

**EFFECTIVENESS OF RISK MANAGEMENT PRACTICES ON THE  
PROCUREMENT PERFORMANCE OF HUMANITARIAN NON-  
GOVERNMENTAL ORGANIZATIONS IN NAIROBI, KENYA**

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## ABSTRACT

Humanitarian entities strive to aid victims of armed conflict, famines, and natural disasters through relief operations and development aid programs. Effective procurement is the foundation of running humanitarian missions successfully, which involves the ability to swiftly identify needs and effectively engage in fundraising, procurement, transportation, distribution, and delivery of essential products and services. Unfortunately, these entities face numerous issues which cause delays in emergency response, resource wastages, financial losses, operational inefficiencies, reputational damage, ethical concerns, and loss of donor confidence. Robust risk management measures are thought to be the solution to procurement-related these challenges. However, knowledge of the effectiveness of these measures remains unclear due to limited empirical coverage. This research aimed address this gap by determining the effectiveness of risk management practices in the procurement performance of humanitarian NGOs in Nairobi. Therefore, the study aimed to provide empirical evidence on the effectiveness of risk management in addressing procurement constraints in the humanitarian missions. The study focused on risk assessment, regular auditing, supplier management, and contract management practices as the independent variables, procurement performance as the dependent variable, and NGO size as the moderating variable. The study was underpinned by contingency and RBV, anchoring and supporting theoretical frameworks. A pragmatic research philosophy was followed and a descriptive cross-sectional research design adopted. 89 humanitarian NGOs in Nairobi were targeted, where 178 heads of risk and procurement were surveyed using questionnaires and interviews. Findings were analyzed using quantitative statistical techniques (descriptive and inferential statistics) and thematic analysis. Results of the study demonstrate low adoption rates for all the risk management practices by humanitarian organizations, with supplier management least adopted. All the four practices exhibited significant effectiveness in enhancing procurement performance in these NGOs with the most effective being supplier management and contract management. Also, organizational size has a significant moderating effect on the effectiveness of these practices. Therefore, with the demonstrated effectiveness and varying adoption rates, this study recommends a deliberate and focused adoption of the four risk management practices, with special emphasis on supplier management and contract management practices to optimize procurement performance.

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## LIST OF ABBREVIATIONS

ADNOC:	Abu Dhabi National Oil Company
D-B:	Design-Build
DRC:	Democratic Republic of Congo
FEMA:	Federal Emergency Management Agency
IFRC:	International Federation of Red Cross and Red Crescent Societies
KES:	Kenya Shilling
LGA:	Local Government Authority
NACOSTI:	National Commission of Science, Technology, and Innovation
NGO:	Non-Governmental Organization
NHS:	National Health Service
OL:	Organizational Learning
PLS:	Partial Least Squares
PPRA:	Public Procurement Regulatory Authority
PSA:	Public Sector Authorities
RBV:	Resource-Based View
RM:	Risk Management
RMM:	Risk Management Maturity
ROA:	Return on Assets
SPSS:	Statistical Package for Social Sciences
UAE:	United Arabs Emirates
UK:	United Kingdom
UN:	United Nations
UNHCR:	United Nations High Commissioner for Refugees
USAID:	United States Agency for International Development
USD:	United States Dollar

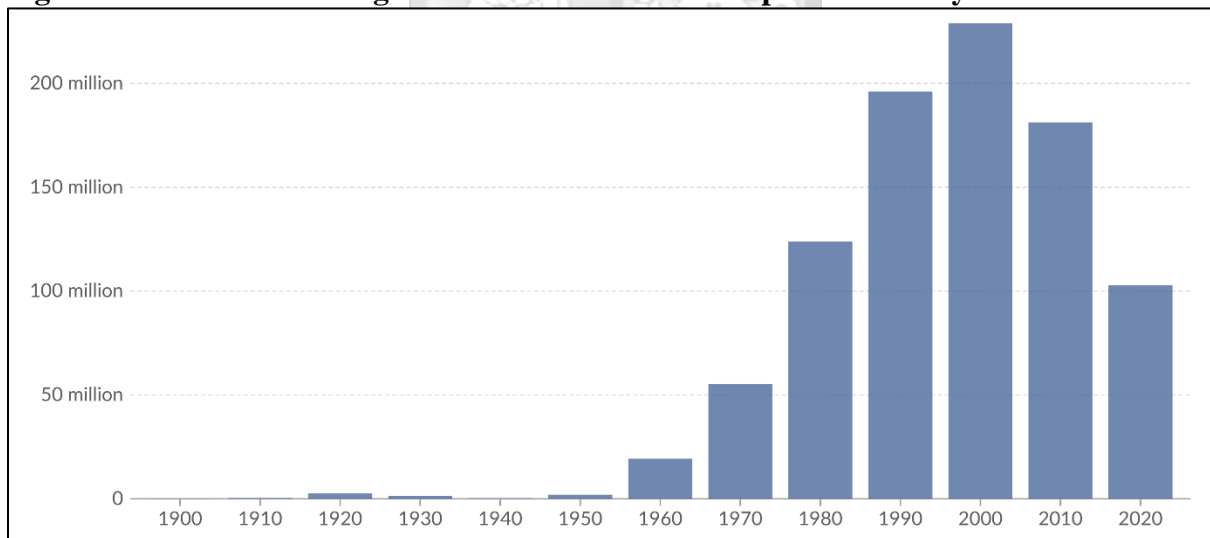
# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Disasters, whether natural or anthropogenic, occur across the globe at an alarming rate. For instance, natural disasters, including climate-related cases, have led to the death of more than 1.3 million people, and injured and displaced at least 4.4 billion people between 1998 and 2017 (Ghavamifar et al., 2022). The global economic cost of disasters over the same period is estimated at USD 2.9 trillion. According to Ritchie and Rosado (2022), disasters kill approximately 40,000 to 50,000 people per year, with a single extreme event, such as the Boxing Day Tsunami, capable of killing hundreds of thousands of people. The decadal average of the total number of people affected by disasters and in need of humanitarian assistance in the current decade is 102.88 million, as shown in the figure below.

**Figure 1. 1: Decadal Average of Annual Number of People Affected by Disasters**



**Source: (Ritchie & Rosado, 2022)**

Notably, in disastrous situations, saving people’s lives is much more important. Non-governmental organizations (NGOs) in the humanitarian sector routinely strive to aid victims of armed conflict, famines, and natural disasters through relief operations and development aid programs. Therefore, according to Möller (2023) and Roborgh (2023), these entities play a vital role in global efforts to prevent and/or alleviate human suffering. They are usually involved in “searching for, collecting and transporting victims; offering medical treatments; providing assistance to the civilians through humanitarian relief” (Frennesson et al., 2022). For these

reasons, the likes of Roborgh (2023) and Nyahunda et al. (2022) recognize them for playing a crucial role in addressing humanitarian crises and pressing challenges in society.

According to Moshtari et al. (2021), the ability to swiftly identify needs and effectively engage in fundraising, procurement, transportation, distribution, and delivery of essential products and services to those in need is paramount to running a successful NGO. In other words, effective “procurement of products (e.g., medicines, food, or non-food items) and services (e.g., warehousing, transportation, shelter) are critical activities for humanitarian NGOs” (Moshtari et al., 2021). In light of the above, Falasca and Zobel (2021) confirm that procurement activities account for at least 65% of NGOs’ expenditures, with transportation accounting for 15% of the budget. Given the substantial expenditure, ensuring efficiency in procurement performance and practices within these organizations becomes imperative.

Procurement contributes to the overall NGO performance, as described above (Moshtari et al., 2021). It is the foundation of the success of humanitarian entities. However, Umutoniwase and Wanjiku (2023) reveal that procurement practices face certain constraints, chief among them being risks. Harju et al. (2024) also contend that “procurement is associated with exposure to multiple risks that may cause failures in service delivery.” As Wynstra et al. (2018) point out, this is because procurement performance is complex and unique and demands that potential risks be addressed that could undermine an NGO’s ability to achieve desired outcomes. Risks in procurement have long been empirically proven to hinder NGOs’ ability to promptly deliver life-saving aid and respond to humanitarian crises.

Moreover, in emergencies, the usual governing order breaks down, communities become more vulnerable, and victims are in dire need of urgent relief (Ghavamifar et al., 2022). Therefore, as Torabi et al. (2018) stress, the success of the response in meeting the needs of the victims depends directly on the effectiveness of procurement, which can be drastically interrupted in sudden-onset disasters. Usually, according to Ghavamifar et al. (2022), humanitarian agencies should preposition relief supplies in advance of a disaster and procure required additional relief items after a disaster. However, the unpredictable nature of sudden-onset disasters in terms of location, time, and type, as well as the inherent uncertain demand for a wide range of supplies with short lead times, can make it difficult to respond to crises effectively.

The 2017 Kermanshah earthquake response program illustrates the consequences of inefficient procurement operations (Maghsoudi & Moshtari, 2021). During the crisis, it was discovered

that aid agencies did not preposition relief items in advance due to a lack of coordinated procurement. Due to the lack of supplies in the warehouses prior to the disaster, the prices of relief items increased drastically. In addition, wastage and oversupply of relief items were repeatedly reported due to the lack of coordination in procurement. Other challenges, such as stock-outs and excess storage, have been reported as major procurement risks. At the same time, according to Ghavamifar et al. (2022), over-prepositioning relief supplies can lead to wastages, which, for example, saw the United States Federal Emergency Management Agency (FEMA) lose up to USD 43 million worth of food to spoilage in 2006.

The aforementioned challenges, coupled with the unpredictability of crises, have seen NGOs increasingly integrate risk management practices into procurement operations. According to Harju et al. (2024) and Burghart and Fekete (2022), risk management is crucial in supporting procurement decision-making by addressing potential risks early on, reducing the likelihood of costly mistakes.” In another publication, Elwany and Elsharkawy (2016) mentioned that incorporating risk management is crucial in achieving successful procurement outcomes and organizational objectives. In addition, proper risk management practices can go a long way in minimizing the impact of adverse events and ensuring business continuity while achieving value for money in procurement.

The strategic importance of successful procurement in humanitarian NGOs has seen a surge in empirical research on the effectiveness of risk management in ensuring effective procurement. Based in Finland, Harju et al. (2024) stress the importance of risk management in procurement. According to the scholars, the absence of explicit measures aimed at managing risk factors “increases the vulnerability to disruptions which consequently reduce the availability or quality of service.” They explain that structured risk management enhances procurement performance through proactive management and the reduction of the probabilities of risk. Malaysian-based research by Annamalah and Pertheban (2018) found that supply risk management has a direct and positive effect on purchasing and operational performance.

In Africa, humanitarian aid is often characterized by corruption and a lack of accountability. Adebajo (2022) states that systemic corruption in Sub-Saharan Africa extends far beyond the public sector, further citing that “humanitarian entities, which are expected to be strongholds of decency, are often rocked by accountability scandals.” Classic examples are the corruption and accountability issues that faced the humanitarian action towards the 2015/17 Ebola epidemic in the West African region. An investigation by the International Federation of Red

Cross and Red Crescent Societies (IFRC) (2017) uncovered that the organization lost USD 2.7 million to inflated prices of relief items, USD 2.1 million to collusion between its staff and Sierra Leonean bank's staff, USD 1.2 million to fake billing, and several other irregularities in its Ebola-related humanitarian operations in Guinea, Liberia, and Sierra Leone.

Similarly, Kleinfeld and Dodds (2020) and Kleinfeld (2020) expose the widespread corruption and fraud within aid operations, undermining the effectiveness of humanitarian efforts in the Democratic Republic of Congo (DRC). The reports describe the corruption and procurement issues between international aid agencies and national NGOs as particularly egregious, where organizations are sometimes expected to provide kickbacks that can amount to 10% of contract value. According to Kleinfeld and Dodds (2020), suppliers cited that staff of NGOs and UN agencies would demand 10-30% kickbacks of the contract value, forcing them to respond by fixing higher prices for humanitarian aid institutions. Kleinfeld (2020) further points out that humanitarian agencies that were involved in the Rapid Response to Population Movement (RRMP) lost at least USD 6 million in just two years.

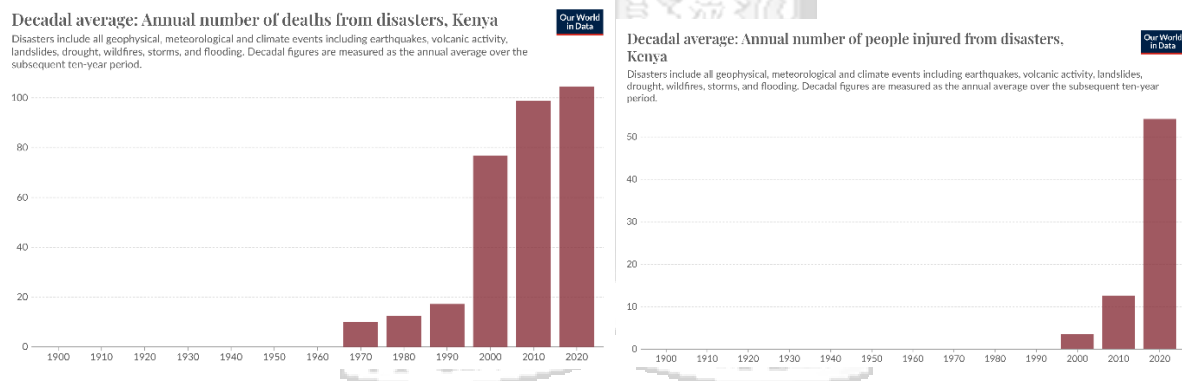
Malhouni and Mabrouki (2024) identify 268 risks that hinder the effectiveness of humanitarian action in the DRC and the Central African Republic, nations deeply impacted by persistent crises. These risks are grouped into 8 risk families: logistical (procurement, operational, safety, and technical) and non-logistical (staffing, security, compliance, and brand reputation). Their root causes are also well highlighted: humanitarian agencies often lack the capacity to deliver timely and relevant aid because of the inability to establish quality programs that address the most pressing and responsive needs. Other relevant risks relate to threat assessment and analysis, resource constraints, staffing and retaining, ambushes, and blockage of crisis zones by armed forces (militia or government). Humanitarian agencies face multifaceted risks, demanding robust risk management frameworks to ensure effective delivery of aid.

In Uganda, Titeca (2022) highlights the 2018 fraud scandal, which implicated both government officials and the United Nations High Commissioner for Refugees (UNHCR). It was uncovered that the refugee number was inflated by 300,000, resulting in mishandling of USD 44-214 million during the refugee influx from South Sudan. Audit reports revealed that weak internal controls led to “diversion of resources, over-expenditures, poor procurement procedures, and non-respect of systems for contracting partners” (Titeca, 2022). A study by the Internal Risk Management Group (2020) into NGO risk management and accountability practices revealed compelling findings. Clear messaging from top leaders, information sharing of corruption and

fraud, systems and performance, policies, and risk registers were recognized as essential controls for corruption and fraud. However, the controls did not always work because of non-compliance, competing interests and priorities, a lack of risk-driven organization culture, and working with local implementing partners.

Kenya continues to face crises that necessitate ongoing humanitarian relief. Within the decade, the country has suffered adverse droughts, floods, food insecurity, refugee crisis, conflict, displacements, and more. Kenya experienced the worst drought in four decades, affecting 6.4 million people, 4.5 million of whom were in need of dire humanitarian assistance, and resulting in the death of 2.4 million livestock (Otunga, 2024). Deaths and injuries have also increased, as illustrated in Figure 1.2. Additionally, Kenya hosts one of the largest refugee populations in Africa at 812,000; climate-induced crises saw more than 187,000 people displaced in 2022; nearly 466,000 people were identified as internally displaced as a result of the recent floods (Otunga, 2024). These incidents underscore the importance of humanitarian aid in the country.

**Figure 1. 2: Average Decadal Deaths and Injuries**



**Source: (Ritchie & Rosado, 2022)**

Yet, the sector is embroiled in major scandals involving misuse of funds, ethical breaches, and procurement inefficiencies. The United States Agency for International Development (USAID) and the Global Fund’s audit report unearthed procurement and financial irregularities that risked more than KES 100 billion of donor funds meant for the COVID-19 pandemic response, resulting in donors reducing or freezing funding (Wafula, 2020). Other crises affected by procurement inefficiencies include the drought response program, refugees and displaced populations, flooding, and the food crisis. Maria et al. (2018) argue that humanitarian organizations constantly encounter situations that put their ethics to the test, in which they often fail due to a myriad of factors, including urgency and pressure, corruption and fraud, lack of capacities, and inadequate oversight and accountability.

### 1.1.1 Risk Management in Procurement

Risk management, as defined by the ISO, involves the “systematic performance of identifying, assessing, and controlling threats to an organization’s capital, earnings, and operations.” Or, as Hessami (2019) clarifies, as a planned and structured performance, risk management drives quality decision-making at all times by ensuring risks are appropriately identified, classified, quantified, and then managed and controlled. The goal of risk management, in this regard, is to “ensure the best value for the organization in terms of cost, time, and quality by balancing the input to manage risks with the benefits from such act” (Hessami, 2019). Risks are inherent in any endeavor, and their presence is inevitable, which is why effective risk management is crucial to mitigate potential negative impacts.

Risk management frameworks and their specific applications vary across sectors. In the public sector, risk management aims to ensure transparency, accountability, and efficient use of public funds (Binti Ilias et al., 2023). Public entities face unique risks stemming from political issues, regulatory changes, and public scrutiny. In the private sector, risk management is crucial in maintaining business continuity and achieving strategic business goals (Hai et al., 2022). On the other hand, NGOs, especially those in the humanitarian sector, operate in diverse and often high-risk environments, making procurement risk management frameworks vital for their operations (Moshtari et al., 2021). This is because, as established earlier, effective procurement is crucial for successful humanitarian action.

Furthermore, the dynamics of risk management differ across sectors. Unlike the public sector, which is highly regulated, with institutions often required to adopt elaborate risk management models (Moyer et al., 2021) and the private sector, which is known to adopt robust and proactive risk management frameworks (Manyathi et al., 2021), the NGO sector lacks robust standards and procedures. Malhouni and Mabrouki (2024) attribute this to many factors: weak internal controls, inadequate expertise, limited resources, donor requirements and expectations, and complex environments. Maria et al. (2018) say even for those that do, during crises, they abandon those practices to ensure immediate resource needs are met for quick response and delivery of aid. This is because stringent risk management practices can create logistical challenges and delays in rapidly changing and complex environments like conflict zones.

The consequences of the absence of or nonadherence to procurement risk management frameworks can be adverse. They include operational disruptions, which can exacerbate the

suffering and potential loss of lives of the affected populations during crises, monetary losses, donors withdrawing funding, reputational damage, and public scrutiny (Hong et al., 2018; Nyamah et al., 2023). Therefore, owing to the current status of the procurement landscape in the humanitarian sector, the integration of risk management practices into NGOs' procurement strategies needs significant improvements.

In view of the above, the common procurement risk management best practices include risk assessments, audits, supplier management, and contract management (Harju et al., 2024; Wang et al., 2023). Regular risk assessments enable an organization to identify, assess, and manage risks throughout the procurement process (Ni et al., 2022). It is crucial in safeguarding an entity against potential adverse events (cost overruns, price volatility, regulatory risks, market disruptions, economic downturns, and technological risks) and streamlining its supply chain. Auditing helps uncover potential risks in procurement, inefficiencies, noncompliance, irregularities, or fraud, and supplier risk (Mihajlović et al., 2021). Regular audits help identify red flags and mitigate risks while maintaining the transparency and integrity of procurement.

Supplier management should be emphasized by organizations that overly depend on suppliers for a smooth procurement performance (Njagi & Shalle, 2016a), because any supplier-related risk (disruptions, supplier bankruptcy, poor performance, financial instability, or quality issues) can halt procurement operations (Momanyi & Paul, 2018). Similarly, contract management is vital in mitigating contract-related risks and potential legal disputes. Contract management aims to ensure contractual agreements are well-considered, compliant, and aligned with the organization's goals. Razi et al. (2023) cite that effective contract management addresses the following risks: ambiguity and omissions, noncompliance, unexpected liabilities, supplier performance issues, and legal and regulatory changes.

The present study focused on risk assessment, regular auditing, supplier management, and contract management with a moderating effect of the organizational size of humanitarian agencies. This is because, according to Harju et al. (2024) and Maghsoudi and Moshtari (2021), these strategies can help achieve transparency, accountability, reliability, and compliance in procurement performance as well as help identify risks early on and address them. In other words, according to the literature, these are among the most important components of risk management frameworks for a humanitarian organization.

### **1.1.2 Procurement Performance in Non-Governmental Organizations**

Procurement encompasses “the full range of activities related to purchasing goods, services, and works in alignment with an organization’s specific operational needs and procedures” (Wang et al., 2023). Procurement should not be misconstrued with purchasing, a function that merely reflects the act of acquisition. Procurement is a broad concept encompassing a wide array of activities beyond purchasing (logistics, transportation, negotiation, invoicing) (Chansamut, 2023; Wang et al., 2023). Put simply, procurement is an all-encompassing concept involving advanced planning, scheduling, and purchasing that aims to save costs, enhance operational efficiency, and increase value for money. Procurement in humanitarian entities involves “pre-positioning supplies procured in advance of a disaster and procurement of additional supplies immediately after the disaster” (Moshtari et al., 2021). Disasters often create huge spikes in demand for specific goods, so if these entities fail to efficiently procure, the response to the disaster is compromised.

NGOs strive to procure effectively, but as Moshtari et al. (2021) point out, they face certain challenges in doing so, including delays, changing needs and circumstances, low-quality products, price volatility, corruption and fraud, and budgetary constraints. Furthermore, Grandia and Meehan (2017) assert that humanitarian agencies are expected to be ethical and demonstrate equality, accountability, transparency, and non-discrimination. This implies that donations should be utilized in the most efficient manner to optimize value for money by making sure services meet acceptable levels of quality and are delivered to the right people on time. However, Moshtari et al. (2021) cite that procurement decisions are a challenge because NGOs must balance the expectations of various stakeholders: donors, governments, beneficiaries, and policymakers, making procurement cumbersome and bureaucratic.

### **1.1.3 Humanitarian Non-Governmental Organizations in Kenya**

NGOs in Kenya perform a broad range of functions aimed at improving human well-being and addressing social welfare issues. Oluoch (2023), Tindika et al. (2020), and Kimani (2022) bring out some key aspects of NGOs’ impact in Kenya, citing that they advocate for marginalized communities and promote social justice, provide humanitarian assistance and coordinate emergency response, promote access education, expand access to quality healthcare, preserve natural resources and protect the environment, defend human rights, alleviate poverty, promote

peace and conflict resolution, and advocate for good and transparent governance. In other words, NGOs are pivotal to Kenya's social, political, and environmental prosperity.

Kenya has 12,162 registered NGOs, which are spread all over the country and vary from small NGOs operating locally to international ones with regional presence (Annual NGO Sector Report Year 2021/2022, 2023). They operate across various sectors: health, children, youth, microfinance, housing, environment, animal welfare, informal sector, disability, governance, gender, peacebuilding, human rights, religion, sports, and many others (Kimani, 2022; Tindika et al., 2020). The sector is regulated by the NGO Coordination Board, which ensures that NGOs operate within stipulated standards and maintain transparency and accountability. Oluoch (2023) explains that this is because these organizations are custodians of public trust and are often expected to exhibit values of integrity and transparency when handling donor funds.

Beyond human and social welfare, NGOs contribute immensely to Kenya's economy. They serve as catalysts of economic growth; in 2018/19 alone, 1,026 NGOs contributed a total of KES 34.9 billion in implementing projects related to the government's Big Four agenda (Rotich & Karanja, 2021). Also, according to the NGOs Coordination Board (2023), NGOs contributed to the economy by spending at least KES 185.5 billion, most of it (KES 118 billion) going into project implementation. Sectors that benefited the most from the expenditure include health (30.63%), children (10.36%), education (10.0%), and relief/disaster management (8.18%). As such, the success of NGOs is crucial to the country's socio-economic development.

## 1.2 Problem Statement

Humanitarian procurement faces significant risks, as evidenced by studies indicating substantial losses within relief programs (Muhwezi et al., 2023). Up to 15% of aid is lost to corruption, fraud, theft, bribery, and resource diversion (Darden, 2019; Jenkins, 2024), with only 36% of aid reaching intended beneficiaries (Obrecht et al., 2022). These losses are often facilitated by the challenges aid agencies face in overseeing their procurement activities, leading to issues such as manipulated tenders, bribery, embezzlement, document falsification, and other fraudulent acts (Jenkins, 2024). The effects of these vulnerabilities are significant; locally, declining donor funding has been linked to accountability issues, including a lack of transparency and procurement issues (Miriti & Karithi, 2020; Okinda & Ondiwa, 2024). Given the increasing need for humanitarian assistance due to escalating crises and disasters, the effectiveness of procurement is paramount for delivering life-saving aid, such as evacuation,

medical services, water, and food, to affected victims. Therefore, robust risk management frameworks within humanitarian programs are vital to ensure accountability, maintain donor confidence, and ultimately maximize the impact of aid delivery.

Despite the growing recognition of the value of risk management, its systematic adoption within humanitarian entities is a relatively recent development, since historically, these organizations have prioritized their core missions over formal risk management practices (Muhwezi et al., 2023). Consequently, there is a notable scarcity of research specifically examining the effectiveness of risk management on procurement practices within this unique sector. Furthermore, conceptual scope gaps persist in the current empirical literature, while highlighting procurement performance within the humanitarian assistance sector, studies (Ghavamifar et al., 2022; Moshtari et al., 2021; Titeca, 2022; Torabi et al., 2018) fail to adequately cover the effectiveness of risk management on procurement performance. A significant methodological gap exists where current research (for example, Burghart & Fekete, 2022; Elwany & Elsharkawy, 2016; Harju et al., 2024) lacks quantitative measures that precisely assess the effectiveness of risk management on procurement. Kenya's humanitarian sector has been overlooked by multiple studies (e.g., Harju et al., 2024; Malhouni & Mabrouki, 2024; Maria et al., 2018; Torabi et al., 2018), denoting contextual and geographical scope gaps.

Therefore, inspired by these practical and empirical problems, this study aimed to contribute to the discussion by examining the effectiveness of risk management practices on the procurement performance of humanitarian NGOs in Nairobi County.

### **1.3 Research Objectives**

The study was guided by a primary objective and three specific objectives.

#### **1.3.1 Main Objective**

To determine the effectiveness of risk management practices on the procurement performance of humanitarian organizations in Nairobi County.

#### **1.3.2 Specific Objectives**

The study sought to achieve the following specific objectives:

- i. To determine the effectiveness of risk assessment on the procurement performance of humanitarian organizations in Nairobi County.
- ii. To determine the effectiveness of regular auditing on the procurement performance of humanitarian organizations in Nairobi County.
- iii. To evaluate the effectiveness of supplier management on the procurement performance of humanitarian organizations in Nairobi County.
- iv. To investigate the effectiveness of contract management on the procurement performance of humanitarian organizations in Nairobi County.
- v. To establish the moderating effect of organizational size on the effectiveness of risk management on the procurement performance of humanitarian NGOs in Nairobi County.

#### **1.4 Research Questions**

The study sought to answer the following research questions:

- i. How effective is risk assessment on the procurement performance of humanitarian organizations in Nairobi County?
- ii. How effective is regular auditing on the procurement performance of humanitarian organizations in Nairobi County?
- iii. How effective is supplier management in the procurement performance of humanitarian organizations in Nairobi County?
- iv. How effective is contract management on the procurement performance of humanitarian organizations in Nairobi County?
- vi. Does organizational size moderate the effectiveness of risk management on procurement performance of humanitarian organizations in Nairobi County?

#### **1.5 Scope of the Study**

The study aimed to determine the effectiveness of risk management on the procurement performance of humanitarian organizations in Nairobi County. As such, the conceptual scope constituted risk assessment, regular auditing, supplier management, and contract management as the independent variables, procurement performance as the dependent variable, and organizational size as the moderating variable. The contextual scope included the humanitarian assistance sector, with the geographical scope limited to Nairobi County. The methodological

scope for the study constituted a mixed-method approach, based on both quantitative and qualitative primary data. The study was carried out in March 2025.

### **1.6 Significance of the Study**

This study holds significant value for policymakers and regulators within the humanitarian response sector. It offers critical, evidence-based insights that can shape more effective procurement policies and risk management frameworks. The study provides practical recommendations that policymakers can use to strengthen regulatory oversight, improve transparency, and enhance accountability among humanitarian organizations. In Kenya, where procurement inefficiencies and accountability challenges often impact aid effectiveness, these findings can inform strategic interventions, guiding policymakers in enforcing well-structured policies that not only mitigate risks but also optimize resource allocation, aid distribution, and overall operational efficiency within humanitarian programs.

This study also has critical practical implications for risk management and procurement practitioners of humanitarian assistance agencies. By providing comprehensive insights into risk management practices, the study is a valuable reference point that equips practitioners with the knowledge needed to assess, refine, and implement effective risk mitigation strategies. Given the sector's exposure to procurement inefficiencies, fraud risks, and accountability challenges, the study enables NGOs to develop structured approaches that reduce risks and enhance procurement efficiency, transparency, and financial sustainability. Moreover, the study contributes to the development of robust organizational strategies aimed at combating procurement-related risks, ensuring that humanitarian entities optimize resource allocation and maintain operational integrity.

Lastly, this study makes a significant contribution to academia, serving as a valuable resource for researchers and scholars in the field. It benefits the research community in two key ways. First, it enriches the collective knowledge base, enabling future researchers to build upon previous findings, refine existing theories, and explore emerging areas of inquiry. By addressing identified gaps in empirical literature, the study lays the groundwork for new perspectives, methodological improvements, and interdisciplinary applications in related research. Second, the study plays a critical role in theory development and validation, as it is instrumental in testing theoretical frameworks and hypotheses related to the topic under investigation. Through empirical analysis and evidence-driven insights, it assesses the

applicability, effectiveness, and limitations of existing theories, offering scholars a structured foundation for advancing conceptual models.

### **1.7 Chapter Summary**

The chapter offers a synopsis of the study in terms of the background of the topic, the problem the study sought to address, the objectives that were to be achieved, and the research questions it sought to answer. The significance and scope of the study are also provided.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This section of the study explores the existing body of scholarly literature on the effectiveness of risk management practices in enhancing procurement performance. The chapter synthesizes various empirical articles to provide a comprehensive understanding of the topic and to uncover gaps left unaddressed by current research. This section also includes theories that underpinned the study, a conceptual framework, and how variables were operationalized.

#### **2.2 Theoretical Framework**

A theoretical framework comprises a set of concepts, ideas, and assumptions that serve as a roadmap for conceptualizing a research problem. The theoretical framework for this research was grounded in two key theories that elucidate the relationship between risk management and procurement performance. They include contingency theory as the anchoring theory and the resource-based view as the supporting theory.

##### **2.2.1 Contingency Theory**

Contingency theory was developed by Joan Woodward in her 1965 scholarly work, “Industrial Organization: Theory and Practice” (Carmine & Smith, 2021). The theory suggests that the best way to organize and lead an organization or make decisions depends on internal and external factors like environmental uncertainty, the size of the organization, and the operational scope. Contingent leaders employ flexible and adaptive strategies to suit the demands of the organization, occasioned by internal and external changes that occur from time to time (Northouse, 2021). As further explained by Araral (2020), proponents of this theory believe that “there is no best way to organize a firm, to lead a company, or to make decisions. Instead, the optimal course of action is contingent upon the internal and external situation.”

Since the theory proposes that organizational effectiveness is contingent upon the alignment between organizational practices and internal/external environmental conditions, it is highly relevant to procurement risk management. In other words, according to Mwakiru and Barasa (2022), the theory acknowledges that the achievement of procurement risk management goals is influenced by internal and external factors, and since the circumstances change, managers

need to be adaptive to meet the expectations of the changing environment. Or, as Hong et al. (2018) put it simply, “the effectiveness of risk management practices in procurement depends on the specific context and conditions faced by the organization—for example, how the regulatory environment, industry dynamics, and market volatility influence risk management strategies.”

The theory was appropriate for this study because it sought to examine the effectiveness of risk management in the procurement performance of humanitarian NGOs. As so far established and as echoed by Mikołajczak (2021), humanitarian NGOs operate in a unique environment with changing operational needs driven by workforce turnover, donor expectations, and urgent beneficiary needs. Effective tools for performance management are important for efficient operations. For instance, possible influencers of procurement risk management, such as leadership structure, team competence, job pressures, and stakeholder demands, call for flexibility in adapting to the changes in the environment.

Therefore, applying contingency theory allowed this study to investigate how the effectiveness of specific risk management practices in enhancing procurement performance is not absolute, but dependent on, or "contingent upon," the unique internal and external contextual factors encountered by individual humanitarian organizations in Kenya (Mikes & Kaplan, 2013). This framework suggests that the optimal mix and intensity of risk assessment, auditing, supplier, and contract management strategies vary to achieve high procurement performance, depending on the specific operational environment and the types of risks prevalent in a given humanitarian mission. Therefore, the theory provided a robust theoretical justification and framework for examining the effectiveness of risk management practices (risk assessment, regular auditing, supplier management, and contract management) on procurement performance within Kenya's humanitarian organizations.

Notwithstanding its suitability for the study, contingency theory is not without its limitations. It has been criticized for being overly complex, making it difficult to identify the most appropriate management practices for a given situation (Carmin & Smith, 2021; Harney, 2023). Critics also argue that it lacks a clear framework for determining the best management practices for a specific situation. Nonetheless, contingency theory was instrumental in examining whether and to what extent the procurement performance of humanitarian entities is contingent upon specific risk management practices such as risk assessments, regular audits, supplier management, and contract management.

## 2.2.2 Resource-Based View Theory

The resource-based view (RBV) theory is a managerial framework developed by Jay Barney in his 1991 article, “Firm Resources and Sustained Competitive Advantage” (Ferreira et al., 2014). The theory stresses the value and strategic use of organizational resources and capabilities in gaining a sustainable competitive edge. In this theory, Barney argues that “firms are heterogeneous because they possess heterogeneous resources, meaning that firms can adopt differing strategies because they have different resource mixes” (Ferreira et al., 2014). RBV theory, therefore, focuses managerial attention on an organization’s internal resources in an effort to identify capabilities, assets, and competencies with the potential to deliver long-term success.

RBV theory enables firms to determine their core competencies, which, within procurement, can constitute procurement risk management (Bohnenkamp, 2013; Münch et al., 2022). Effective risk management can be considered a critical organizational capability because it enables an organization to safeguard its resources and maintain operational continuity. In other words, Govan and Damnjanovic (2016) elaborate that when procurement risks are sufficiently identified and managed, firms can protect their supply chain, ensuring the availability of critical inputs and sustaining their operations.

Since RBV theory posits that an organization's competitive advantage stem from its unique bundle of valuable, rare, inimitable, and non-substitutable capabilities, it holds relevance in humanitarian procurement literature (Mishra et al., 2019; Othman, 2011). In this case, through the lens of the theory, risk management practices (risk assessment, auditing, contract, and supplier management) were conceptualized as valuable capabilities for humanitarian entities. When well-developed, these capabilities become inimitable assets that enhance operational efficiency, reduce losses due to fraud or diversion, and ensure the timely delivery of aid, thereby directly contributing to superior procurement performance (Nanthagopan et al., 2016). Thus, RBV helped explain how sophisticated risk management transforms into a strategic capability that enables humanitarian organizations to optimize their procurement outcomes.

Despite being a significant contribution to strategic management, and also being relevant to the study, the RBV theory has faced several criticisms. For instance, it has been criticized for its lack of framework for identifying and measuring resources (Nagano, 2020). This is because certain resources such as organizational culture, knowledge, goodwill, and reputation cannot

be quantified. It also focuses on a firm's current resource base, neglecting the dynamic nature of competitive environments. As such, it may not account for shifting consumer preferences, rapid technological advancements, and globalization. Nevertheless, RBV was relevant to this research and was used to examine if the effectiveness of risk management leads to effective procurement performance in humanitarian NGOs.

## **2.3 Empirical Review**

This section of the chapter provides an analysis of the existing empirical literature on the topic under investigation. The analysis is presented according to the specific objectives of the study.

### **2.3.1 Effectiveness of Risk Assessment on the Procurement Performance**

The effectiveness of the risk assessment system as a procurement control was explored by Sysyk (2020) in Ukraine. Following huge losses of budget funds, the researcher was interested in the effectiveness of newly introduced risk assessment systems as a control technique for public procurement. Conducting a critical assessment of the current regulatory documents, the study found that applying risk assessment systems optimized control of procurement for public funds and increased procurement efficiency and effectiveness. From a Vietnamese perspective, a case study was conducted on general contractors by Pham et al. (2021), who interviewed procurement experts. They observed that risk assessments were imperative in the success of design-build (DB) projects, explaining that risk assessment measures help identify, predict, and plan for risks. While both these studies underscore the importance of risk management frameworks, they lack humanitarian organizations as context and are limited in terms of geographical scope.

Li (2022) was interested in the effectiveness of risk management practices. The researcher collected data from 12 NHS client organizations and construction suppliers using semi-structured questionnaires and quantitative statistical techniques utilized to analyze data. He noted that risk management as a whole, including ongoing risk monitoring, produced "better value for money, integrated project team, strategic risk response activities, communication management, and stakeholder management." Elsewhere in the United Arab Emirates, using an empirical review of literature, Al Qubaisi and Emran (2021) discovered that the adoption of e-procurement integrated with risk monitoring saw a subsequent rise in procurement performance

within the Abu Dhabi National Oil Company. Also, the study observed that the relationship between RM and procurement performance is mediated by a sustainable supply chain.

Still in Asia, following a rise in public procurement issues, Ismail et al. (2018) sought to examine the effectiveness of monitoring mechanisms on public sector procurement. The study focused particularly on procurement procedures and the role of internal auditors in issues in public procurement. Following a quantitative research design whereby practitioners from Malaysia's Ministry of Home Affairs were surveyed, findings suggest that these mechanisms have a negative relationship towards procurement issues in the public sector. The above researchers, Li (2022), Al Qubaisi and Emran (2021), and Ismail et al. (2018) further the view that risk assessment is critical to procurement functions. However, although groundbreaking, it is worth noting that findings from the study cannot be inferred to Kenya's humanitarian sector because of geographical and contextual gaps.

Research in the African region also stresses the importance of risk assessment in procurement function. In their research, Oyelami and Shittu (2019) observed that the absence of risk assessment techniques was a leading factor in construction project failures in Abuja, Nigeria. The study collected data from 150 professionals registered with the Federation of Construction Industry and used the Relative Importance Index (RII), Mean Item Score (MIS), and Spearman Rank Correlation analysis for analysis. Similar findings were discovered by Enzokuhle (2024), who employed a desk methodology based on secondary data from South Africa. Like Oyelami and Shittu (2019), the study noted that the risk management strategy was effective in mitigating supply chain disruptions. It was critical in maintaining operational stability and ensuring business continuity. Using a quantitative design, as researchers above, Tumuhairwe and Ahimbisibwe (2016) also confirmed that "effective risk management has a stronger influence on records management performance than that on procurement." In other words, even from an African perspective, risk management practices are crucial to procurement functions. However, geographical scope and contextual gaps are apparent in these studies since Kenya was not captured, hence the need for the present study.

In Kenya, the rising demand for transparency and accountability in procurement activities, especially in the public sector, has seen increased adoption of procurement controls. This trend motivated the likes of Mwau et al. (2018) to investigate the effectiveness of these controls. For instance, this research looked into the impact of procurement risk management on the procurement performance of mega projects in the energy sector using a descriptive research

design. Results from inferential statistics suggest that procurement risk assessment has a significant positive influence on procurement performance. In another study, Ondore et al. (2018) looked into the relationship between procurement risk management strategies and procurement performance of sugar firms in Kenya. Data was collected from 45 middle-level management employees and analyzed using quantitative data analyses. All the strategies analyzed had a positive and significant effect on procurement performance (efficiency and effectiveness). The study demonstrated that procurement risk management improved procurement performance by up to 45%.

Similarly, Muinde et al. (2020) found that “a 1% change in procurement risk management leads to a 17.3% change in procurement performance in public universities in Kenya.” In this study, 31 chartered public universities were studied using a descriptive research survey design and inferential statistics for analysis. However, using regression analysis to analyze data obtained from county government officials, Barmoiben and Odari (2022) are of different opinions; they believe that risk monitoring is the most important risk management strategy in driving procurement performance.

### **2.3.2 Effectiveness of Regular Auditing on Procurement Performance**

The empirical attention on the use of procurement audits in improving procurement performance is growing. For instance, Anin et al. (2024) sought to determine its strategic importance in improving public procurement outcomes in Ghana’s public sector organizations using a quantitative analysis. After surveying 223 public sector organizations, the researchers observed that “internal and external aspects of procurement audit relate differently to self-reported procurement quality performance under differing conditions of top management commitment.” Still, in Ghana, using the structural equation modeling approach, Karikari Appiah et al. (2023) demonstrate that the relationship between internal audit effectiveness and procurement performance is mediated by cultural and strategic resilience dimensions.

Research by Sallwa (2022) contributed to the significance of procurement audit on procurement effectiveness literature from the perspective of Tanzania’s public organizations. After surveying 154 respondents and using correlation and regression analyses for data gathered, the researcher confirmed that “value for money audit has a highly significant contribution to the procurement effectiveness followed by the compliance audit; on the other hand, the strategic audit showed an insignificant contribution to the procurement

effectiveness.” Also in Tanzania, David (2022) surveyed 241 respondents from LGAs, PPRA, Internal Audit General office and the National Audit office using questionnaires, the researcher found that “internal audit competencies, procedure, and independence affect the contribution of internal audit to procurement positively.”

Kenya has not been left behind in the research about the effectiveness of audits on the procurement performance. Research by Gichuki and Paul (2020) is a classic reference point for the topic. The study examined the effect of public procurement audits on the performance of state cooperations using a descriptive design whereby 200 respondents were surveyed, and data was analyzed using multiple regression and correlation analysis. They found that “preparation and planning auditing, information and publicity auditing, evaluation of received tenders auditing, award and execution of contract auditing have a positive relationship with performance of state corporations.” Using a similar research design but involving 52 heads from procurement, finance, ICT, and audit department in their survey, Gitonga and Kyule (2021) noticed that “compliance audit had a significant influence on supply chain performance of state corporations.” In the context of NGOs, Jembe and Wandera (2019) adopted a case-study approach but observed that accountability, conformity, and transparency translate positively to the procurement performance of NGOs in Mombasa.

### **2.3.3 Effectiveness of Supplier Management on Procurement Performance**

The relationship between supplier management and procurement performance was researched by Njagi and Shalle (2016), who focused on East African Breweries using a case study. Findings from inferential statistics indicate that four variables – supplier integration, supplier quality management, supplier collaboration, and supplier training – accounted for 81% variance in procurement performance. Elsewhere in Tanzania, Chagalima et al. (2023) demonstrated that supplier monitoring improved procurement performance in terms of cost reduction, lead times, and buyer satisfaction. The study used a confirmatory factor analysis (CFA) and PERFORMANCE macro on primary data collected from 179 public procuring organizations using a structured survey questionnaire.

An in-depth analysis by Denhere et al. (2023) looked into the impact of supplier relationship management on the performance of Zimbabwean paint manufacturing firms. After surveying 116 employees and analyzing data using inferential statistics via SPSS, findings revealed that supplier relationships enhanced performance. However, the research noted a greater

inadequacy of resources to support supplier relationships and that a significant number of firms did invest in supplier relationship management. Beatrice and Mulyungi (2019) examined the relationship between supplier relationship management and procurement performance in Rwanda's SKOL Breweries Limited. Data was collected from 108 employees using questionnaires and analyzed using quantitative techniques. The study found that supplier relationship management accounted for up to 74.7% variance in procurement performance.

Descriptive research by Momanyi and Paul (2018), which was based on Kenya's Sidian Bank, also offers valuable insights into the topic. Primary data was collected using questionnaires and analyzed using quantitative data analyses via SPSS. The study found that "a unit increase in supply chain integration would lead to an increase in procurement performance." In another study, Mogere and Otuya (2020) adopted a qualitative review of the literature to unearth the relationship between supplier management and procurement. The study concluded that supplier management enhances procurement via "reduced costs, faster delivery, and increased efficiency and effectiveness." According to Kiloli and Chege (2023), whose focus was on Kenya's 65 parastatals, supplier management practices – supplier selection and development – had a positive significant impact on procurement performance. However, the impact of quality management was insignificant.

#### **2.3.4 Effectiveness of Contract Management on Procurement Performance**

Research by Abutabenjeh et al. (2021) from the United States contributed to the topic by examining the perceived value of procurement and contract management certification. Public procurement and contract management officials were asked to provide their views on the intrinsic and extrinsic values of certification. According to the findings, a significant portion of the respondents believed that the certification was valuable both to the procurement profession and procurement performances for an organization. However, a section of the respondents did not see the value in the certification. Another research by Abutabenjeh and Rendon (2023) sought to analyze contract management deficiencies in state auditor reports. A total of 165 deficiencies were identified, most of which "aligned with the procurement of professional services and occurred during the acquisition planning, source selection, and contract administration contracting phases."

An empirical review by Masoud et al. (2023) sought to determine the correlation between contract management and procurement performance in Tanzania's parastatals. More

specifically, the researchers were interested in the effectiveness of contract preparation, the competence of the contract management team, and the contract allocated budget on procurement performance. After surveying 241 respondents and analyzing data using multiple regression analysis, the findings revealed that the three variables had a significant positive effect on procurement performance. Still, in Tanzania, after surveying 164 procurement entities and using descriptive and inferential statistics, Matto et al. (2021) discovered that contract formation and quality control are significant predictors of value for money in procurement. However, contract administration, time control, and cost control were not.

Hassan and Omwenga (2023) were interested in the effect of contract management on procurement performance among Kenya's state corporations. A sample of 157 individuals was surveyed using questionnaires, and correlation and multiple regression analysis was employed for data analysis. Findings a statistically significant relationship between "contract administration, contract dispute resolution, contract relationship management, contract monitoring, contract evaluation, and procurement performance." From the public universities' perspective, Muinde (2022) confirmed that "buyer-supplier collaboration, procurement risk management, transparency and accountability, and contract records management influence procurement performance." They also observed that legal compliance moderated the relationship between contract management and procurement performance.

### **2.3.5 Moderating Effect of Organization Size on Risk Management**

The moderating role of organization size was tested by Wang et al. (2018) who looked into "whether organizational learning (OL) and risk management maturity (RMM) varies based on firm size." Findings from data collected from managers of construction companies in Malaysia, which were analyzed using PLS confirmed that "regardless of firm size, factors of OL can play an important role in enhancing the ability of construction organizations to attain better risk management practice." In other words, according to the study, firm size does not have a statistically significant effect on the effectiveness of risk management practices. However, it is worth noting that this study was in the context of Malaysian construction sector and the moderating effect of firm size on the effectiveness of risk management on procurement performance was not tested, denoting geographical, contextual, and conceptual limitations.

Offering a different perspective, Achimugu et al. (2023) hold the view that the effectiveness of risk management varies depending on the size of the organization. In particular, after surveying

44 financial firms in Nigeria, the researchers observed that “market risk without moderation is insignificant positive at all levels of significance whereas the indirect relationship of market risk as moderated by firm size has a significant negative effect on return on assets.” This research underscores the importance of firm size as a moderating factor when developing a risk management framework. Though groundbreaking, it is noting that the study is not without its limitations. It was based on Nigeria’s financial sector whereby the moderating effect of firm size on the impact of risk management on profitability was measured. The geographical, contextual, and conceptual gaps in this study warrants further research into the current topic.



## 2.4 Summary of Literature and Knowledge Gaps

Table 2.1 provides a summary of peer-reviewed articles analyzed in the chapter, gaps identified, and how the proposed study will address those gaps.

**Table 2. 1: Summary of Literature and Gaps**

Researcher(s)	Objective	Findings	Gaps Identified	Focus of the Study
Sysyk (2020)	To assess the regulatory framework and the current control system in procurement for public funds	Risk assessment systems optimized control and increased efficiency and effectiveness	Scope: the study was based in Ukraine. Contextual: was based on government procurement Methodological: qualitative design was utilized.	The current study was based in Kenya and will focus on procurement performance in humanitarian NGOs.
Pham et al. (2021)	To Develop risk management performance for general contractors in the bidding stage for DB projects	Risk assessment frameworks are imperative for the success of DB projects	Scope: the study was based in Vietnam. Methodological: qualitative design was utilized. Contextual: study was based on DB projects.	The current study was based on quantitative data and will focus on procurement performance in humanitarian NGOs in Nairobi, Kenya.
Oyelami and Shittu (2019)	To assess risk management techniques for construction projects under design bid build and design & build procurement methods in Abuja, Nigeria	Risk management techniques improved project success.	Scope: the study was based in Abuja, Nigeria. Conceptual: focus was on risk management. Contextual: context was construction projects	The current study focused on procurement performance in humanitarian NGOs in Nairobi, Kenya.

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
Enzokuhle (2024)	To examine the effectiveness of risk management strategies in mitigating supply chain disruptions in South Africa	Risk management helped maintain operational stability and ensure business continuity	Scope: the study was based in South Africa. Conceptual: focus was on risk management. Contextual: lacks context of NGOs.	The current study focused on procurement performance in humanitarian NGOs in Nairobi, Kenya.
Tumuhairwe and Ahimbisibwe (2016)	To analyze procurement records compliance, effective risk management and records management performance:	Effective risk management has a stronger influence on records management performance than that on procurement	Scope: the study was based in Uganda. Conceptual: focus was on risk management. Contextual: lacks context of NGOs.	The proposed study will focus on procurement performance in humanitarian NGOs in Nairobi, Kenya.
Mwau et al. (2018)	To assess the influence of procurement risk management on procurement performance of mega projects in the energy sector in Kenya	Procurement risk management improved procurement performance.	Contextual: context of the study was mega projects in the energy sector.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Muinde et al. (2020)	To determine the influence of procurement risk management on procurement performance in public universities in Kenya	1% change in procurement risk management leads to 17.3% change in procurement performance in public universities	Contextual: context of the study was public universities.	The proposed study will focus on risk assessment and its impact on procurement performance among NGOs.
Anin et al. (2024)	To enhance procurement quality performance in a developing country: the roles of procurement audit and top management commitment	Internal and external audits behave differently with procurement with regard to top management commitment.	Scope: the study was based in Ghana. Contextual: lacks context of NGOs.	The current study focused on risk assessment and its impact on procurement performance among NGOs.

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
Karikari Appiah et al. (2023)	To explore internal audit effectiveness as a boon to public procurement performance: a multi mediation model	The relationship between internal audit and procurement is mediated by cultural and strategic resilience	Scope: the study was based in Ghana. Contextual: lacks context of NGOs.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Sallwa (2022)	To determine the influence of procurement audit on procurement effectiveness	Value for money audit has high significant contribution to the procurement effectiveness followed by the compliance audit; on the other hand, the strategic audit showed an insignificant contribution to the procurement effectiveness	Scope: the study was based in Tanzania. Contextual: focused on public government organizations.	The proposed study will focus on risk assessment and its impact on procurement performance among NGOs.
David (2022)	To analyze the contribution of internal audits on the effectiveness of procurement assignments in Tanzania's LGAs	Internal audit competencies, procedure and independence affect positively the contribution of internal audit to procurement	Scope: the study was based in Tanzania. Contextual: focused on local government authorities.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Gichuki and Paul (2020)	To determine the Effect of Public Procurement Audit on Performance of State Corporations in Kenya	“Preparation and planning auditing, information and publicity auditing, evaluation of received tenders auditing, award and execution of contract auditing have a positive relationship with performance of state corporations.”	Contextual: context of the study was state corporations.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Gitonga and Kyule (2021)	To assess the effect of compliance audit of the	“Compliance audit had a significant influence on supply	Contextual: context of the study was state corporations.	The current study focused on risk assessment and its impact on

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
	procurement system on performance of supply chain management in state corporations in the ministry of transport	chain performance of state corporations.”		procurement performance among NGOs.
Jembe and Wandera (2019)	To examine the effect of procurement audit on the procurement performance of NGOs in Kenya: a case study of compassion Kenya, Mombasa.	Accountability, conformity and transparency translate positively on procurement performance of NGOs	Scope: the study was based in Mombasa. Contextual: context of the study was state corporations.	The current study focused on risk assessment and its impact on procurement performance among humanitarian NGOs in Nairobi.
Li (2022)	To develop a RM system for construction procurement in NHS healthcare infrastructure projects	Risk management as a whole, including ongoing risk monitoring, produced “better value for money, integrated project team, strategic risk response activities, communication management and stakeholder management.”	Scope: the study was based in the UK. Contextual: focused on national healthcare system.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Al Qubaisi and Emran (2021)	To determine the impact of RM on procurement performance through SSC within ADNOC in UAE	The increased adoption of e-procurement integrated with risk monitoring saw a subsequent rise in procurement performance	Scope: the study was based in UAE. Contextual: focused on Abu Dhabi National Oil Company. Methodological: an empirical review of literature was used.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Ismail et al. (2018)	To examine the relationship between monitoring mechanisms and procurement issues in public sectors	Procurement procedures and internal auditors have negative relationship towards	Scope: the study was based in Asia. Contextual: focused on public sector organizations.	The current study focused on risk assessment and its impact on procurement performance among NGOs.

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
		procurement issues in the public sector		
Ondore et al. (2018)	To explore the relationship between procurement risk management strategies and procurement performance of sugar firms in Kenya	All the strategies analyzed had a positive and significant effect on procurement performance	Contextual: context of the study was sugar firms.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Barmoiben and Odari (2022)	To determine the role of supply chain risk management on procurement performance in county governments in Kenya	risk monitoring is the most important risk management strategy in driving procurement performance	Contextual: context of the study was county governments in Kenya.	The current study focused on risk assessment and its impact on procurement performance among NGOs.
Njagi and Shalle (2016)	To determine the role of supplier management on procurement performance in manufacturing sector	Supplier management accounted for 81% variance in procurement performance.	Contextual: context of the study was manufacturing sector in Kenya.	The current study focused on supplier management and its impact on procurement performance among NGOs.
Momanyi and Paul (2018)	To assess the influence of supplier management on procurement performance.	A unit increase in supply chain integration would lead to an increase in procurement performance	Contextual: context of the study was the banking sector in Kenya.	The current study focused on supplier management and its impact on procurement performance among NGOs.
Changalima et al. (2023)	To examine supplier monitoring and procurement performance in the public sector in Tanzania.	Supplier monitoring has a significant effect on procurement performance; contract	Scope: the study was based in Tanzania. Contextual: focused on public sector organizations.	The current study focused on supplier management and its impact on procurement performance among humanitarian NGOs.

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
		management moderates the relationship between the two.	Conceptual: research was limited to supplier monitoring.	
Mogere and Otuya (2020)	To leverage procurement performance through effective supplier relationship management	Supplier management enhances procurement via “reduced costs, faster delivery and increased efficiency and effectiveness.”	Contextual: the study lacks specific context. Methodological: the study adopted a qualitative review of literature.	The current study focused on supplier management and its impact on procurement performance among humanitarian NGOs.
Kiloli and Chege (2023)	To explore supplier management practices and procurement performance of selected parastatals	Supplier management had positive significant impact on procurement performance.	Contextual: the used the context of parastatals.	The proposed study will focus on supplier management and its impact on procurement performance among humanitarian NGOs.
Beatrice Mulyungi (2019)	To assess the role of supplier relationship management on procurement performance in manufacturing sector in Rwanda	supplier relationship management accounted for up to 74.7% variance in procurement performance	Scope: the study was based in Rwanda. Contextual: focused on breweries sector. Conceptual: research was limited to supplier relationship management.	The current study focused on supplier management and its impact on procurement performance among humanitarian NGOs.
Denhere et al. (2023)	To evaluate resource allocation and supplier relationship management towards the performance of the manufacturing industry	Supplier relationship management enhances performance	Scope: the study was based in Zimbabwe. Contextual: focused on paint manufacturing sector. Conceptual: research was limited to supplier relationship management.	The current study focused on supplier management and its impact on procurement performance among humanitarian NGOs.

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
Abutabenjeh et al. (2021)	To examine the perceived value of public procurement and contract management certification.	Varying opinion on the value of the certification with many of the opinion that the certification is valuable.	Scope: the study was based in the United States. Contextual: the study lacks clear context. Conceptual: the study failed to examine the relationship between the variables. Methodological: qualitative approach was used.	This study focused on supplier management and its impact on procurement performance among humanitarian NGOs.
Abutabenjeh and Rendon (2023)	To identify procurement and contract management deficiencies	A total of 165 deficiencies were identified, most of them aligned with the procurement of professional services and occurred during the acquisition planning, source selection, and contract administration and contracting phases.	Scope: the study was based in the United States. Contextual: the study lacks clear context. Conceptual: the study failed to examine the relationship between the variables. Methodological: qualitative approach was used.	This study focused on supplier management and its impact on procurement performance among humanitarian NGOs.
Matto et al. (2021)	To determine the influence of contract management on value for money in procurement in Tanzania.	Contract formation and quality control were significant attributes of for money. Conversely, contract administration, time control, and cost control were not.	Scope: the study was based in Tanzania. Contextual: the study lacks clear context.	This study focused on supplier management and its impact on procurement performance among humanitarian NGOs.

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
Masoud et al. (2023)	To analyze procurement contract management and procurement performance in parastatal organizations in Tanzania	contract preparation, the competence of the contract management team, and the contract allocated budget had significant effect on procurement.	Scope: the study was based in Tanzania. Contextual: the context of the study was Tanzania's parastatals.	This study focused on supplier management and its impact on procurement performance among humanitarian NGOs.
Hassan and Omwenga (2023)	To assess the effect of contract management on procurement performance among Kenya's state corporations	“Contract administration, contract dispute resolution, contract relationship management, contract monitoring, contract evaluation, and procurement performance.”	Contextual: the used the context of state corporations.	This study focused on supplier management and its impact on procurement performance among humanitarian NGOs.
Muinde (2022)	To explore contract management on procurement performance in public universities in Kenya	buyer supplier collaboration, procurement risk management, transparency and accountability, and contract records management influence procurement performance	Contextual: the used the context of public universities.	This study focused on supplier management and its impact on procurement performance among humanitarian NGOs.
C. Wang et al. (2018)	Whether organizational learning (OL) and risk management maturity	Regardless of firm size, factors of OL play a critical role in enhancing the ability to	Geographical: study based in Malaysia	This study focused on the moderating effect of firm size on risk management and procurement

<b>Researcher(s)</b>	<b>Objective</b>	<b>Findings</b>	<b>Gaps Identified</b>	<b>Focus of the Study</b>
	(RMM) varies based on firm size.	attain better risk management practice	Contextual: focused on construction companies Conceptual: assess moderating effect of firm size on OL and RMM.	performance among humanitarian NGOs.
Achimugu et al. (2023)	Moderating Effect of Firm Size on Risk Management and Profitability of Quoted Financial Firms in Nigeria	market risk without moderation is insignificant at all levels whereas the indirect relationship of market risk as moderated by firm size has a significant negative effect on ROA	Geographical: based in Nigeria Contextual: focused on financial firms Conceptual: assess moderating effect of firm size on risk management and profitability.	This study focused on the moderating effect of firm size on risk management and procurement performance among humanitarian NGOs.

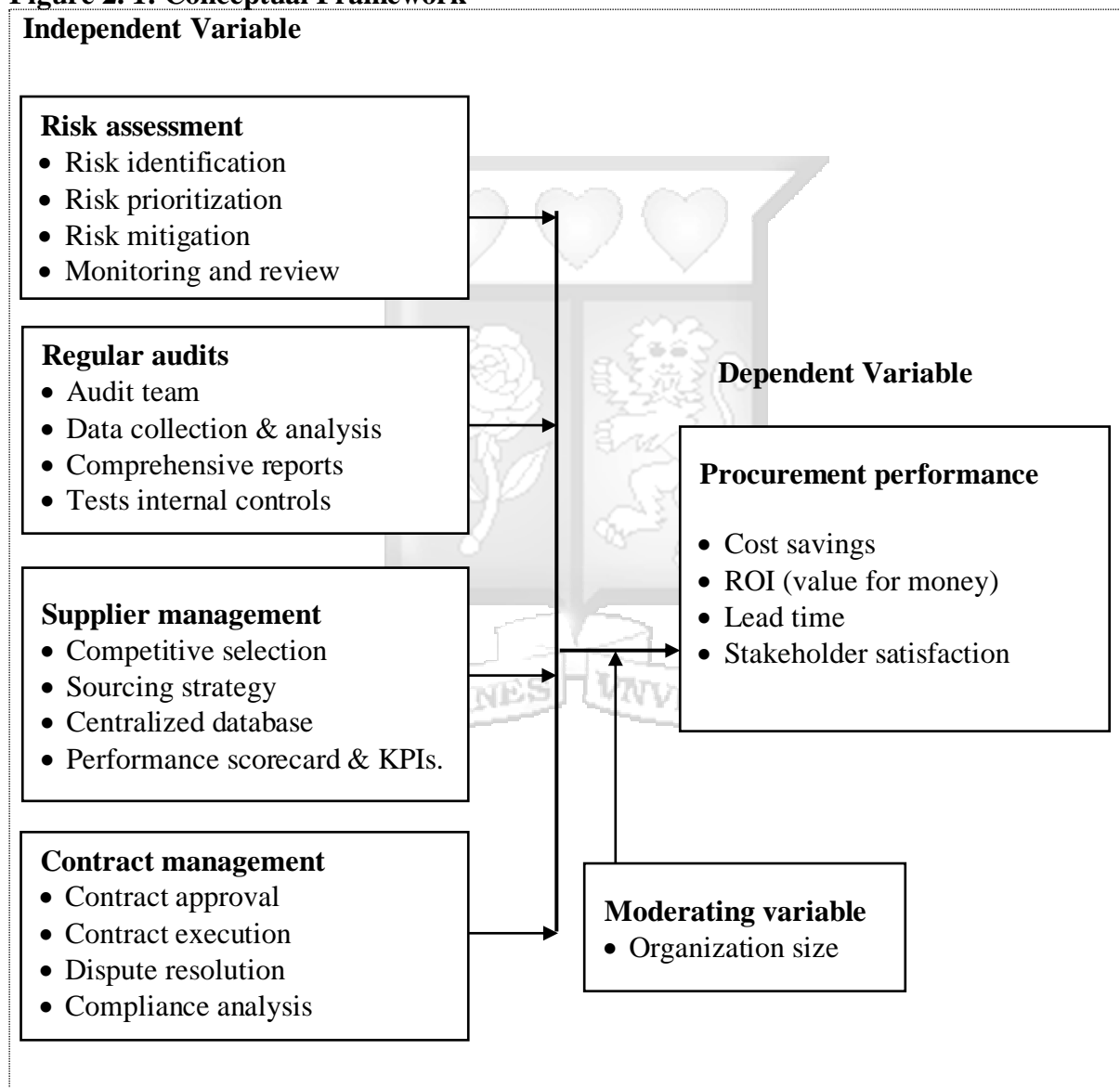
*Source: Researcher, 2024*



## 2.5 Conceptual Framework

This study sought to determine the effectiveness of risk management in enhancing the procurement performance of humanitarian NGOs in Nairobi, Kenya. Risk assessment, regular audits, supplier management, and contract management constituted the independent variables. The procurement performance was the dependent variable, and organizational size was the moderating variable. Figure 2.1 shows the relationship between these variables.

**Figure 2. 1: Conceptual Framework**



*Source: Researcher, 2025*

## 2.6 Operationalization of Variables

Table 2.2 illustrates how the variables of the study were operationalized and measured.

**Table 2.2: Operationalization of Variables**

<b>Variable</b>	<b>Indicators</b>	<b>Measurement</b>	<b>Source</b>
<b>Independent variables</b>			
Risk assessment	<ul style="list-style-type: none"> <li>• Risk identification</li> <li>• Risk prioritization</li> <li>• Risk mitigation</li> <li>• Monitoring and review</li> </ul>	Five-point Likert scale	(Chen et al., 2021; Kamal & Elim, 2021; Ni et al., 2022; Ramkumar et al., 2016)
Regular audits	<ul style="list-style-type: none"> <li>• Audit team</li> <li>• Data collection &amp; analysis</li> <li>• Comprehensive reports</li> <li>• Test internal controls</li> </ul>	Five-point Likert scale	(Anin et al., 2024; Milojević et al., 2021; Sallwa, 2022)
Supplier management	<ul style="list-style-type: none"> <li>• Competitive selection</li> <li>• Sourcing strategy</li> <li>• Centralized database</li> <li>• Performance scorecard &amp; KPIs.</li> </ul>	Five-point Likert scale	(Amoako-Gyampah et al., 2019; Kiloli & Chege, 2023; Njagi & Shalle, 2016b)
Contract management	<ul style="list-style-type: none"> <li>• Contract approval</li> <li>• Contract execution</li> <li>• Dispute resolution</li> <li>• Compliance analysis</li> </ul>	Five-point Likert scale	(Masoud et al., 2023; Matto et al., 2021; Rajeev, 2023)
<b>Dependent variable</b>			
Procurement performance	<ul style="list-style-type: none"> <li>• Cost savings</li> <li>• ROI (value for money)</li> <li>• Lead time</li> <li>• Stakeholder satisfaction</li> </ul>	Five-point Likert scale	(Gupta & Narain, 2012; Kumar & Ganguly, 2021; Munyimi, 2019)
<b>Moderating variable</b>			
Organization size	<ul style="list-style-type: none"> <li>• Operational scope</li> </ul>	Numerical	(Achimugu et al., 2023)

*Source: Researcher, 2025*

## 2.7 Chapter Summary

The chapter provides an in-depth review of the literature on the topic under investigation, along with gaps in existing studies. It also defines the theoretical and conceptual frameworks for the study as well as the operationalization of variables. The empirical literature reviewed in the study is not without gaps. The gaps identified include geographical scope (i.e., studies conducted outside Kenya), contextual (i.e., the humanitarian sector was not covered as a

context), methodological (i.e., some studies adopted qualitative methods, failing to quantify the effectiveness of risk management on procurement), and conceptual (i.e., variables measured in some studies are not consistently with what this study aimed to assess).



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section outlines the study's research methodology. It highlights the research philosophy, research design, population, sampling method, data collection performance, data analysis, research quality, and ethical considerations to be adopted by the study.

#### **3.2 Research Philosophy**

According to Ryan (2018), the four known philosophical research paradigms guide research methods and analysis: positivism, interpretivism, pragmatism, and critical theory. Positivism underpins quantitative research methods, emphasizing objectivity, measurable variables, and statistical analysis. Interpretivism drives qualitative research, focusing on understanding human experiences, perceptions, and institutional dynamics (Alharahsheh & Pius, 2020). Pragmatism encourages the use of both qualitative and quantitative methods, selecting tools based on the research problem rather than rigid philosophical constraints. Ryan (2018) says critical theory focuses on exploring social inequalities, power structures, and systemic influences, often using qualitative, interpretive, and participatory approaches to challenge dominant narratives and drive social change.

Therefore, the pragmatic research paradigm was highly suitable for this study as it integrated elements of both positivism and interpretivism, enabling a more holistic exploration of risk management practices and their impact on procurement performance (Dudovskiy, 2016). Quantitative methods and statistical analysis were employed to measure the extent of adoption of risk management practices and their correlation with procurement performance, allowing for generalizable insights (Imran, 2024). At the same time, qualitative methods provided a rich contextual understanding of how these risk management practices function in humanitarian settings, identifying specific challenges and effective strategies. This dual approach ensured that the research not only quantifies relationships but also uncovers the practical implications, nuances, and lived experiences, ultimately generating findings that are both robust and directly applicable to improving humanitarian procurement operations.

### **3.3 Research Design**

Research design is defined as a structured plan showing how parts of the research work in unison to address the research questions (Bostley, 2019). It is the research plan and, therefore, the foundation upon which research is framed and carried out. Different types of research designs are case studies, experimental, longitudinal, and cross-sectional designs. Based on the data type, the research design can be either qualitative or quantitative. Qualitative design is implemented in research where one seeks to make meaning of constructs like attitudes, events, and situations through interpretive practice. The data are often collected through interviews, ethnography, and case studies, which are often subjective performances that make results less generalizable. Quantitative research design, on the other hand, involves an objective performance in terms of data analysis through statistical procedures. Using quantitative methods helps answer the how, when, and what questions. If adequate samples are obtained, such results are much more generalizable. Typical methods of data collection in quantitative design include the research questionnaire and interview guide (Sciberras & Dingli, 2023). Based on data analysis approaches, other designs include explanatory, descriptive, causal, and exploratory.

Because of the research philosophy, this study followed a descriptive cross-sectional research design with a mixed-methods approach. This is because both qualitative and quantitative data were examined within similar time frames and across humanitarian organizations. This helped to analyze the effectiveness of risk management practices on procurement performance in humanitarian organizations.

### **3.4 Population and Sampling**

This section of the chapter defines the target population and breaks down the sampling technique and sample size the study adopted.

#### **3.4.1 Target Population**

Population refers to the complete number of objects or entities that can be included in a particular study (Taherdoost, 2018a). The study's units of analysis comprised humanitarian NGOs in Nairobi, Kenya. NGO Coordination Board indicates that there are 12,162 NGOs registered in Kenya, out of which 1,143 active NGOs are in Nairobi County, with 89 of them

within the humanitarian sector (Annual NGO Sector Report Year 2021/2022, 2023). Therefore, this study targeted 89 humanitarian NGOs in Nairobi City County as the units of analysis.

### **3.4.2 Sampling**

A sample is a representative part of a population. In research, a sample size refers to the units selected to be analyzed to make conclusions regarding a population. In relation to sampling, a major question regards the right sample for representativeness (Taherdoost, 2018a). An adequate sample should be determined, and objects drawn accordingly to ensure an adequate representation of the population under study. This study employed a multi-stage sampling design. In the initial stage, a census approach was adopted, where all 89 humanitarian entities were targeted.

Subsequently, in the second stage, purposive sampling was applied to select key informants within these NGOs, specifically targeting the heads of risk and procurement departments. According to Isaac (2023), this nonprobability sampling method involves selecting participants based on their attributes, knowledge, experiences, or some other criteria. Therefore, since they interact directly with procurement and risk management functions in their respective organizations, the heads of procurement and risk management were instrumental in providing valuable insights needed to complete the study.

### **3.5 Data Collection**

This study relied on qualitative and quantitative cross-sectional data, which were collected from the heads of the procurement and risk management units via questionnaires and interviews. The questionnaires were structured, consisting of closed-ended questions to obtain consistent quantitative insights on the research variables. Questionnaires were preferred because they provided quantitative data that would be used to test the relationships between the variables. The questionnaire was divided into five sections: Section A asked questions about respondents' general information, Sections B to F contained questions on the study's variables: risk assessment, regular audits, supplier management, contract management, and procurement performance.

The development of the questionnaire was based on the study's objectives, research questions, and conceptual framework, ensuring alignment with the core themes and analytical focus of

the research. Additionally, insights from similar studies on the topic were incorporated to enhance methodological rigor, validity, and relevance, ensuring that the questionnaire effectively captured the necessary data to address the research problem comprehensively.

Data was measured using a five-point Likert scale whereby 5=strongly Agree (SA), 4=Agree (A), 3=Undecided (U), 2=Disagree (D), and 1=Strongly Disagree (SD). The questionnaires were disseminated through various methods, including online and offline channels. Willing participants were invited to select their preferred participation method, either an electronic version or a physical copy of the questionnaire. Respondents who chose the online option received a link to the digital questionnaire, while those who preferred the drop-off/pick-up method received a physical copy. Exhausting both online and offline channels helped elicit a higher response rate.

A semi-structured interview guide was utilized to collect qualitative data from respondents, ensuring a balance between structured inquiry and the flexibility to explore deeper insights (Taherdoost, 2021). This approach allowed for follow-up questions, clarification requests, and contextual elaborations, enriching the depth and reliability of the responses. Depending on participant preferences, interviews were conducted either in person or virtually through platforms such as Google Meet, Zoom, and Microsoft Teams, ensuring accessibility and convenience while maintaining engagement and data quality.

### **3.6 Data Analysis**

The completed questionnaires were collected, sorted, organized, and cleaned. Questionnaires with errors or incomplete responses were eliminated. Eligible questionnaires were coded and input into the Statistical Package for Social Sciences (SPSS) version 24 for analysis. The study employed descriptive and inferential statistical techniques to analyze collected data.

#### **3.6.1 Descriptive Statistics**

Descriptive statistics was used to organize and summarize the main qualities of the dataset. The study utilized measures of central tendency (mean) to describe the averages of values and measures of variability (standard deviation) to indicate how spread out the values were.

### 3.6.2 Inferential Statistics

The study also utilized inferential statistics to make inferences and draw conclusions about the target population using the sample data. In particular, the study performed correlation analysis and multiple regression analysis.

#### 3.6.2.1 Correlation Analysis

Correlation analysis was used to examine the association between each independent variable and the dependent variable. The study first conducted a normality test to determine whether to perform parametric or nonparametric tests for correlation analysis. According to Senthilnathan (2019), “the correlation coefficient is measured on a scale that varies from + 1 through 0 to – 1; a positive coefficient denotes a positive correlation, a negative coefficient denotes a negative correlation, and zero suggests the absence of correlation.”

#### 3.6.2.2 Multiple Regression Analysis

Multiple regression analysis was performed to determine the effect of the independent (predictor) variables on the dependent (outcome) variable. Before then, the study undertook diagnostic tests – the test for heteroscedasticity, the test for normality, and the test for multicollinearity – to determine the appropriateness of the regression model. The multiple linear relationships between the variables are expressed using the model below:

$$\text{PROCP} = \beta_0 + \beta_1 \text{RSKAS} + \beta_2 \text{RAUDIT} + \beta_3 \text{SUPMNGT} + \beta_4 \text{CONMGT} + \epsilon$$

Where: PROCP=procurement performance,  $\beta_0$ =constant/intercept  $\beta_1$  to  $\beta_4$ =beta coefficients, RSKAS=risk assessment, RAUDIT=regular audits, SUPMNGT=supplier Management, CONMGT=contract management and  $\epsilon$ =error term.

#### 3.6.2.3 Qualitative Analysis

For the qualitative data, the study employed thematic analysis, a widely used method for identifying, analyzing, and interpreting patterns within interview responses. This approach allowed researchers to systematically categorize recurring themes, ensuring a structured and meaningful exploration of qualitative insights.

### **3.7 Research Quality**

Research should be done in a credible way such that it is repeatable, and its findings should be reliable and valid. The data should be credible, which means the instruments used to collect the data should be appropriate, and the methods implemented should be appropriate for the type and nature of the data. Also, adherence to the assumptions of linear regression is necessary.

#### **3.7.1 Pilot Study**

The pilot testing was conducted to pretest the questionnaire. That helped to achieve the validity and reliability of the research instrument (Sugiarta et al., 2023). As recommended by the scholars above, the pilot study should be established, but it is dependent on the sample size. Since the sample size for this study was 178 respondents, the study conducted a pilot test on 10% of the sample, which is 18 procurement and risk management heads in selected NGOs picked through convenient sampling by choosing the NGOs close to the researcher.

#### **3.7.2 Research Validity**

Content validity was used to determine validity. The use of experts throughout the research performance can help to enhance the research instruments' validity through rich content. The research achieved content validity by consulting university faculty, including the assigned supervisor, to refine the research methodology and data collection instrument, ensuring that the developed constructs effectively and accurately measure research validity in alignment with academic standards (Sugiarta et al., 2023). By engaging professionals in the industry through a pilot testing performance, the instrument was enhanced to reach higher content validity. The opinions of the employees in the procurement and risk management departments were considered, and their knowledge of the discipline enhanced the instruments.

#### **3.7.3 Research Reliability**

Reliability is the consistency of the research instrument (Taherdoost, 2018b). In this research, Cronbach's alpha was used to quantitatively measure the questionnaire's reliability. The recommended Cronbach's alpha of 0.7 for a questionnaire is said to have adequate internal consistency. This study adopted a Cronbach's alpha of 0.7. That factor analysis was adopted using the questionnaire results obtained during pilot testing, and the analysis was undertaken on the constructs for each of the study variables.

### **3.8 Ethical Considerations**

Ethics in research has been defined as the actions of the researcher and the research population (Saunders et al., 2019). Ethical clearances were obtained from Strathmore University's Institutional Review Board (IRB) and subsequently from the National Commission of Science, Technology, and Innovation (NACOSTI) for the study permit.

Before administering questionnaires, willing participants signed consent forms enabling them to participate on a voluntary basis, and they had the right to withdraw at any stage. The principle of doing no harm was especially important to the study (Saunders et al., 2019). If, at any stage in the research, any information was disclosed that compromised the safety of the participant, this information was eliminated from the study. All data provided by participants was kept confidential and was utilized for research purposes only. Confidentiality was achieved by delinking specific information from data subjects. The study also guaranteed anonymity by not identifying the respondents and organizations that participated in the research.

### **3.9 Chapter Summary**

This chapter describes the methods and strategies that were utilized in conducting the study. It details data collection methods, data analysis methods, target population, and sampling techniques, as well as how research quality and ethical standards were maintained.



## CHAPTER FOUR

### PRESENTATION OF FINDINGS

#### 4.1 Introduction

This study sought to establish the effectiveness of risk management on procurement performance within humanitarian NGOs in Nairobi, Kenya. This section details the results of the data collection and analysis, presented in a systematic manner through text, tables, and figures.

#### 4.2 Response Rate

The study aimed to collect data from 178 respondents, comprising 89 heads of procurement (to complete questionnaires) and 89 heads of risk management (to participate in interviews). The questionnaire response rate was 87.64% (78/89), and the interview participation rate was 55.06% (49/89), yielding an overall response rate of 71.35%, as illustrated in Table 4.1.

**Table 4. 1: Response Rate**

Category	Response	Total
Head of Procurement	Targeted number of respondents	89
	Number of respondents	78
	Response rate	87.64%
Head of Risk Management	Targeted number of interviewees	89
	Number of participants	49
	Participation rate	55.06%
<b>Overall response rate</b>		<b>71.35%</b>

Wu et al. (2022) point out that the typical response rate, irrespective of survey type and target respondents, is anywhere in the 20-40% range. They further point out that a response rate of 50% or higher is often acceptable, and those at the higher end of the scale denote high levels of motivation among respondents to participate. Therefore, an overall response rate of 71.35% is sufficient for the study to yield meaningful results.

### 4.3 Background Information

The demographic profile of the respondents was analyzed to provide context for the findings. This analysis included examining variables such as age, gender, education level, organizational tenure experience, and the geographical scope of their respective organizations to understand the composition of the sample and its potential influence on the results. Results are presented in Table 4.2.

**Table 4. 2: Background Information**

Background Information	Distribution	Frequency	Percentage
Gender	Male	67	52.76%
	Female	60	47.24%
Age	Under 30 years	5	3.94%
	31-40 years	42	33.07%
	41-50 years	53	41.73%
	Over 50 years	27	21.26%
Education level	Diploma	24	18.90%
	Bachelor	42	33.07%
	Masters	49	38.58%
	Doctorate	12	9.45%
Organizational tenure	Under 1 year	10	7.87%
	1-5 years	51	40.16%
	6-10 years	42	33.07%
	More than 10 years	24	18.90%
Geographical scope	National	36	46.15%
	Regional	24	30.77%
	Global	18	23.08%

As shown above, the respondent sample exhibited a near-equal gender distribution, with 52.76% male and 47.24% female participants. This is significant for the study because balanced gender distribution enhances the representativeness of the sample, allowing for more generalizable findings. The majority of the respondents were aged 41-50 years (41.73%), with only 3.94% of the respondent sample being under 30 years. Also, only 18.90% of the respondents held diplomas, and the rest (81.1%) held bachelor's, master's, and doctorate degrees. Higher education often correlates with greater specialized knowledge related to the

research topic, resulting in more informed perspectives. Lastly, A significant portion of respondents (40.16%) reported organizational tenure of 1-5 years, while only 7.87% had worked for less than one year. Higher levels of organizational tenure imply that most respondents had gathered sufficient experience within their organizations and were familiar with processes, policies, and potential challenges to provide contextual insights and perspectives.

Additionally, a significant portion of surveyed organizations (46.15%) operated primarily within the country, while 30.77% had a regional scope, focusing on East Africa and the broader African region. The remaining 23.08% maintained an international geographical scope, with operations worldwide. The diverse geographical scope provides specific insights and contexts on how risk management frameworks compare across different sizes of humanitarian agencies and how this comparison translates into procurement performance.

#### 4.4 Descriptive Statistics and Qualitative Findings

This section reports the findings derived from descriptive statistical analysis of the questionnaire data and thematic analysis of the interview transcripts.

##### 4.4.1 Risk Assessment

Respondents were asked to rate risk assessment practices of their respective humanitarian organizations on a five-point Likert scale where 1=strongly disagree and 5=strongly agree. A summary of the responses is provided in Table 4.3.

**Table 4. 3: Risk Assessment**

	Mean	S. Div
This organization has measures for identifying potential risks that may impede procurement functions.	3.1923	1.1959
This organization decides the order in which potential procurement risks deserve attention.	3.1026	1.1798
This organization has a robust framework for mitigating the effects of procurement risks.	2.8718	1.1991
This organization conducts continuous risk monitoring and reviews to ensure uninterrupted procurement.	3.0385	1.2321
<b>Overall Mean</b>	<b>3.0513</b>	<b>1.2017</b>

The composite mean for the risk assessment variable is 3.0513 at 1.2017 standard deviation. This value indicates a neutral to a slightly positive response, suggesting that, on average, respondents neither strongly agreed nor strongly disagreed with the statements related to risk assessment. A standard deviation of 1.2017 indicates relatively high variability in responses, an observation that can be attributed to the diversity of the response sample, as established in Section 4.3.

The item, “This organization has measures for identifying potential risks that may impede procurement functions”, received the highest mean score of 3.1026 at 1.1798 standard deviations, suggesting an element of neutrality but responses leaning more towards positive responses. This implies that a significant number of respondents felt positive towards their organization’s risk prioritization practices. However, the item “This organization has a robust framework for mitigating the effects of procurement risks” had the lowest mean score of 2.8718 at a 1.1991 standard deviation. This value indicates that respondents leaned towards disagreement with the statements related to the risk mitigation frameworks.

Interviews were conducted to gather more insights and organization-specific contexts regarding risk assessment practices. Findings from the thematic analysis suggest that the common risks encountered were fraud risk, non-compliance with donor requirements and regulations, inventory and asset losses, red tape during crises, financial risk, and sub-optimal planning. It is worth noting that these risks were pronounced in relatively smaller humanitarian entities as measured by the geographical scope of operations.

Out of the aforementioned risks, the ones that receive the highest priority, according to the interviewees, are fraud, financial, and non-compliance, primarily because of the impacts of these risks. For instance, **Interviewee 36** said, “...these risks receive the highest priority in our risk management framework because of their consequences if they occur: loss of resources for the organization, poor quality goods and services delivered, failure to satisfy our clients, loss of reputation, loss of donors’ confidence, ineligible costs to be refunded, legal prosecutions, penalties imposed by government, many audit findings, etc.”

Interviewees were asked about specific controls implemented to manage procurement risks; various controls were mentioned, and responses varied between interviewees. However, the common controls were procurement policies and procedures, forms and checklists, procurement committees, procurement processes review, approvals of purchase orders, risk

and compliance unit, training and education, contracts reviews, internal audits, the integral ERP system, increased due diligence, and capacity evaluation and upskilling. However, the availability of and extent to which these controls apply vary between organizations, with the large ones adopting more formal structures.

#### 4.4.2 Regular Audits

Respondents were asked to rate regular auditing practices of their respective humanitarian organizations on a five-point Likert scale, where 1=strongly disagree and 5=strongly agree. A summary of the responses is provided in Table 4.4.

**Table 4. 4: Regular Audits**

	Mean	S. Div
This organization has a capable audit team that provides oversight to address risks in procurement activities.	3.0769	1.4838
Relevant documents are gathered and analyzed to audit for anomalies in the procurement process.	3.0128	1.3240
Comprehensive procurement audit reports detailing identified issues and recommendations are published.	2.7949	1.4357
Internal controls for procurement risk are regularly tested for effectiveness.	3.1026	1.3444
<b>Overall Mean</b>	<b>2.9968</b>	<b>1.3970</b>

The overall mean for the regular auditing practices variable was 2.9968 at a 1.3970 standard deviation. This mean score is extremely close to 3.0, the neutral midpoint on a 5-point Likert scale, implying that, on average, respondents had a neutral perception of regular auditing practices—they neither strongly agree nor strongly disagree. However, a standard deviation of 1.3970 is relatively high, signifying a substantial spread of the responses from the mean score. This implies that there was a wide range of opinions and experiences related to regular auditing; some respondents strongly agreed, while others strongly disagreed.

The item “Internal controls for procurement risk are regularly tested for effectiveness” received the highest mean score of 3.1026 at a 1.3444 standard deviation. This means that, in general, respondents remained neutral on the testing of internal controls for procurement risk to ensure their effectiveness. However, a significant portion of them provided positive responses with a high standard deviation, indicating a substantial variability in perspectives and experiences

regarding this sub-variable. On the other hand, the item “Comprehensive procurement audit reports, detailing identified issues and recommendations, are published” received the lowest mean score of 2.7949 at a 1.4357 standard deviation. This indicates that a significant portion of respondents held negative opinions on the publication of procurement audit reports.

Interviews were held to gain further insights into the qualifications and expertise of the audit team and the frequency of risk management support for procurement. Responses varied depending on the organization. For instance, large institutions cited that the members of their internal audit team were fairly qualified and exhibited acceptable abilities in managing risks. For example, **Interviewee 13** mentioned that “...they all have over 10 years’ experience. In addition to bachelor’s, graduate diplomas, and master’s degree qualifications, the team has professional certification, among other qualifications. They are well-versed with procurement and related processes and are able to provide assurance and advisory services to the function...”

In contrast, smaller humanitarian organizations lacked formal and well-established internal audit departments. In light of the above, **Interviewee 23** responded, “Unfortunately, for now, we lack the capacity to manage a dedicated internal audit team.” The interviewee further explained that “we operate on limited budgets and prioritize direct program delivery. Allocating funds to a dedicated internal audit team can be challenging when resources are scarce.” This view, which was shared by interviewees from relatively smaller organizations, suggests that some organizations may not have the scale or complexity to justify a full-time internal audit team. Therefore, due to the limited resources, delivering aid often takes precedence over internal control measures.

The frequency with which the internal audit team was engaged for procurement risk support varied, according to the interviewees. Some organizations had policies dictating that internal auditing should be conducted periodically, that is, quarterly, semi-annually, and annually. For most organizations, internal audits are carried out annually, at the beginning of the year, or at the end of a fiscal year. This was confirmed by several participants, including Interviewee 3, who stated that “...The internal audit department has an annual audit plan which it follows, and which covers the procurement scope.” For a few organizations, though internal audits were performed periodically, they could still be conducted on an on-demand basis. For instance, **Interviewee 27** said, “We engage during scheduled audits and cross-functional engagements.”

### 4.4.3 Supplier Management

Respondents were asked to rate supplier management practices of their respective humanitarian organizations on a five-point Likert scale, where 1=strongly disagree and 5=strongly agree. A summary of the responses is provided in Table 4.5.

**Table 4. 5: Supplier Management**

	Mean	S. Div
This organization uses a competitive supplier selection process to ensure value for money.	3.0128	1.3627
This organization conducts thorough market analysis to inform its strategic procurement decisions.	2.5513	1.1356
For strategic procurement, we maintain a centralized supplier database to manage all supplier information.	3.0256	1.1507
This organization tracks and evaluates supplier performance using scorecards and KPIs.	2.7949	1.3709
<b>Overall Mean</b>	<b>2.8462</b>	<b>1.2550</b>

The overall mean for the supplier management variable was 2.8462 with a 1.2550 standard deviation. This observation suggests that, in general, respondents leaned slightly toward the neutral or "disagree" side of the scale, implying that respondents did not feel positive about the statements regarding supplier management. However, a 1.2550 standard deviation indicates a significant variability in how respondents perceived supplier management. This can also be attributed to the diversity of the respondent sample, as established earlier. A similar trend was reported across the indicators of supplier management practice with the statement, "This organization conducts thorough market analysis to inform its strategic procurement decisions", having the lowest mean (M=2.5513, S. Div=1.1356). Here, the majority of the respondents disagreed with the view that their organizations conduct thorough market analysis for their procurement needs.

Interviews were carried out to gain further insights into the specific contexts of supplier management. Interviewees were asked to describe their organization's supplier management mechanisms and their implications. These mechanisms vary, but the most common, which were cited by 33 interviewees, were due diligence, performance monitoring and post-contract review, partner monitoring and reporting, capacity building, and robust supplier identification and selection process. These measures, according to the interviewees, translate positively on

procurement performance. A classic demonstration of this is a remark by **Interviewee 11**, “...These due diligence checks and annual performance evaluations allow the organization to ensure the suppliers’ ability to execute the contract and meet their commitments, to ensure their integrity and to detect fraud, among other things.”

Like the internal audit department, many of the surveyed humanitarian organizations struggled to develop and maintain supplier management strategies for their procurement needs. Follow-up questions revealed possible reasons for this phenomenon—for example, **Interviewee 39** said, “In our experience, humanitarian operations often occur in crisis zones, where supply chains are disrupted, and access to reliable suppliers is limited. For example, this was a major challenge in our response to the deadly flooding disaster in 2024.” **Interviewee 7** also added, “In emergency situations, our priority is always to get aid to those in need as quickly as possible, which often takes precedence over rigorous supplier selection and contract management.”

Interviews also sought to identify the main risks and concerns that come with engaging and transacting with suppliers. Several concerns were listed, most of which fell into the following themes/categories of risks: quality of goods and services delivered, poor contract performance, reputational risk, non-compliance, improper due diligence and supplier onboarding, fraud, corruption, and conflict of interest. **Interviewee 42** had the following comment: “Our main concerns are that they fail to meet their commitments (timely contract execution, quality of goods and services delivered, works that do not comply with defined specifications), request several amendments for price changes, subcontract all or part of contracts, refuse to grant reasonable payment terms, and abuses towards our clients.”

#### **4.4.4 Contract Management**

Respondents were asked to rate the contract management practices of their respective humanitarian organizations on a five-point Likert scale where 1=strongly disagree and 5=strongly agree. A summary of the responses is provided in Table 4.6.

**Table 4. 6: Contract Management**

	Mean	S. Div
Procurement contracts receive all necessary approvals prior to execution.	4.0897	.8088
All parties involved fulfil their contractual obligations during procurement contract implementation.	3.4231	.8299
Procurement contracts contain conflict resolution clauses for dispute resolution.	3.4231	1.1680
Procurement contracts are regularly reviewed for compliance.	3.3590	1.1393
<b>Overall Mean</b>	<b>3.5737</b>	<b>.9865</b>

The overall mean for the contract management variable was 3.5737 at a .9865 standard deviation. Since the value is close to 4, the agree side of the scale, this means that, in general, respondents had a positive view of contract management, though not overwhelmingly. The standard deviation of .9865 indicates that there was less variation in the responses, implying that most respondents' opinions on contract management were fairly consistent, with fewer extreme responses. The item "Procurement contracts receive all necessary approvals prior to execution" had the highest mean score (M=4.0897, S. Div=.8088). Here, respondents were in agreement that procurement contracts receive all necessary approvals.

Interviews were conducted to gain particular insights into special conditions within procurement contracts, contractual remedies, and contract management and execution challenges. Special conditions that seem to be incorporated into procurement contracts include payment terms, insurance requirements, project details, conflict of interest guidelines, environmental protection policies, victim protection, performance warranty, and inspection clauses. However, taking into account participants' background information, these conditions were common for large and well-established organizations, which seemed to have higher bargaining power. The measures above were taken for various reasons, which mostly centred around the need to address specific requirements, obligations, or circumstances that are unique to the particular agreement.

Regarding remedies for contractual nonperformance, interviewees mentioned resulting in contract termination. However, in extreme cases, legal actions would be taken, including suing for damages (consequential, compensatory, and punitive damages) and specific performance, especially when damages are not an adequate remedy. The primary challenges faced related to

contract management execution include timely execution, which is often characterized by delays from third parties and “*the request several amendments for price changes, subcontract all or part of contracts, refuse to grant reasonable payment terms, and abuses towards our clients*” as cited by **Interviewee 42**.

#### 4.4.5 Procurement Performance

Respondents were asked to rate the contract management practices of their respective humanitarian organizations on a five-point Likert scale where 1=strongly disagree and 5=strongly agree. A summary of the responses is provided in Table 4.7.

**Table 4. 7: Procurement Performance**

	Mean	S. Div
This organization's procurement strategy delivers substantial cost savings.	3.3846	1.0349
This organization's procurement strategy delivers a positive return on investment.	3.4615	1.1699
Our procurement strategy ensures faster delivery of supplies, making our operations more efficient.	3.3205	1.1582
Positive feedback from key stakeholders confirms satisfaction with the procurement strategy.	3.2179	1.1582
<b>Overall Mean</b>	<b>3.3462</b>	<b>1.0907</b>

The overall mean for procurement performance was 3.3462 at a 1.0907 standard deviation. This finding indicates a slightly positive perception of procurement performance, suggesting that, on average, respondents tended to agree that procurement performance was reasonably good but not exceptionally so. In other words, on average, respondents held the view that procurement performance was slightly above average. However, a standard deviation of 1.0907 indicates a moderate level of variability in responses, indicating that while the average is slightly positive, there was a noticeable spread of opinions. Some respondents strongly agreed that procurement performance was excellent, while others had more neutral or even negative views. This trend was even noticeable for the specific measures of procurement performance: cost savings (M=3.3846, S. Div=1.0349), positive ROI (M=3.4615, S. Div=1.1699), quick lead time (M=3.3205, S. Div=1.1582), and stakeholder feedback ROI (M=3.2179, S. Div=1.1582).

## 4.5 Inferential Statistics

Inferential statistical analyses were conducted to examine the relationships between the study variables. Specifically, correlation analysis was calculated to assess bivariate associations, and multiple linear regression models were employed to determine the predictive power of independent variables on the dependent variable. The results of these analyses are detailed below.

### 4.5.1 Correlation Analysis

Prior to conducting correlation analysis, the Shapiro-Wilk (S-W) test was performed to assess the normality of the continuous variables. This assessment was crucial for determining the appropriateness of Pearson's correlation (a parametric test) versus Spearman's rho (a non-parametric test). The results of the test are presented in Table 4.8.

**Table 4. 8: Shapiro-Wilk Test**

	N	Mean	Std. Deviation	Skewness	Kurtosis	S-W	Sig.
RSKAS	78	3.051282	1.0768815	-.142	-1.481	.897	.000
RAUDIT	78	2.996795	1.2590540	.050	-1.563	.885	.000
SUPMNGT	78	2.846154	1.1311920	-.024	-1.864	.800	.000
CONMGT	78	3.573718	.8336559	.145	-1.272	.932	.000
PROCP	78	3.346154	.9730381	-.323	-1.333	.877	.000

As shown in the table above, the Shapiro-Wilk test indicated that all variables in the study did not follow a normal distribution, as they all recorded p-values less than .05. Additionally, the skewness and kurtosis values revealed that some constructs exhibited left skewness, while others exhibited right skewness. Therefore, the study proceeded to perform Spearman's rho, a non-parametric test, for correlation analysis. Findings are presented in Table 4.9.

**Table 4. 9: Spearman's rho Correlation**

			PROCP	RSKAS	RAUDIT	SUPMNGT	CONMGT
Spearman's rho	PROCP	Coefficient	1.000				
		Sig.	-				
	RSKAS	Coefficient	.919**	1.000			
		Sig.	.000	-			
	RAUDIT	Coefficient	.944**	.895**	1.000		
		Sig.	.000	.000	-		
	SUPMNGT	Coefficient	.969**	.902**	.918**	1.000	
		Sig.	.000	.000	.000	-	
	CONMGT	Coefficient	.937**	.879**	.891**	.928**	1.000
		Sig.	.000	.000	.000	.000	-

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

The Spearman's rho correlation matrix above shows the monotonic relationships between the variables. All correlation coefficients were positive and very high, ranging from .879 to .969, indicating strong positive monotonic relationships between all pairs of variables. Additionally, all p-values were .000, which is less than .01, meaning all the correlations were statistically significant. These results suggest that all five variables were closely related. When one variable increases, the others tend to increase as well, and all these relationships were significant. The high correlation indicates that these variables are strongly associated. Supplier management and procurement performance registered the strongest bivariate correlation ( $r=.969$ ,  $p<.01$ ). This means that the association between supplier management practices and procurement performance of humanitarian organizations is very strong and statistically significant.

While correlation analysis provides valuable insights into the relationships between variables, it is important to note that correlation does not imply causation. Recognizing this limitation, the study first examined foundational associations between variables through correlation analysis. Building on these insights, the research then progressed to the next stage of analysis, focusing on identifying predictive relationships to establish a more comprehensive understanding of variable interactions and their potential influences.

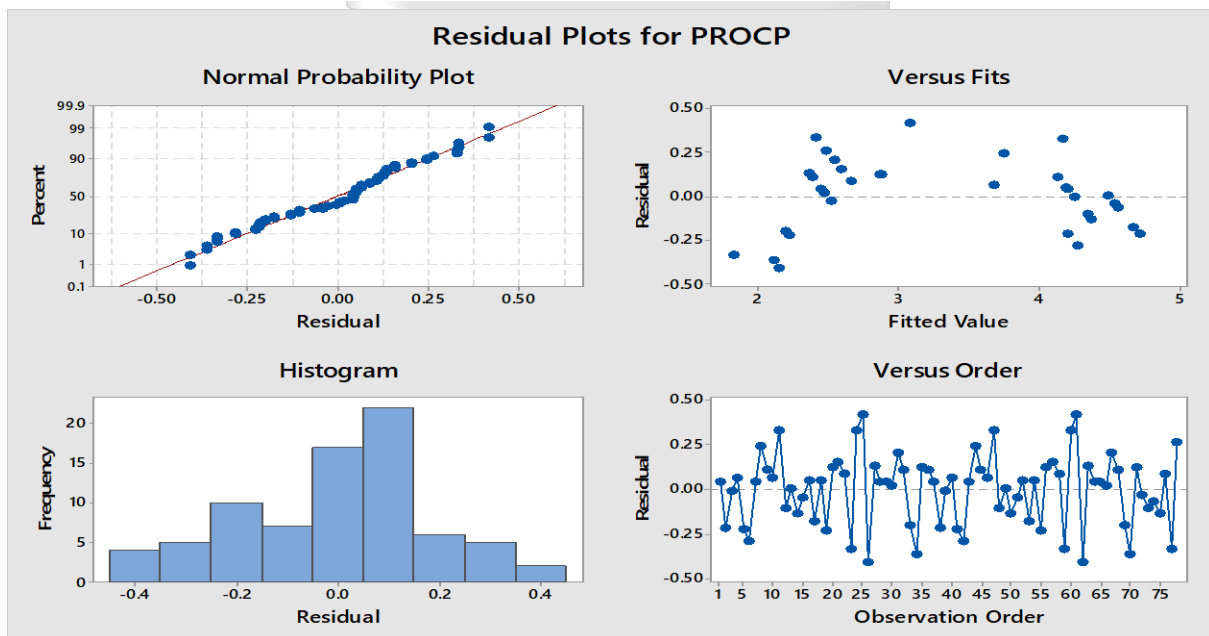
#### 4.5.2 Diagnostic Tests

Before proceeding to regression analysis, several diagnostic tests were performed to assess the validity and assumptions of the regression model. These tests were crucial to ensure the reliability and robustness of the regression results. Specifically, the tests sought to ascertain the

following: homoscedasticity of residuals, normality of residuals, independence of residuals, and absence of multicollinearity among predictor variables.

#### 4.5.2.1 Test for Heteroscedasticity

In a regression analysis, homoscedasticity refers to the assumption that the variance of the error terms (residuals) is constant across all levels of the independent variables (or fitted values). In simpler terms, the spread of the residuals should be roughly the same throughout the range of predicted values. Scatter plots were generated to assess the homoscedasticity of the residuals, specifically to determine whether the variance of the residuals was constant across predicted values. Figure 4.1 visually presents the results of this assessment.

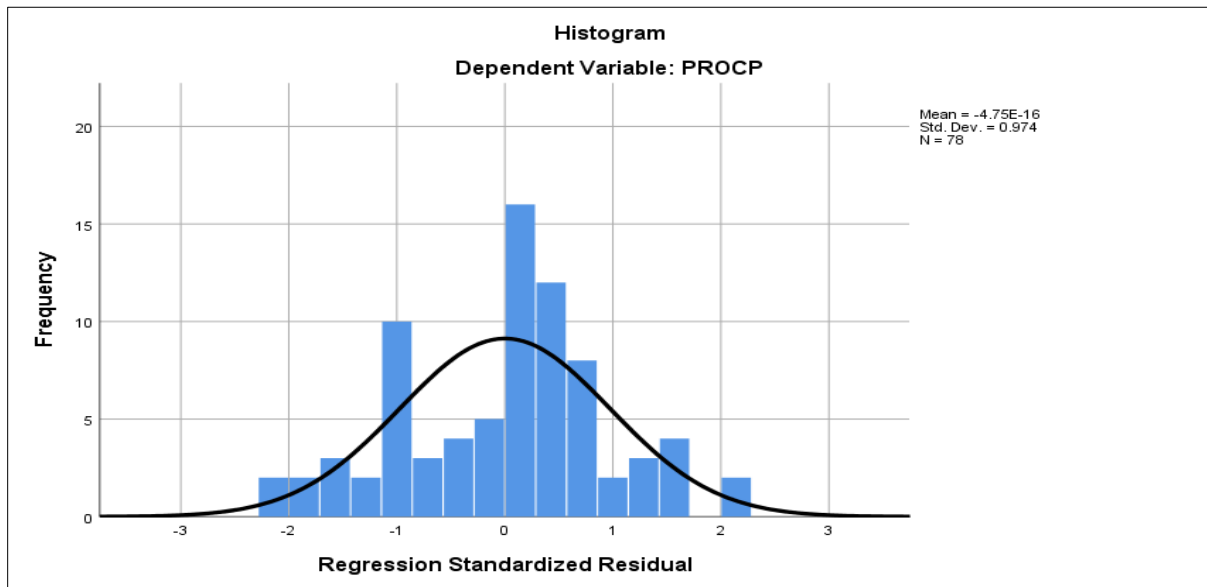


**Figure 4. 1: Test for Heteroscedasticity**

Based on the “Versus Fits” plot, the residuals exhibit homoscedasticity. This suggests that the assumption of constant variance of errors is likely met for this regression model. In other words, the spread of the residuals seems to be relatively consistent across the range of fitted values. Furthermore, the residuals appear to be randomly scattered around the horizontal line (residual=0) in the “Versus Order” plot.

#### 4.5.2.2 Test of Normality

The normality of residuals assumption states that residuals should be normally distributed. A histogram of the residuals was plotted to check if this condition was fulfilled. Results are shown in Figure 4.2.



**Figure 4. 2: Test of Normality**

The normality assumption is fulfilled when a histogram of the residuals resembles a bell-shaped curve. As shown in the diagram above, an almost symmetrical histogram was realized with no extreme outliers. Therefore, this assumption was not violated. Furthermore, the Quantile-Quantile (Q-Q) plot in Figure 4.1 reveals that the residuals follow a normal distribution since the point falls close to a straight line.

#### 4.5.2.3 Test for Autocorrelation

The Durbin-Watson (DW) statistic was employed to assess the presence of autocorrelation, specifically first-order autocorrelation, within the residuals of the regression model. This test is crucial for validating the assumption of independence of errors, a fundamental requirement for the reliable application of regression analysis. Findings are presented in Table 4.10.

**Table 4. 10: Durbin-Watson Test**

Durbin-Watson D-stat	2.243
D-upper	1.595
D-lower	1.390
k	4
Alpha	.01
N	78

- a. Predictors: (Constant), RSKAS, RAUDIT, SUPMNGT, CONMGT
- b. Dependent variable: PROCP

A DW statistic of 2.243 suggests that there is likely no significant first-order autocorrelation present in the residuals. This is because, in this specific case, 2.245 is close to 2, which is the ideal value for no autocorrelation, lending further support to the conclusion that autocorrelation was not a major concern.

#### 4.5.2.4 Test for Multicollinearity

Another crucial assumption for reliable regression analysis is the absence of significant multicollinearity among the predictor variables. Multicollinearity occurs when two or more independent variables in a regression model are highly correlated, leading to unstable and unreliable estimates of the regression coefficients. To assess whether this assumption was met, Variance Inflation Factors (VIFs) were calculated for each predictor variable, and the findings are presented in Table 4.11.

**Table 4. 11: Test for Multicollinearity**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
RSKAS	.764	1.309
RAUDIT	.803	1.245
SUPMNGT	.501	1.995
CONMGT	.564	1.772

- a. Dependent Variable: PROCP

A VIF value of 1 indicates no multicollinearity, whereas values greater than 1 suggest the presence of multicollinearity. A common rule of thumb is that VIF values greater than 10 indicate significant multicollinearity. In this case, all the constructs had VIF values less than 10, indicating the absence of significant multicollinearity among the predictor variables.

### 4.5.3 Regression Analysis

Following the validation of the regression model, which included multiple diagnostic tests, a multiple linear regression analysis was conducted. This analysis aimed to determine the predictive relationship between the dependent variable, procurement performance, and the independent variables: risk assessment, regular auditing, supplier management, and contract management.

As an initial step in the regression analysis, a model summary was generated to evaluate the proportion of variance in the dependent variable explained by the independent variables. The results of this analysis are presented in Table 4.12.

**Table 4. 12: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.979 <sup>a</sup>	.959	.957	.2013691

a. Predictors: (Constant), RSKAS, RAUDIT, SUPMNGT, CONMGT

b. Dependent Variable: PROCP

In the table above, the multiple correlation coefficient ( $R=.979$ ) represents the correlation between the observed values of procurement performance and the values predicted by the regression model. A value of .979 indicates a very strong positive correlation between the predictors (the four risk management practices) and the outcome variable.

The coefficient of determination ( $R\text{ Square}=.959$ ) represents the proportion of the variance in procurement performance that is explained by the independent variables (i.e., risk assessment, regular audits, supplier management, and contract management). A value of .959 means that 95.9% of the variance in procurement performance is accounted for by the four predictors. This is a very high value, indicating a strong predictive power of the regression model.

The Adjusted R Square (.957) is a modified version of R Square that adjusts for the number of predictors in the model. A value of .957 suggests that even after accounting for the number of predictors, 95.7% of the variance in procurement performance is explained. The Adjusted R Square is very close to the R-squared, which suggests that the model is a good fit and that the predictors are useful.

The Std. Error of the Estimate (.2013691) represents the standard deviation of the residuals. In this case, a value of .2013691 indicates that the predicted values are closer to the observed values, suggesting a better fit for the model.

Following the model summary, an analysis of variance (ANOVA) was conducted to assess the overall statistical significance of the regression model. This was done to examine whether the independent variables, as a group, significantly predict the dependent variable. Results are shown in Table 4.13.

**Table 4. 13: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.944	4	17.486	431.224	.000 <sup>b</sup>
	Residual	2.960	73	.041		
	Total	72.904	77			

a. Dependent Variable: PROCP

b. Predictors: (Constant), RSKAS, RAUDIT, SUPMNGT, CONMGT

The Sum of Squares (69.944) represents the variability in procurement performance that is explained by the regression model, with the Sum of Squares (2.960) representing the variability that is not explained by the regression model (i.e., the error term), translating to Sum of Squares (72.904) as the total variability in procurement performance.

The F-statistic is used to test the overall significance of the regression model. In this case, the F-statistic value of 431.224 is very large, indicating that the predictors (risk management practices), as a group, significantly predict procurement performance. The Sig. (p-value) is associated with the F-statistic. As such, a p-value of .000 (which is less than .05) indicates that the overall model is highly statistically significant. Therefore, the four risk management practices—risk assessment, regular auditing, supplier management, and contract management—are reliable predictors of the procurement performance of humanitarian institutions in Nairobi, Kenya.

The ANOVA result indicates that the set of independent variables, as a whole, significantly predicts the dependent variable. To determine the individual contribution and statistical significance of each independent variable in predicting the dependent variable, regression coefficients were examined. The findings are presented in Table 4.14.

**Table 4. 14: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.456	.139		3.284	.002
	RSKAS	.177	.077	.196	2.296	.025
	RAUDIT	.192	.064	.249	2.988	.004
	SUPMNGT	.280	.091	.326	3.092	.003
	CONMGT	.273	.076	.234	3.572	.001

a. Dependent Variable: PROCP

In the table above, the Unstandardized Coefficients (B) represent the change in the dependent variable for a one-unit change in the independent variable, holding all other independent variables constant; Std. Error indicates the variability of the coefficient estimates; the t-statistic is used to test the statistical significance of each individual coefficient; and Sig. (p-value) which is associated with the t-statistic, indicates the probability of obtaining the observed results if there were no relationship between the independent and dependent variables.

In light of the above, all the independent variables have a statistically significant positive relationship with the dependent variable. Therefore, all the four independent variables, risk assessment (B=.177, p<.05), regular auditing (B=.192, p<.05), supplier management (B=.280, p<.05), and contract management (B=.273, p<.05), are significant significantly effective in enhancing procurement performance of Nairobi's humanitarian organizations. Supplier management is the most effective, followed by contract management, regular auditing, and then risk assessment practice. It is also to be noted that if all independent variables were zero (i.e., risk assessment, contract management, regular auditing, and supplier management were all absent), procurement performance would be only .456.

Therefore, the final regression model for the study is as follows:

$$\text{PROCP} = .456 + .177\text{RSKAS} + .192\text{RAUDIT} + .280\text{SUPMNGT} + .273\text{CONMGT} + \epsilon$$

The study further sought to determine the moderating effect of organizational size on the effectiveness of the risk management practices. In this case, interaction terms for independent and moderating variables were established before testing for moderation. Then, a regression analysis was computed for the transformed variables. The results of the model summary are presented in Table 4.15.

**Table 4. 15: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.980 <sup>a</sup>	.960	.957	.20248
2	.981 <sup>b</sup>	.962	.957	.20115

a. Predictors: (Constant), RSKAS, RAUDIT, SUPMNGT, CONMGT, SIZE

b. Predictors: (Constant), RSKAS, RAUDIT, SUPMNGT, CONMGT, SIZE, RAUDIT\_x\_SIZE, RSKAS\_x\_SIZE, CONMGT\_x\_SIZE, SUPMNGT\_x\_SIZE

From the table above, the first regression model, which consisted of the four risk management practices and the moderating variable, explained 96% of the variance of procurement performance. An additional 0.2% variance is explained by the second model, which incorporates the interaction terms, bringing the total variance accounted for by the model to 96.2%. This data suggests that the models were a good fit for moderation analysis.

Therefore, the study proceeded to perform ANOVA to determine the statistical significance of the models. Findings are presented in Table 4.16.

**Table 4. 16: ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.952	5	13.990	341.251	.000 <sup>b</sup>
	Residual	2.952	72	.041		
	Total	72.904	77			
2	Regression	70.153	9	7.795	192.655	.000 <sup>c</sup>
	Residual	2.751	68	.040		
	Total	72.904	77			

a. Dependent Variable: PROCP

b. Predictors: (Constant), RSKAS, RAUDIT, SUPMNGT, CONMGT, SIZE

c. Predictors: (Constant), RSKAS, RAUDIT, SUPMNGT, CONMGT, SIZE, RAUDIT\_x\_SIZE, RSKAS\_x\_SIZE, CONMGT\_x\_SIZE, SUPMNGT\_x\_SIZE

As shown above, both models are statistically significant. The first model, with the independent and moderating variables, is statistically significant at  $F(5,72)=341.251$ ,  $p<.001$ , whereas the second model, consisting of the independent and moderating variables as well as the interaction terms, is statistically significant at  $F(9,68)=192.655$ ,  $p<.001$ . Both models are reliable predictors of procurement performance in Nairobi County's humanitarian organizations.

Regression coefficients were used to examine the predictive effects of the independent, moderating, and interactive terms on the dependent variables. Findings are shown in Table 4.17.

**Table 4. 17: Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.443	.143		3.108	.003
	RSKAS	.177	.078	.196	2.288	.025
	RAUDIT	.197	.065	.255	3.005	.004
	SUPMNGT	.272	.093	.316	2.927	.005
	CONMGT	.272	.077	.233	3.537	.001
	SIZE	.104	.031	.102	1.450	.045
2	(Constant)	.165	.375		.439	.007
	RSKAS	.012	.186	.013	.065	.049
	RAUDIT	.495	.203	.641	2.445	.017
	SUPMNGT	.071	.239	.083	.298	.007
	CONMGT	.423	.209	.362	2.022	.047
	SIZE	.158	.188	.131	.838	.005
	RSKAS_x_SIZE	.044	.118	.166	.370	.001
	RAUDIT_x_SIZE	.201	.081	.793	2.492	.015
	SUPMNGT_x_SIZE	.372	.139	1.388	2.677	.009
	CONMGT_x_SIZE	.339	.071	1.295	4.785	.000

a. Dependent Variable: PROCP

The regression coefficient results indicate that the four risk management practices and organizational size have a significant positive effect on procurement performance, as revealed by the values of beta coefficients, t-statistic, and p-value. The interaction terms in the second model all have positive and statistically significant effect on procurement performance: RSKAS\_x\_SIZE (B=.044, p<.05), RAUDIT\_x\_SIZE (B=.201, p<.05), SUPMNGT\_x\_SIZE (B=.372, p<.05), and CONMGT\_x\_SIZE (B=.339, p<.05). This means that as the size of a humanitarian organization increases, the effectiveness of the risk assessment, regular audits, supplier management, and contract management practices on procurement performance become significantly stronger.

#### 4.6 Chapter Summary

In this chapter, the results of the study are presented in terms of descriptive, qualitative, and inferential statistics using text, tables, and figures. Descriptive and qualitative findings offer

insights into the status of risk management practices for procurement risk in humanitarian organizations in Kenya. Inferential statistics establishes the relationships between these variables, indicating the significance of the effectiveness of risk assessment, regular audits, supplier management, and contract management on procurement performance. Results also show the moderating effect of organization size on the effectiveness of the aforementioned practices.



## CHAPTER FIVE

### SUMMARY, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

#### 5.1 Introduction

This study aimed to assess the effectiveness of risk management practices in enhancing the procurement performance of humanitarian organizations in Nairobi, Kenya. Building upon previous chapters, this final section of the study presents a summary of the key findings, followed by a comprehensive discussion of their significance, implications, and alignment with the theoretical frameworks and existing literature. The section then ends with the overall conclusive remarks, recommendations, and suggested areas for further research.

#### 5.2 Summary of Key Findings

The study findings are based on the responses of 127 out of 178 targeted heads of risk management and procurement functions from 89 humanitarian organizations in Nairobi County. This response rate is sufficiently high, enhancing the reliability of the findings and supporting their generalizability to the broader target population.

Descriptive statistical analysis revealed that the adoption of risk management practices within humanitarian organizations is underwhelming: risk assessment ( $M=3.0513$ ,  $SD=1.2017$ ), regular auditing ( $M=2.9968$ ,  $SD=1.3970$ ), supplier management ( $M=2.8462$ ,  $SD=1.2880$ ), and contract management ( $M=3.5737$ ,  $SD=.9865$ ). These findings indicate underlying challenges, which were also revealed in subsequent interviews. The common themes regarding challenges that were raised include resource constraints, complexities of humanitarian operations, lack of specialized expertise, prioritization of frontline activities over internal control measures, and the uncertainty of operating environments. Similar to the risk management practices, the overall status of procurement performance was also below expectations ( $M=3.3452$ ,  $SD=1.0907$ ).

Inferential statistical analysis revealed very strong positive and significant correlation between risk management practices in question and procurement performance in humanitarian organization: risk assessment ( $r=.919$ ,  $p<.01$ ), regular auditing ( $r=.944$ ,  $p<.01$ ), supplier management ( $r=.969$ ,  $p<.01$ ), and contract management ( $r=.937$ ,  $p<.01$ ). Furthermore, the results of regression analysis suggest that risk assessment ( $B=.177$ ,  $p<.05$ ), regular auditing

( $B=.192$ ,  $p<.05$ ), supplier management ( $B=.280$ ,  $p<.05$ ), and contract management ( $B=.273$ ,  $p<.05$ ), are significantly effective in enhancing procurement performance of Nairobi's humanitarian organizations. Additionally, the size of a humanitarian organization significantly moderates the effectiveness of these risk management practices.

### **5.3 Discussion of the Key Findings**

An in-depth discussion of the study's key findings, their implications, and alignment with the theoretical frameworks and previous literature is provided in this chapter. The discussion is structured according to the specific objectives of the study.

#### **5.3.1 Effectiveness of Risk Assessment on Procurement Performance**

The first objective of the study was to examine the effectiveness of risk assessment practices in enhancing the procurement performance of humanitarian organizations in Nairobi County. Descriptive and qualitative analysis revealed a reasonable rate of adoption of risk assessment practices with plenty of room for improvement. This is because some respondents felt like their organizations lacked robust risk management frameworks for identifying, prioritizing, and mitigating procurement risks. This view is consistent with the scholarly sentiments of Nayak and Choudhary (2022) and Schneiker (2018), who also observed low adoption rates of risk management frameworks. They explain that many humanitarian NGOs face challenges implementing comprehensive risk management frameworks, particularly those in high-risk environments.

Interestingly, while the consistent adoption of comprehensive risk assessment strategies may be less prevalent than desired within humanitarian organizations, inferential statistical analysis reveals a significant positive correlation between the application of risk assessment practices and enhanced procurement performance. In other words, risk assessment efforts yield significant positive outcomes in procurement performance. Therefore, this discovery supports both the contingency and RBV theoretical frameworks. In the context of contingency theory, this implies that humanitarian NGOs that tailor their risk assessment frameworks to their specific operational contexts rather than relying on standardized models achieve better procurement outcomes. From the perspective of RBV theory, the finding suggests that risk assessment practices serve as a strategic resource that enhances procurement efficiency and success.

Moreover, the notion that risk assessment substantially improves procurement performance is supported by several empirical studies worldwide (Elamer et al., 2018; Enzokuhle, 2024; Muinde et al., 2020; Mwau et al., 2018; Ondore et al., 2018; Oyelami & Shittu, 2019; Pham et al., 2021; Sysyk, 2020). These studies advance the idea that risk assessment frameworks help identify, evaluate, and mitigate potential threats that could disrupt supply chains, delay deliveries, or increase costs. Therefore, by assessing procurement risks in a systematic manner, organizations can implement proactive strategies that enhance efficiency, ensure the timely acquisition of goods, and reduce waste or fraud. Effective risk assessment allows procurement teams to optimize sourcing decisions, strengthen partnerships with suppliers, and improve resource allocation, ultimately enabling humanitarian organizations to respond swiftly and effectively in crisis situations while maintaining accountability and transparency.

### **5.3.2 Effectiveness of Regular Auditing on Procurement Performance**

The second objective of the study was to examine the effectiveness of regular auditing in enhancing the procurement performance of humanitarian organizations in Nairobi County. Scoring relatively lower than the risk assessment variable, descriptive and qualitative analyses reveal that regular auditing for procurement risk management was not a popular practice in Nairobi County's humanitarian organizations. Despite the significance of auditing as mandated by the regulatory frameworks, especially for NGOs exceeding KES 1 million (Ochudho, 2015) as well as donor requirements (Zainon et al., 2011), many of the surveyed organizations cite challenges related to capacity and resources, affect the consistency and depth of auditing practices across the sector. The primary challenge cited was the limited capacity to run a formal and well-established internal audit department.

Nevertheless, regular auditing was shown to be significantly effective in enhancing the procurement performance of humanitarian organizations, according to the results of inferential statistics. The statistically significant effectiveness of regular auditing in enhancing procurement performance underscores the critical role of oversight and accountability in the humanitarian sector. Therefore, in this context, the finding supports the principles of both the contingency and RBV theories. From the perspective of the contingency theory, the finding demonstrates that in the complex and high-risk environment of humanitarian operations, adapting to the circumstances by adopting formal controls like regular auditing is necessary for managing inherent risks and uncertainties in procurement, ultimately leading to better

outcomes. Regarding RBV theory, the study demonstrates that a robust auditing function is a valuable and potentially rare organizational capability.

Furthermore, this finding is consistent with those from the existing body of empirical work, including studies from international, regional, and local contexts (Anin et al., 2024; Gichuki & Paul, 2020; Jembe & Wandera, 2019; Mhlanga, 2022; Sallwa, 2022). According to these studies, and in accordance with the specific aspects of regular auditing studied, an enhanced procurement performance in humanitarian organizations is achieved by auditing's ability to promote transparency, accountability, and efficiency in resource management. Auditing involves reviewing procurement processes, financial transactions, and supplier relationships, thereby playing a crucial role in identifying inefficiencies, preventing fraud, and ensuring compliance with regulatory and donor requirements. Regular audits also strengthen internal controls, enabling organizations to make informed procurement decisions that optimize cost-effectiveness and minimize risks such as supply chain disruptions or misallocation of funds.

### **5.3.3 Effectiveness of Supplier Management on Procurement Performance**

The third objective of the study was to examine the effectiveness of supplier management in enhancing the procurement performance of humanitarian NGOs in Nairobi County. As the findings of the descriptive and qualitative analysis suggest, supplier management was the least adopted of the four risk management practices studied. A possible explanation for the underwhelming adoption of strategic supplier management within the NGO sector is provided by Agunda et al. (2019), who points out that while supplier management is increasingly recognized as a vital component of the effective supply chain within the NGO sector, its implementation varies depending on the organization's size, resources, and specific operational context. Therefore, many humanitarian organizations, especially smaller, resource-constrained organizations, have yet to realise the potential of effective supplier management.

Despite being the least prevalent among the surveyed humanitarian organizations, supplier management demonstrated surprisingly strong and statistically significant effectiveness in enhancing procurement outcomes. In fact, a comparative analysis reveals it to be the most impactful of the four risk management practices studied in achieving better procurement results in humanitarian organizations. Therefore, this observation strongly supports the principles of the contingency and RBV theories. For instance, from a contingency theory's point of view, this finding demonstrates that complex supply chains, diverse needs, and potential for

disruptions, all of which characterize the humanitarian aid sector, necessitate adaptable and effective management of suppliers. From the point of view of the RBV theory, the finding underscores that supplier management is a valuable organizational resource capable of significantly improving procurement performance.

The finding that supplier management is effective in enhancing procurement outcomes is also backed by several other empirical studies, including (Denhere et al., 2023; Kiloli & Chege, 2023; Mogere & Otuya, 2020; Momanyi & Paul, 2018; Njagi & Shalle, 2016). These studies argue that effective supplier management enhances procurement performance in humanitarian organizations by ensuring reliability, cost-effectiveness, and risk reduction in supply chains. Since it involves active monitoring of supplier relationships, it enables organizations to assess vendor capabilities, enforce compliance with sourcing standards, and minimize disruptions caused by unreliable suppliers. This process optimizes procurement efficiency by improving quality control, delivery timelines, and negotiation power. Additionally, the practice fosters long-term partnerships that strengthen supply chain resilience, allowing humanitarian organizations to respond swiftly and effectively to crises while maintaining operational transparency and accountability.

#### **5.3.4 Effectiveness of Contract Management on Procurement Performance**

The fourth objective of the study was to examine the effectiveness of contract management in enhancing the procurement performance of humanitarian organizations operating in Nairobi. Out of the four risk management practices, contract management was the most prevalent practice by a significant margin, according to respondents. The widespread application of contract management practices is an observation that has been concurred by Itumo and Ngugi (2016), and Zhao et al. (2016), who clarify that contract management is a crucial practice in the NGO sector because it ensures compliance and financial accountability, and operational efficiency in procurement and service delivery. This is because NGOs often rely on multiple funding sources, including government grants and donor contributions, which come with strict contractual obligations.

In view of the above, the effectiveness of contract management in improving the procurement performance of humanitarian organizations in Nairobi is statistically significant. Interestingly, according to multiple regression analysis, contract management is the second most important risk management practice for enhancing procurement performance after supplier management.

To this end, this realization is consistent with the tenets of the contingency and RBV theories as the study's theoretical frameworks. From a contingency theory perspective, this result signifies the importance of contract management as a mechanism for navigating the uncertainties associated with suppliers, logistics, and project implementation, leading to better procurement outcomes tailored to the specific challenges. In terms of RBV, effective contract management can be viewed as a valuable and unique organizational capability.

Additionally, the finding above is in agreement with the results of the previous body of empirical literature, including (Abutabenjeh et al., 2021; Abutabenjeh & Rendon, 2023; Hassan & Omwenga, 2023; Masoud et al., 2023; Matto et al., 2021; Muinde et al., 2020). According to these studies, contract management ensures compliance, efficiency, and risk mitigation throughout the procurement process. This is because well-structured contracts establish clear expectations between organizations and suppliers, reducing the likelihood of disputes, delays, or resource mismanagement. It also defines terms related to pricing, delivery schedules, and quality standards, thereby enhancing accountability and ensuring that procurement activities align with organizational goals and donor requirements. Additionally, effective contract management enables cost control, as organizations can negotiate favourable terms, avoid unexpected expenses, and strengthen supplier relationships for long-term procurement stability.

### **5.3.5 Moderating Effect of Organizational Size**

Following the establishment of the effectiveness of the risk management practices in enhancing the procurement performance of humanitarian organizations operating in Nairobi, the study also sought to determine if organizational size moderated the effectiveness of the practices in question. Proxied by the geographical scope of operations (i.e., national, regional, or international), the study discovered that organizational size positively and significantly moderates the effectiveness of all four risk management practices in improving the procurement performance of humanitarian organizations. This means that as the size of a humanitarian organization increases, the effectiveness of the risk assessment, regular audits, supplier management, and contract management practices on procurement performance becomes significantly stronger.

The phenomenon above can be attributed to several factors. For instance, the notion that larger NGOs tend to derive greater benefits from adopting these practices than smaller ones can be

due to greater resources and capacities typically available to larger organizations. Larger NGOs possess dedicated departments with specialized expertise in risk management, auditing, procurement, and legal affairs, enabling them to design and implement more sophisticated and comprehensive versions of these practices (Wang et al., 2018). Similarly, larger organizational size often correlates with more formalized structures, policies, and procedures, which provide a stronger foundation for embedding and sustaining these effective procurement-enhancing practices. It is also worth noting that larger organizations tend to have greater bargaining power and established networks within their field of operations, facilitating more robust supplier management and contract negotiation processes, which often result in more favorable terms and reduced risks compared to smaller NGOs with limited leverage.

#### **5.4 Conclusion**

This study provides compelling evidence that risk management practices are crucial in enhancing the procurement performance of humanitarian organizations operating in Nairobi, Kenya. Using contingency and RBV as theoretical frameworks, this study demonstrates that risk assessment, regular auditing, supplier management, and contract management all exhibit statistically significant effectiveness in achieving positive procurement outcomes. Notably, supplier management emerges as the most effective of the four practices examined, followed by contract management, regular auditing, and then risk assessment. This suggests that the strategic engagement and management of partners within the supply chain yield the most substantial improvements in procurement outcomes. Furthermore, findings reveal a significant positive moderating effect of organizational size across all four practices, indicating that larger humanitarian organizations are better positioned to leverage their resources and capacities to maximize the benefits derived from implementing robust risk management frameworks in their procurement processes. These insights underscore the importance of risk management practices as well as organizational size for humanitarian organizations seeking to realize tangible improvements in their procurement processes.

#### **5.5 Implications of the Study**

In light of the findings discussed, the following are the policy, practical, and theoretical implications of this study.

### **5.5.1 Policy Implications**

The findings of this study carry significant policy implications for policymakers and regulatory bodies overseeing Kenya's humanitarian assistance sector. The effectiveness of risk management practices, particularly supplier and contract management, underscores the need for policies that encourage and mandate the adoption of these practices by humanitarian organizations. This could involve the development of sector-specific guidelines, training programs, and resource allocation mechanisms to support NGOs, especially smaller ones, in building their capacity in these critical areas. Furthermore, the positive moderating effect of organizational size suggests that policies should consider differentiated approaches, offering tailored support or incentives to smaller organizations to overcome resource limitations and implement effective risk management strategies in their procurement processes. Emphasizing the importance of regular auditing through clear regulatory frameworks and providing guidance on best practices can also contribute to greater accountability and efficiency within the sector.

### **5.5.2 Practical Implications**

For humanitarian organizations, the study provides clear, practical recommendations. The strong effectiveness of supplier management highlights the need to prioritize the development of robust supplier selection, relationship management, and performance monitoring processes. Organizations should invest in understanding their supply chains, diversifying their supplier base, and establishing clear contractual agreements that mitigate risks. Similarly, strengthening contract management practices, including meticulous drafting, diligent monitoring, and proactive management of contractual obligations, is crucial for ensuring successful procurement outcomes.

### **5.5.3 Theoretical Implications**

This study contributes to the body of empirical knowledge in risk management practices for procurement risk in the context of the humanitarian aid sector. It demonstrates the significance of specific risk management practices on procurement performance. The findings support and extend contingency theory by highlighting that the adoption and effectiveness of specific organizational practices are indeed contingent upon the specific demands and complexities of the operating environment. Moreover, the study lends empirical support to RBV theory by suggesting that capabilities in supplier management and contract management, which are

valuable, rare (given their adoption levels), and difficult to imitate, can lead to improved procurement performance. The moderating effect of organizational size further suggests that the ability to leverage these valuable resources and capabilities is also influenced by the organization's scale and available resources.

### **5.6 Limitations of the Study**

This study, despite its contributions, is subject to a few limitations that warrant consideration when interpreting its findings. Firstly, its geographical scope was constrained to Nairobi, meaning the results may not be generalizable to humanitarian organizations operating in other areas of Kenya or other countries. Secondly, the context was limited to humanitarian assistance, which means the findings might not fully apply to other forms of aid or development work that involve different procurement complexities and stakeholder dynamics. Thirdly, the conceptual scope was restricted to four specific risk management practices (risk assessment, regular auditing, supplier management, and contract management). While these are crucial, they do not encompass the full spectrum of risk management strategies (e.g., technology adoption, internal controls, risk culture) that could influence procurement performance, thus potentially providing an incomplete picture. Also, based on cross-sectional data, the study captures a snapshot in time, preventing the establishment of the observation of changes and trends in the effectiveness of risk management practices and procurement performance over time.

### **5.7 Areas for Further Research**

While this study provides valuable insights into the effectiveness of risk management practices in enhancing procurement performance among humanitarian organizations in Nairobi, several areas warrant further exploration. First, this study's geographical limitation suggests the need for future research to expand coverage beyond Nairobi, investigating how risk management practices influence procurement performance in other regions of Kenya or across the country as a whole. Second, this study's contextual scope was confined to the humanitarian assistance sector; future research should examine other non-governmental sectors, such as education, healthcare, and environmental advocacy, to determine how risk management practices vary across different operational contexts. Lastly, this study focused on four specific risk management practices, leaving room for further research on additional risk management frameworks.

## 5.8 Chapter Summary

The final section of this study provides a comprehensive interpretation of the findings, examining their implications in relation to existing theories and literature. It highlights how the results align with established scholarly perspectives to offer deeper insights into the topic. Additionally, this section outlines the study's policy, practical, and theoretical contributions, demonstrating its relevance to academia, industry, and policymaking. However, recognizing its limitations, the study presents recommendations for future research, identifying key areas where further exploration is needed to enhance understanding and expand knowledge within the field.



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## APPENDICES

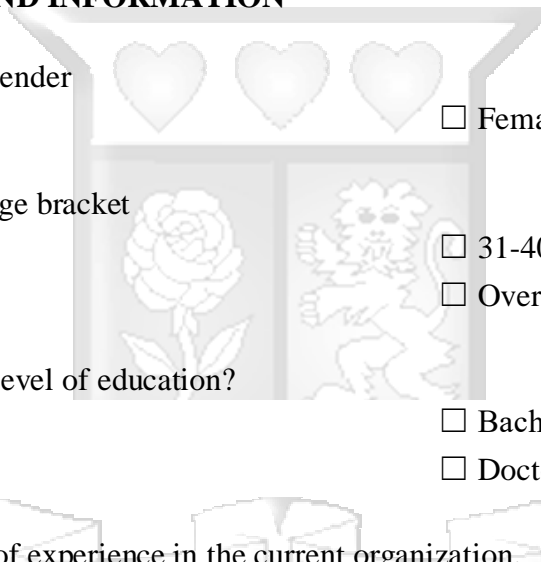
### Appendix 1: Questionnaire

This questionnaire seeks to gather data on *The Effectiveness of Risk Management in The Procurement Performance of Humanitarian Non-Governmental Organizations in Nairobi, Kenya*. This survey is being conducted as part of the fulfilment of the degree of Masters of Business Administration (MBA) at Strathmore University. Therefore, it is for academic purposes only. Your participation is voluntary, and the responses you provide will remain confidential. The survey shall not collect any personally identifiable information.

Read each question carefully and answer by ticking (✓) against the most appropriate answer.

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#### PART A: BACKGROUND INFORMATION

- 
1. Please indicate your gender  
 Male  Female
  2. Please indicate your age bracket  
 Under 30 years  31-40 years  
 41-50 years  Over 50 years
  3. What is your highest level of education?  
 Diploma  Bachelor's degree  
 Master's degree  Doctorate
  4. Please indicate years of experience in the current organization.  
 Less than 1 year  1-5 years  
 6-10 years  11 years and above
  5. Please indicate the geographical scope of your organization's humanitarian operations.  
 Local (county level)  National (country)  
 Regional (East Africa)  International

#### PART B: RISK ASSESSMENT

This section relates to procurement risk assessment practices in your organization. Please rate the extent to which you agree/disagree with the following statements. *Please Note:* SD = Strongly Disagree, D = Disagree, U= Undecided, A = Agree, and SA= Strongly Agree.

	SD	D	U	A	SA
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This organization has measures for identifying potential risks that may impede procurement functions.					
This organization decides the order in which potential procurement risks deserve attention.					
This organization has a robust framework for mitigating the effects of procurement risks.					
This organization conducts continuous risk monitoring and reviews to ensure uninterrupted procurement.					

### PART C: REGULAR AUDIT

This section relates to regular auditing of the procurement process in your organization. Please rate the extent to which you agree/disagree with the following statements. *Please Note:* SD = Strongly Disagree, D = Disagree, U= Undecided, A = Agree, and SA= Strongly Agree.

	SD	D	U	A	SA
This organization has a capable audit team that provides oversight to address risks in procurement activities.					
Relevant documents are gathered and analyzed to audit for anomalies in the procurement process.					
Comprehensive procurement audit reports detailing identified issues and recommendations are published.					
Internal controls for procurement risk are regularly tested for effectiveness.					

### PART D: SUPPLIER MANAGEMENT

This section relates to supplier management practices in your organization. Please rate the extent to which you agree/disagree with the following statements. *Please Note:* SD = Strongly Disagree, D = Disagree, U= Undecided, A = Agree, and SA= Strongly Agree.

	SD	D	U	A	SA
This organization uses a competitive supplier selection process to ensure value for money.					
This organization conducts thorough market analysis to inform its strategic procurement decisions.					
For strategic procurement, we maintain a centralized supplier database to manage all supplier information.					
This organization tracks and evaluates supplier performance using scorecards and KPIs.					

**PART D: CONTRACT MANAGEMENT**

This section relates to contract management practices related to procurement activities in your organization. Please rate the extent to which you agree/disagree with the following statements. *Please Note:* SD = Strongly Disagree, D = Disagree, U= Undecided, A = Agree, and SA= Strongly Agree.

	SD	D	U	A	SA
Procurement contracts receive all necessary approvals prior to execution.					
All parties involved fulfill their contractual obligations during procurement contract implementation.					
Procurement contracts contain conflict resolution clauses for dispute resolution.					
Procurement contracts are regularly reviewed for compliance.					

**PART E: PROCUREMENT PERFORMANCE**

This section relates to your organization's procurement performance. Please rate the extent to which you agree/disagree with the following statements. *Please Note:* SD = Strongly Disagree, D = Disagree, U= Undecided, A = Agree, and SA= Strongly Agree.

	SD	D	U	A	SA
This organization's procurement strategy delivers substantial cost savings.					
This organization's procurement strategy delivers a positive return on investment.					
Our procurement strategy ensures faster delivery of supplies, making our operations more efficient.					
Positive feedback from key stakeholders confirms satisfaction with the procurement strategy.					

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**- Thank You for Your Participation -**

## Appendix 2: Ethical Approval



25<sup>th</sup> February 2025

Mrs Chepkorir Winnie,  
winnie.chepkorir@strathmore.edu

Dear Mrs Chepkorir,

### **RE: The Effectiveness of Risk Management on Procurement Performance of Humanitarian Non-Governmental Organizations in Nairobi, Kenya**

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** proposal. Your application reference number is **SU-ISERC2521/24**. The approval period is from **25<sup>th</sup> February 2025 to 24<sup>th</sup> February 2026**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including (informed consents, study instruments, MTA) will be used.
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SU-ISERC.
- iii. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to SU-ISERC within 72 hours of notification.
- iv. Any changes anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to SU-ISERC within 72 hours.
- v. Clearance for the export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to the expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days of completion of the study to SU-ISERC.

Before commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology, and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke/> and obtain other clearances needed.

Yours sincerely,

**Mr Ambrose Rachier,**  
**Chairperson; SU-ISERC**



## Appendix 4: Humanitarian Organizations

1. Abanyala Floods Relief Services
2. Abyei Community Action for Development
3. Action Against Hunger Kenya
4. Action Aid International Kenya
5. Action For Child In Conflict
6. Action Now Kenya
7. Advanced Initiatives for Population and Development
8. Adventist Development and Relief Agency International
9. Adventures In Mission – Kenya
10. Africa Community Development Foundation
11. Africa Peace Forum
12. African Collaborative Centre for Earth System
13. AMREF Health Africa in Kenya
14. Amurt International
15. ANPPCAN – Kenya (African Network for the Prevention and Protection against Child Abuse and Network)
16. Association Of Christian Resource Organization Serving Sudan
17. Awake Citizens Corps Kenya
18. Basic Needs UK In Kenya
19. Care Highway Humanitarian Aid
20. Catholic Relief Services
21. Centre For Legal Rights, Education, Advocacy and Development
22. Centre For Social Responsibility and Accountability
23. Child Refuge Centres International
24. Christadelphian Meal–A–Day Fund
25. Compassion International Inc.
26. Concern Worldwide
27. Danish Refugee Council
28. Give Directly Kenya
29. Handicap International
30. HELPAGE International
31. Himilo Relief and Development Association

32. Hope For Life
33. Hope Worldwide Kenya
34. Horn Of Africa Refugee Support Organization
35. Human Appeal International (Kenya)
36. Human Rights Watch
37. Humanitarian And Charitable One Trust Kenya
38. Humanitarian International Voluntary Association
39. I Choose Life Africa
40. Indigenous Resource Management Organization-IREMO
41. International Medical Corps
42. International Rescue Committee
43. Islamic Relief – Kenya
44. Italian Agency for The Development and Assistance to New Sudan
45. Joining Hands Together Africa
46. Kenya Aids Ngo’s Consortium
47. Latter Day Saint Charities
48. Maahad Daawah Organization
49. Mandera Women for Peace and Development (MWPD)
50. Marsabit Women Advocacy and Development Organisation (MWADO)
51. Medical Assistance in Africa
52. Mercy Corps
53. Mercy USA For Aid and Development Kenya
54. Merti Integrated Development Program (MIDP)
55. Nomad Charities – Kenya Chapter
56. Nomadic Assistance for Peace and Development (NAPAD)
57. Northern Region Development Agency (NORDA)
58. Pastoralist Community Initiative and Development Assistance (PACIDA)
59. Pastoralist Girls Initiative
60. Pathfinder International
61. Peace Building, Healing and Reconciliation Programmed
62. Plan International
63. Planned Parenthood Global
64. Pokot Women Empowerment Organization (PWEO)
65. Population Services International Kenya

66. Practical Action
67. Qatar Charity
68. Refugee Consortium of Kenya
69. Refugee Education Trust- Kenya
70. Relief International – Kenya
71. Relief, reconstruction, and development organization (RRDO)
72. Rural Agency for Community Development and Assistance (RACIDA)
73. Samburu Women Trust (SWT)
74. Save The Children International
75. Socio-Economic Development and Human Rights Organization
76. Somali Minority Rights and Aid Forum
77. Strategies For Northern Development
78. Strategies for Northern Development (SND)
79. Sustainable Development and Peace Building Initiatives
80. The Fred Hollows Foundation Kenya
81. The National Council of NGOs
82. The Samburu Project – Kenya
83. Transformation Compassion Network
84. Unite 4 Africa Inc.
85. Urgent Action Fund
86. Wajir Women for Peace
87. Womankind Kenya
88. World Vision Kenya
89. ZOA Refugee Care – Netherlands

