementing corrective actions to ensure that objectives are achieved. It relies on continuous feedback loops where deviations from expected performance are detected and addressed in real time (Hashimu, 2022). This theory is especially important in project environments where constant monitoring and evaluation are required to manage uncertainties and ensure that projects stay on track in terms of time, cost, and quality. Risk control strategies such as regular audits, risk reviews, and performance dashboards align directly with Control Theory principles, as they help maintain project discipline and accountability (Aduma, & Kimutai, 2022).

Within Health NGOs operating in Nairobi City County, Control Theory supports the implementation of structured risk monitoring systems to detect emerging threats and deviations

early. In complex urban health settings, where conditions change rapidly, effective risk control ensures that projects remain aligned with goals despite external disruptions. For example, a health NGO conducting a vaccination campaign may face unexpected logistical challenges or community resistance. By applying control mechanisms such as routine field reports and stakeholder feedback sessions, the organization can identify problems early and make timely adjustments. Thus, Control Theory enables NGOs to enhance project performance by fostering transparency, responsiveness, and strategic oversight throughout the project lifecycle (Abdulkarim & Umar, 2021). The theory was used to establish the influence of risk control strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya.

Conceptual Framework

The figure below shows the relationship between the independent variables and the dependent variable. The independent variables include; risk response strategies and risk control strategies while the dependent variable is project performance in health non-governmental organizations in Nairobi City County, Kenya

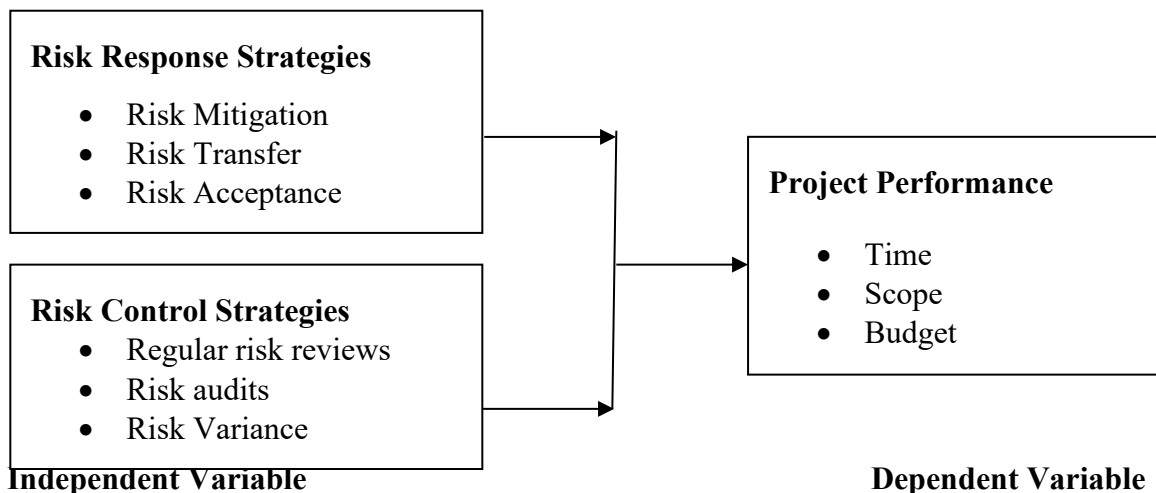


Figure 2. 1: Conceptual Framework

Empirical Review

Risk Response Strategies and Project Performance

Hassan and Ibrahim (2020) conducted a study on the effect of risk response strategies on project performance in construction projects. The study adopted a quantitative research design and collected data from project managers and site supervisors using structured questionnaires. The findings revealed that projects that actively applied risk mitigation measures experienced fewer cost overruns and schedule delays. The study concluded that proactive risk response strategies significantly enhance project performance by minimizing the negative effects of identified risks.

A study by Mensah (2021) examined the relationship between risk response strategies and project success in manufacturing firms. Using a cross-sectional survey design, data were collected from operations and project managers. The results indicated that risk transfer mechanisms such as insurance and outsourcing positively influenced project performance by reducing financial exposure and operational uncertainty. The study concluded that appropriate allocation of risk responsibilities improves project stability and performance outcomes.

Khan and Ali (2022) conducted a study on the influence of risk response strategies on information technology project performance. The study employed a descriptive research design and gathered data from IT project teams. The findings showed that a combination of risk mitigation and risk acceptance strategies enhanced project performance by enabling teams to focus resources on critical risks while tolerating minor uncertainties. The study concluded that balanced risk response approaches support efficiency and successful project delivery.

A study by Otieno and Kamau (2023) investigated the effect of risk response strategies on project performance in public infrastructure projects. The study adopted a mixed-methods research design involving surveys and interviews. The results established that structured risk response planning significantly improved project performance in terms of quality outcomes and stakeholder satisfaction. The study concluded that clearly defined risk response strategies strengthen project control and reduce implementation challenges.

Silva and Rodrigues (2024) examined the relationship between risk response strategies and project performance in engineering and industrial projects. Using a quantitative research approach, data were collected from project professionals across multiple organizations. The findings revealed that projects with formalized risk response frameworks recorded higher levels of schedule adherence, cost efficiency, and overall performance. The study concluded that effective implementation of risk mitigation, transfer, and acceptance strategies is essential for achieving sustainable project performance.

Risk Control Strategies and Project Performance

A study by Mwangi and Kamau (2020) examined the effect of risk control strategies on project performance in construction projects. The study adopted a descriptive survey design and collected data from project managers and site engineers. The findings revealed that regular risk reviews and continuous monitoring significantly improved project performance by enabling early detection of deviations from project plans and timely corrective actions. The study concluded that systematic risk control enhances project predictability, reduces delays, and improves overall efficiency.

Osei and Adu (2021) conducted research on the relationship between risk control strategies and project success in manufacturing and industrial projects. Using a cross-sectional research design, data were collected from project supervisors and operations managers. The study found that the

use of risk audits and variance analysis positively influenced project performance by ensuring compliance with project standards and identifying gaps in risk management processes. The study concluded that implementing structured risk control measures strengthens accountability and supports consistent achievement of project objectives.

Khan and Rahman (2022) investigated the effect of risk control strategies on IT project performance. The study used a mixed-methods approach, combining questionnaires and interviews with IT project managers. Findings indicated that monitoring risk variance and conducting regular audits enhanced project performance by reducing scope creep and improving resource allocation. The study concluded that continuous evaluation and control of risks are critical for maintaining project timelines, quality, and cost efficiency.

A study by Otieno and Mutua (2023) explored the influence of risk control strategies on public sector infrastructure project performance. The study employed a descriptive survey design and collected data from project management teams. Results showed that projects that implemented regular risk reviews and tracked risk variance experienced fewer implementation challenges and higher stakeholder satisfaction. The study concluded that proactive risk control mechanisms strengthen project governance and contribute to successful project delivery.

Silva and Pereira (2024) conducted a study on the effect of risk control strategies on engineering project performance. Using a quantitative research design, data were collected from project professionals across multiple organizations. The findings revealed a significant positive relationship between risk control practices, including audits, regular reviews, and variance tracking, and project outcomes such as schedule adherence, cost management, and quality standards. The study concluded that effective risk control strategies are essential for achieving sustainable project performance and reducing project uncertainties.

RESEARCH METHODOLOGY

The descriptive research design was employed where data was collected one point in time. Project Management employees in health sector NGOs in Nairobi City County were the targeted population and therefore they form the population of the study. The unit of analysis was ten (10) NGOs in the health sector in Nairobi City County. These organizations are not profit making. The unit of observation was project management level employees. In every NGO, 11 respondents were target comprising of 2 top manager, 4 middle managers and 5 lower-level managers. The management employees were targeted since they are directly involved in formulation and implementation of strategies in the organization. The total target population for this study therefore comprised of 110 employees at different project managerial levels currently working with the ten health sector NGOs. The study used census method since the target population is small.

Data was collected using a self-administered semi-structured questionnaire. Semi-structured questionnaires were used since they enable the researcher collect quantitative data. A five-point Likert scale was used to measure all variables. The lowest rating of 1 signifies a low opinion by respondent while a high rating of 5 signifies a high rating by the respondents. A pilot test was conducted to determine validity and reliability of the data collection instrument. A pilot study is a small experiment designed to test logistics and gather information prior regarding a larger study, in order to improve the latter quality and efficiency. The responses from respondents were used to adjust and refine questionnaire accordingly. According to Mugenda and Mugenda (2019) the pretest sample should be between 1% and 10% depending on the sample size. The pilot study was used to test validity and reliability of the data collection instrument

Data obtained from the field was coded, cleaned, and entered into the computer for analysis using the SPSS version 25. Data analysis was done through use of descriptive and inferential statistics. Descriptive statistical included frequency, percentages, mean and standard deviation. Inferential statistical analysis comprised of multiple regression analysis and correlation analysis. The significant of each independent variable was tested at a confidence level of 95%. The multiple regression model that was utilized as shown below:

$$Y = \beta + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where:

Y represents dependent Variable (Project Performance),

β represents a constant or Intercept

β_1, β_2 , represents the estimated regression coefficients

X_1 represents Risk Response Strategies

X_2 represents Risk Control Strategies

ϵ represents error term (represents the effect of the variables that were not covered by the equation)

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

Response Rate

The researcher sampled 110 respondents who were each administered with the questionnaires. From the 110 questionnaires 94 were completely filled and returned hence a response rate of 85.5%. The response rate was considered as suitable for making inferences from the data collected. As indicated by Sahu (2017), a response rate that is above fifty percent is considered adequate for data analysis and reporting while a response rate that is above 70% is classified as excellent. Hence, the response rate of this study was within the acceptable limits for drawing conclusions and making recommendations.

Descriptive Statistics

Risk Response Strategies and Project Performance

The first specific objective of the study was to examine the influence of risk response strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya. The respondents were requested to determine the influence of risk response strategies and project performance in health non-governmental organizations in Nairobi City County, Kenya. The results were as shown Table 1.

Table 1: Risk Response Strategies and Project Performance

	MeanStd. Deviation
The organization implements risk mitigation measures to reduce the impact of identified risks.	3.855 0.502
Risk transfer mechanisms, such as insurance or outsourcing, are used to manage project risks.	3.841 0.611
Acceptable risks are formally acknowledged and monitored to minimize disruption.	3.822 0.732
Project teams develop and follow risk response plans for high-priority risks.	3.804 0.845
Risk response strategies are reviewed and updated regularly during project execution.	3.799 0.676
Effective risk response strategies contribute to timely project completion and achievement of objectives.	3.784 0.701
Aggregate	3.818 0.678

From the results, the respondents agreed that the organization implements risk mitigation measures to reduce the impact of identified risks ($M=3.855$, $SD=0.502$). The respondents agreed that risk transfer mechanisms, such as insurance or outsourcing, are used to manage project risks ($M=3.841$, $SD=0.611$). Further, the respondents agreed that acceptable risks are formally acknowledged and monitored to minimize disruption ($M=3.822$, $SD=0.732$).

From the results, the respondents agreed that project teams develop and follow risk response plans for high-priority risks ($M=3.804$, $SD=0.845$). In addition, the respondents agreed that risk response strategies are reviewed and updated regularly during project execution ($M=3.799$, $SD=0.676$). Further, the respondents agreed that effective risk response strategies contribute to timely project completion and achievement of objectives ($M=3.784$, $SD=0.701$).

Risk Control Strategies and Project Performance

The second specific objective of the study was to establish the influence of risk control strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya. The respondents were requested to indicate their level of agreement on various

statements related to risk control strategies and project performance in health non-governmental organizations in Nairobi City County, Kenya. The results were as shown Table 2

Table 2: Risk Control Strategies and Project Performance

	Mean	Std. Deviation
The organization conducts regular risk reviews throughout the project lifecycle.	3.874	0.638
Risk audits are performed to ensure compliance with risk management plans.	3.863	0.579
Variance in identified risks is monitored and addressed promptly.	3.851	0.782
Project performance is continuously compared against risk management objectives.	3.840	0.808
Corrective actions are implemented immediately when deviations from risk plans are detected.	3.833	0.852
Effective risk control strategies enhance the overall quality and success of projects.	3.826	0.664
Aggregate	3.848	0.721

From the results, the respondents agreed that the organization conducts regular risk reviews throughout the project lifecycle ($M=3.874$, $SD=0.638$). The respondents agreed that risk audits are performed to ensure compliance with risk management plans ($M=3.863$, $SD=0.579$). Further, the respondents agreed that variance in identified risks is monitored and addressed promptly ($M=3.851$, $SD=0.782$).

From the results, the respondents agreed that project performance is continuously compared against risk management objectives ($M=3.840$, $SD=0.808$). In addition, the respondents agreed that corrective actions are implemented immediately when deviations from risk plans are detected ($M=3.833$, $SD=0.852$). Further, the respondents agreed that effective risk control strategies enhance the overall quality and success of projects ($M=3.826$, $SD=0.664$).

Project Performance

The respondents were requested to indicate their level of agreement on various statements related to project performance in health non-governmental organizations in Nairobi City County, Kenya. The results were as shown Table 3.

Table 3: Project Performance

	Mean	Std. Deviation
Projects in our organization are completed within the planned timelines.	3.892	0.832
Projects are delivered within the allocated budget.	3.858	0.612
Project objectives and goals are consistently achieved.	3.837	0.589
The quality standards of project deliverables meet or exceed expectations.	3.755	0.785
Stakeholder satisfaction with project outcomes is high.	3.731	0.683
Project resources are utilized efficiently to achieve desired results.	3.705	0.514
Aggregate	3.796	0.669

From the results, the respondents agreed that projects in their organization are completed within the planned timelines ($M=3.892$, $SD=0.832$). The respondents agreed that projects are delivered within the allocated budget ($M=3.858$, $SD=0.612$). Further, the respondents agreed that project objectives and goals are consistently achieved ($M=3.837$, $SD=0.589$).

From the results, the respondents agreed that the quality standards of project deliverables meet or exceed expectations ($M=3.755$, $SD=0.785$). In addition, the respondents agreed that Stakeholder satisfaction with project outcomes is high ($M=3.731$, $SD=0.683$). Further, the respondents agreed that project resources are utilized efficiently to achieve desired results ($M=3.705$, $SD=0.514$).

Correlation Analysis

The present study used Pearson correlation analysis to determine the strength of association between independent variables (risk response strategies and risk control strategies) and the dependent variable (project performance in health non-governmental organizations in Nairobi City County, Kenya). Pearson correlation coefficient range between zero and one, where by the strength of association increase with increase in the value of the correlation coefficients.

Further, the results revealed that there is a very strong relationship between risk response strategies and project performance in health non-governmental organizations in Nairobi City County, Kenya ($r = 0.855$, $p \text{ value} = 0.001$). The relationship was significant since the p value 0.001 was less than 0.05 (significant level). The findings are in line with the findings of Hassan and Ibrahim (2020) that there is a very strong relationship between risk response strategies and project performance.

The results also revealed that there was a very strong relationship between risk control strategies and project performance in health non-governmental organizations in Nairobi City County, Kenya ($r = 0.874$, $p \text{ value} = 0.000$). The relationship was significant since the p value 0.000 was less than 0.05 (significant level). The findings are in line with the results of Osei and Adu (2021) who revealed that there is a very strong relationship between risk control strategies and project performance.

Table 5: Correlation Coefficients

		Project Performance	Risk Response Strategies	Risk Control Strategies
Project Performance	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	94		
Risk Response Strategies	Pearson Correlation	.855**	1	
	Sig. (2-tailed)	.001		
	N	94	94	
Risk Control Strategies	Pearson Correlation	.874**	.211	1
	Sig. (2-tailed)	.000	.054	
	N	94	94	94

4.6.2 Regression Analysis

Multivariate regression analysis was used to assess the relationship between independent variables (risk response strategies and risk control strategies) and the dependent variable (project performance in health non-governmental organizations in Nairobi City County, Kenya)

The model summary was used to explain the variation in the dependent variable that could be explained by the independent variables. The r-squared for the relationship between the independent variables and the dependent variable was 0.636. This implied that 63.6% of the variation in the dependent variable (project performance in health non-governmental organizations in Nairobi City County, Kenya) could be explained by independent variables (risk response strategies and risk control strategies).

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.798	.636	.635	.10428

a. Predictors: (Constant), risk response strategies and risk control strategies

The ANOVA was used to determine whether the model was a good fit for the data. F calculated was 143.17 while the F critical was 2.474. The p value was 0.000. Since the F-calculated was greater than the F-critical and the p value 0.000 was less than 0.05, the model was considered as a good fit for the data. Therefore, the model can be used to predict the influence of risk response strategies and risk control strategies on project performance in health non-governmental organizations in Nairobi City County, Kenya.

Table 7: Analysis of Variance

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	80.461	2	40.2305	143.17	.000 ^b
Residual	25.017	91	.281		
Total	126.478	93			

a. Dependent Variable: project performance in health non-governmental organizations in Nairobi City County, Kenya

b. Predictors: (Constant), risk response strategies and risk control strategies

The results revealed that risk response strategies has significant effect on performance in health non-governmental organizations in Nairobi City County, Kenya, $\beta_1=0.365$, p value= 0.001). The relationship was considered significant since the p value 0.001 was less than the significant level of 0.05. The findings are in line with the findings of Hassan and Ibrahim (2020) that there is a very strong relationship between risk response strategies and project performance

In addition, the results revealed that risk control strategies has significant effect on project performance in health non-governmental organizations in Nairobi City County, Kenya, $\beta_1=0.384$, p value= 0.000). The relationship was considered significant since the p value 0.000 was less than the significant level of 0.05. The findings are in line with the results of Osei and Adu (2021) who revealed that there is a very strong relationship between risk control strategies and project performance.

Table 8: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. E	Beta		
1	(Constant)	0.251	0.065		3.862	0.000
	risk response strategies	0.365	0.095	0.364	3.842	0.001
	risk control strategies	0.384	0.100	0.385	3.840	0.000

a Dependent Variable: project performance in health non-governmental organizations in Nairobi City County, Kenya

The regression model was as follows:

$$Y = 0.251 + 0.365X_1 + 0.384X_2 + \epsilon$$

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Further, the study concludes that risk response strategies have a positive and significant effect on project performance in health non-governmental organizations in Nairobi City County, Kenya. Findings revealed that risk mitigation, risk transfer and risk acceptance influence project performance in health non-governmental organizations in Nairobi City County, Kenya. The

study also concludes that risk control strategies have a positive and significant effect on project performance in health non-governmental organizations in Nairobi City County, Kenya. Findings revealed that regular risk reviews, risk audits and risk variance influence project performance in health non-governmental organizations in Nairobi City County, Kenya.

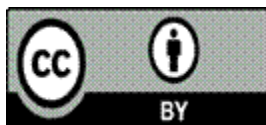
Recommendations

In addition, the study recommends that the management of health non-governmental organizations in Kenya should implement well-defined and timely risk response strategies by developing and regularly updating risk response plans that clearly outline mitigation, avoidance, transfer, or acceptance actions for prioritized risks. The study also recommends that the management of health non-governmental organizations in Kenya should strengthen risk control strategies by establishing continuous monitoring and control mechanisms that track identified risks, assess the effectiveness of implemented responses, and detect emerging risks throughout the project lifecycle.

REFERENCES

- Abdulkarim A. B., & Umar, A. I. (2021). Investigating the impact of risk management strategies on project performance in construction industry. *Science Journal of Business and Management*, 9(3), 224-230.
- Aduma, L. K., & Kimutai, G. (2022). Project risk management strategies and project performance at the National Hospital Insurance Fund in Kenya. *International Academic Journal of Information Sciences and Project Management*, 3(2), 80-110.
- Algremazy, N. A., Ideris, Z., Alferjany, M. A., & Akram, A. (2023). The effect of risk management practices on project performance: A case study of the Libyan construction industry. *International Journal of Professional Business Review*, 8(6), 1–20.
- Cherono, F., & Nyang'au, S. P. (2024). Risk management practices and project performance in construction projects. *International Journal of Social Sciences Management and Entrepreneurship*, 8(2), 992–1005.
- Khan, S., & Ali, R. (2022). Risk response strategies and IT project performance. *International Journal of Information Systems and Project Management*, 10(3), 25–41.
- Khan, T., & Iqbal, J. (2022). Risk assessment practices and performance of IT projects. *Journal of Systems and Software*, 183, 110–125.
- Kinyua, E., Ogollah, K., & Mburu, D. K. (2024). Effect of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi, Kenya. *International Journal of Economics, Commerce and Management*, 3(2), 1-30.
- Makambajeki, R. P., & Mjema, E. A. (2023). Risk management practices in IT project performance. *European Journal of Theoretical and Applied Sciences*, 1(4), 97–112.

- Mensah, K. (2021). Risk transfer mechanisms and project performance in manufacturing firms. *Journal of Business and Industrial Marketing*, 36(7), 923–936.
- Njuguna, P. G. (2023). *Risk management strategies and performance of projects in Nairobi City County, Kenya*. Retrieved from <https://ir-library.ku.ac.ke/server/api/core/>
- Obondia, K. C. (2022). Risk monitoring and control practices and project success. *Journal of Project Management*, 7, 35–52.
- Opiyo, W. V., & Mutwiri, F. (2024). Project risk management strategies and performance of youth community based organization projects in Nairobi City County, Kenya. *International Journal of Social Sciences Management and Entrepreneurship*, 8(3), 503-513
- Otieno, P., & Kamau, J. (2023). Risk response planning and infrastructure project performance. *International Journal of Construction Engineering and Management*, 12(1), 55–73.
- Owais, T., Iram, T., & Sobia, S. (2023). Effects of risk management strategies on project success in the construction industry of Pakistan. *International Journal of Engineering Business Management*, 11(3), 1–16.
- Roque, R. J., & Marly, M. C. (2023). Understanding the impact of project risk management strategies on project performance. *Journal of Technology Management & Innovation*, 8(1), 64-79.
- Sangwa, I. & Dushimimana, J., D. (2023). Effect of risk management strategies on project performance. *Journal of Entrepreneurship & Project Management*, 7(12), 92-103.
- Silva, L., Costa, E., & Rocha, J. (2024). Risk control strategies and engineering project performance. *Journal of Engineering, Design and Technology*, 22(3), 401–418.
- Tamutaran, R., & Khan, M. R. B. (2024). Impact of risk management strategies on organizational performance: evidence from Malaysian organizations. *Malaysian Journal of Business, Economics and Management*, 3(2), 137-143.
- Tayebwa, J., & Ongesa, T. N. (2024). Risk management strategy on financial performance of micro finance institutions in Uganda. *Newport international journal of current issues in arts and management*, 4(2), 50-60.
- Wabomba, K. W. (2022). *Influence of risk management strategies on project performance: a survey of selected international development organizations based in Nairobi City, Kenya*. Retrieved from <https://erepository.uonbi.ac.ke/bitstream/handle/>



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