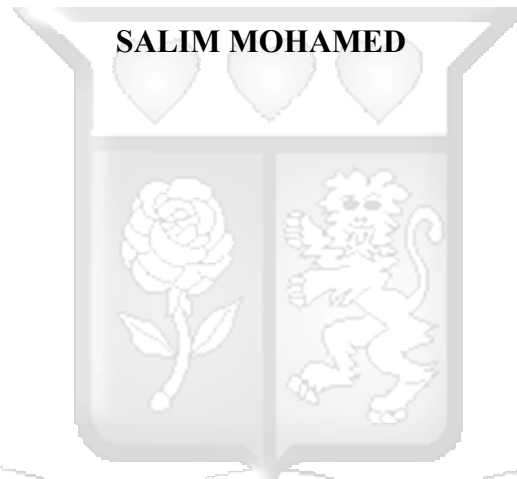


**ASSESSING THE EFFECTIVENESS OF RISK MANAGEMENT STRATEGIES ON
FINANCIAL SUSTAINABILITY AMONG SMALL AND MEDIUM ENTERPRISES IN
NAIROBI COUNTY: AN OWNER'S PERSPECTIVE**



**A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE IN
MASTER OF BUSINESS ADMINISTRATION OF STRATHMORE UNIVERSITY
KENYA (FINANCE OPTION)**

FEBRUARY 2025

DECLARATION

The work and contents contained herein is my original workings which have not been in any manner presented for examination or the award of a degree in any other higher learning institution.

Sign 

Date 07.06.2024

Salim Mohamed

Reg No: 150221

Declaration by the Supervisor

This dissertation and the contents contained in there have been approved for examination

Sign... ...

Date 07.06.2024

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DEDICATION

I dedicate this dissertation to my family for their steadfast and relentless moral and motivation support towards its development.



ACKNOWLEDGEMENT

I extend my heartfelt gratitude to the Almighty Allah for blessing me with good health and vitality, enabling me to successfully complete this dissertation proposal.

I am deeply indebted to my family for their constant encouragement, unwavering moral support, and invaluable inspiration throughout this journey. Their enduring belief in me has been a source of strength as I navigated the intricacies of writing this dissertation proposal.

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Furthermore, I wish to acknowledge all individuals who have played a role, however small, in supporting me throughout this project. Whether through financial assistance, valuable advice, or moral support, your contributions have been deeply appreciated and have contributed to the successful completion of this dissertation proposal.

In conclusion, I am sincerely grateful to everyone who has been a part of this journey and has contributed to its fruition. Thank you.

ABSTRACT

Despite the importance of SMEs towards the economic development of the nations, they have continued to face many unforeseen risks. The general purpose of this study is to assess the effectiveness of risk management strategies on financial sustainability among SMEs in Nairobi, Kenya. The specific objectives aim to investigate the influence of risk identification practices, risk assessment practices, risk mitigation practices, and risk monitoring practices on financial sustainability of SMEs in Nairobi County, Kenya. The study was anchored by four theories: decision making theory, prospect theory, contingency planning theory, and institutional theory. The empirical gap that this study aimed to fill was that past studies has failed to conduct explicit research to evaluate the extent to which risk management practices influence the sustainability of SMEs. The study was carried out over a 3-month period. Descriptive survey research design approach was employed in the study. The study's target population included all 30252 registered SMEs in Nairobi County, Kenya. The researcher used purposive sampling to randomly selecting respondents from the population with every individual having an equal chance of being chosen. The instrument used for this research was a questionnaire. The collected data was fed into SPSS version 27 and analysed using descriptive statistics and inferential statistics. The results were presented using tables, graphs, and charts. The first objective revealed that SME owners report and identify risks through formal processes to ensure that they can communicate their observations and concerns, thus improving the organization's risk awareness and responsiveness. The second objective revealed the critical importance of systematically assessing risks using both quantitative and qualitative methods that provide SMEs with measurable data to understand potential risks better. The third objective revealed that SMEs collaborate with external stakeholders to mitigate certain risks thus enhancing their overall sustainability. The fourth objective revealed that SMEs conduct periodic audits or evaluations of risk management processes and controls to improve their financial sustainability. The study concluded that risk identification practices enable SMEs to proactively address risks before they spiral into significant problems, thus safeguarding their financial resources and ensuring steady growth; risk assessment practices; risk assessment practices enable SMEs to make informed decisions and implement effective risk management strategies; risk mitigation practices enhances SMEs' financial sustainability and position them for long-term success in a competitive and unpredictable business environment; and risk monitoring practices improve SMEs' ability to anticipate and respond to risks in due course supporting their financial sustainability and long-term success. The study recommended that SMEs should prioritize the implementation of comprehensive risk management practices to enhance their financial sustainability, the Nairobi County Government should support SMEs by creating an enabling environment for effective risk management; and policymakers should develop and implement regulations that promote and support risk management practices among SMEs.

Keywords: Risk management, risk identification, risk assessment, risk mitigation, and risk monitoring, financial sustainability, small and medium enterprises.

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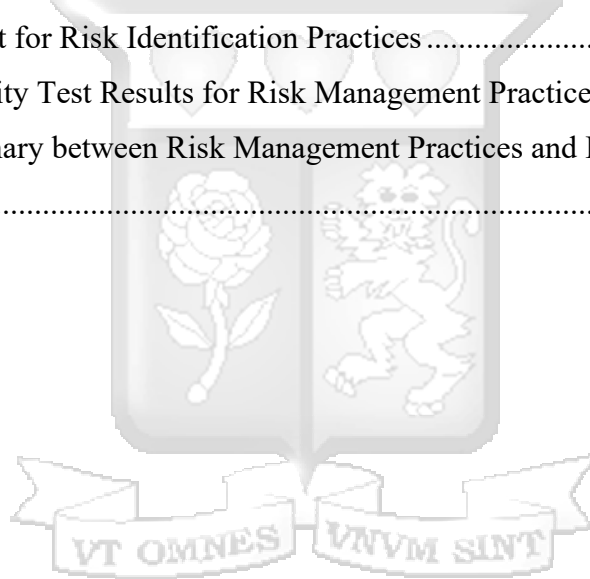
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ABBREVIATIONS AND ACRONYMS

NACOSTI	National Commission for Science Technology and Innovation
SMES	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
USA	United States of America



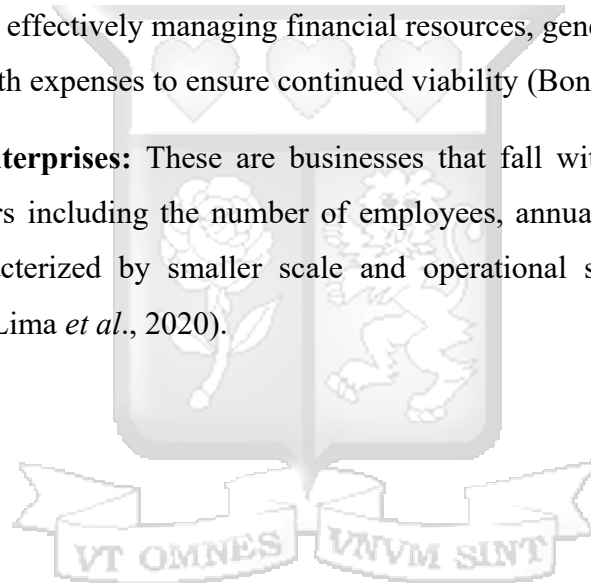
OPERATIONAL DEFINITIONS OF KEY TERMS

Risk Management: This is the systematic process of identifying, assessing, and mitigating risks to an organization. It involves analysing potential events or situations that may have adverse effects on the achievement of organizational objectives (Arena, *et al.* 2010).

Risk Management Practices: These practices encompass the methodologies, processes, and strategies that organizations employ to identify, assess, monitor, and respond to risks. These practices involve a systematic and structured approach to managing uncertainties that could affect the organization's ability to achieve its goals (Nanthuru *et al.*, 2018).

Financial Sustainability: This is the ability of an organization to sustain its financial health over the long term. It involves effectively managing financial resources, generating sufficient revenue, and balancing income with expenses to ensure continued viability (Boniface and Ibe, 2012).

Small and Medium Enterprises: These are businesses that fall within a certain size range, typically based on factors including the number of employees, annual revenue, or total assets, and are generally characterized by smaller scale and operational scope compared to large corporations (de Araújo Lima *et al.*, 2020).



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Small and Medium Enterprises (SMEs) play a crucial role in promoting economic growth, innovation, and employment generation in various countries. They contribute significantly to local economies by enhancing entrepreneurship, increasing market competition, and promoting industrialization (Blazy and Weill, 2013; Smit and Watkins, 2021; Kiiru *et al.*, 2023). However, as argued by Crovini *et al.* (2021), despite their crucial role, SMEs are highly vulnerable to various risks that threaten their financial sustainability. Unlike large corporations with substantial financial buffers and diversified revenue streams, SMEs often operate with limited resources, making them particularly susceptible to financial distress when faced with risks (Mumassabba, 2024). Consequently, the ability of SMEs to effectively manage risks determines their survival, profitability and long-term sustainability.

SMEs encounter multiple types of risks, including financial, operational, strategic, and compliance risks. Financial risks, such as cash flow shortages, currency fluctuations, and high-interest rates, can lead to insolvency and business closure (de Araújo Lima *et al.*, 2020). Operational risks arise from internal inefficiencies, technological failures, and supply chain disruptions, which can impact productivity and service delivery. Strategic risks, such as market competition, evolving consumer preferences, and changes in business models, require SMEs to be agile and adaptive (Glowka *et al.*, 2021). Additionally, compliance risks related to tax regulations, labour laws, and industry standards pose significant challenges, as failure to adhere can result in legal penalties and reputational damage. Without comprehensive risk management strategies, SMEs may struggle to navigate these uncertainties, thereby compromising their financial sustainability.

The question of how risk management practices influence financial sustainability is suitable due to the growing vulnerability of SMEs to financial instability in uncertain economic environments. SMEs, which form the backbone of many economies in the world, often lack

robust risk management frameworks, making them highly susceptible to operational, financial, and strategic risks (Crovini *et al.*, 2021). Given their limited access to capital and external financing, ineffective risk management can lead to cash flow constraints, increased liabilities, and eventual business failure (Kwanum & Luper, 2018). For instance, during the COVID-19 pandemic, many SMEs in Nairobi County suffered severe financial distress due to unanticipated disruptions, highlighting the need for proactive risk identification, assessment, and mitigation strategies to ensure financial sustainability (Njuguna, 2023). As such, exploring this relationship, the study provides a foundation for SMEs to adopt structured risk management practices that enhance their financial resilience.

Globally, SMEs play a key role in the economic development of nations. Meidell and Kaarbøe (2017) state that SMEs have wide-ranging definitions in different countries, but they generally fall within a defined range. For example, European Commission (1996) defined SMEs as enterprises with less than 250 employees and a yearly income of EUR 40 million (Wang and Yu (2019). In many cases, small enterprises have fewer employees and lower annual turnover compared to medium-sized enterprises. The distinction is often based on quantitative factors, with small businesses commonly having a more limited workforce and financial scale than their medium-sized counterparts. SMEs play a crucial role in economies worldwide, contributing to job creation, innovation, and economic growth, and their categorization helps tailor policies and support mechanisms to address the unique challenges and needs of businesses within these size parameters (Glowka *et al.*, 2021).

A report by Simota *et al.* (2018) asserts that the lack of financial sustainability significantly hampers the ability of SMEs to contribute to employment creation and poverty alleviation, mostly among marginalized groups. According to Verbano and Venturini (2020), risk management has emerged as a crucial factor impacting the sustainability of SMEs globally, affecting both developed and developing nations. They observed that SMEs have played a vital role in improving the living standards of many families, fostering innovation, and promoting equitable income distribution while developing entrepreneurial skills. Countries such as the United States, Australia, the United Kingdom, Malaysia, and China have a rich history of SME

prevalence, underscoring their essential contributions to economic and social development. Simota *et al.* (2018) emphasize that without financial sustainability, SMEs struggle to fulfil their potential in addressing unemployment and poverty.

In Africa, the 2013 report by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) revealed that over 37 million SME outlets provided employment to more than 80% of Nigeria's total population. This significant contribution is evidence for the vital role of SMEs in the country's economic development, demonstrating their capacity to absorb a sizeable portion of the workforce and support livelihood opportunities for millions. The Government of Ghana characterizes SMEs as businesses that employ fewer than one hundred individuals and have capital investments not exceeding 10 million Ghanaian cedis. Consequently, these enterprises typically have an employment capacity ranging from 9 to 100 people, serving specific employers and contributing significantly to the country's economic framework. According to Hudáková *et al.* (2019), a large segment of Ghana's population is primarily engaged in the SME informal sector, which plays a crucial role in employment generation.

Moreover, the significance of SMEs extends beyond mere employment. They are vital in promoting economic growth, driving innovation, and supporting equitable income distribution. In many African nations, including Nigeria and Ghana, SMEs are instrumental in reducing poverty levels, enhancing social stability, and boosting overall national productivity. These enterprises provide a fertile ground for entrepreneurship, allowing individuals to develop their business acumen and entrepreneurial skills. Additionally, SMEs contribute to the diversification of the economy, making it more resilient to external shocks and global economic fluctuations. As such, it is clear that SMEs are not just engines of employment but also key players in the broader economic development strategy of African nations. Policymakers and stakeholders must therefore continue to support the growth and sustainability of SMEs through favourable policies, access to financing, and capacity-building initiatives. This can ensure that SMEs continue to play their key role of elevating economic and social development across the continent.

In Malaysia, the Department of Statistics has reported that the growth and sustained positive economic contributions of SMEs have resulted in a 0.5% increase in the Gross Domestic Product (GDP) of the country. According to Yakob *et al.* (2019), there is a preference among individuals to engage in the informal sector over government employment, emphasizing the significant role of SMEs in the Malaysian economy. Despite their importance, the current business environment is becoming increasingly challenging due to rising threats and heightened competition in modern markets. To effectively combat these risks and threats, companies must prioritize delivering high-quality products and services, ensuring exceptional delivery standards to satisfy customers and maintain competitive advantage (Rehman & Anwar, 2019). This requires enterprises, whether start-ups or established businesses, to possess comprehensive knowledge of their organization, including its strengths and opportunities. Such insight enables businesses to anticipate weaknesses and threats, effectively monitor and manage risks, thus maintaining their competitiveness and market position (Brustbauer, 2020).

In addition to internal organizational knowledge, businesses must also stay up-to-date with market trends and technological advancements. For example, the integration of digital technologies and data analytics can provide SMEs with crucial insights into market behaviour, customer preferences, and emerging risks. According to a study by the World Bank (2021), the adoption of digital tools has been shown to enhance the operational efficiency and market reach of SMEs, contributing to their resilience and growth in a rapidly evolving business world. Furthermore, building robust networks and partnerships is essential for SMEs to thrive. Collaborations with other businesses, industry associations, and academic institutions can nurture innovation and provide access to new markets and resources. A report by the International Trade Centre (ITC) (2018) emphasizes the importance of such partnerships in enhancing the global competitiveness of SMEs, enabling them to navigate complex international markets and capitalize on new opportunities.

The lack of awareness and financial constraints often hinder SMEs from seeking professional advice on risk management. According to Crovini *et al.* (2021), many SMEs operate with limited budgets and may view risk management as a secondary concern compared to day-to-day

operations and growth. This emphasises the need for more targeted initiatives, such as government programs or industry associations, to provide practical and affordable risk management guidance for SMEs (Florio & Leoni, 2017). Bridging this gap could involve creating simplified, industry-specific resources, promoting awareness campaigns, and establishing partnerships between SMEs and experts who can offer tailored advice. Addressing this lack of guidance is crucial for the resilience and sustainability of SMEs, as effective risk management contributes significantly to long-term success and continuity in a dynamic business environment (Santoro *et al.*, 2019; Benali *et al.*, 2018; Yakob *et al.*, 2019).

It is evident that the poor financial sustainability of SMEs is often attributed to a combination of risks and uncertainties, along with a lack of essential skills to effectively manage these risks (Kwanum & Luper, 2018). In many SMEs, the responsibility of risk management predominantly falls on the founder or founders, who are typically the entrepreneurs. Unfortunately, these individuals often lack the necessary professional qualifications, resulting in decisions that can negatively impact the firm. The SME sector in Kenya is challenged by inadequate capital, which makes it difficult for these enterprises to engage in comprehensive risk management strategies, consequently affecting their performance. According to the World Bank (2021), limited access to financing is a significant barrier for SMEs in developing countries, hindering their ability to invest in risk management practices and other essential business operations.

In addition to financial constraints, there is often a lack of awareness and training in risk management among SME owners and managers. This gap in knowledge and skills can lead to inadequate risk identification, assessment, and mitigation strategies, further exacerbating the vulnerabilities of these businesses. A study by the International Finance Corporation (IFC) (2019) found that providing targeted training and capacity-building programs can significantly improve the risk management capabilities of SMEs, enhancing their resilience and sustainability. Furthermore, the integration of modern technological tools and data analytics can play a crucial role in enhancing risk management practices within SMEs. Technologies such as artificial intelligence and machine learning can help businesses identify potential risks more accurately and develop more effective mitigation strategies. According to a report by McKinsey &

Company (2021), the adoption of digital risk management solutions can lead to substantial improvements in the operational efficiency and financial stability of SMEs.

1.1.1 Risk Management Practices

Risk management practices play a crucial role in shaping the perception of financial sustainability. According to Yang *et al.* (2018), effective risk management enables SMEs to identify, assess, mitigate, and monitor potential risks, thereby enhancing their ability to deal with uncertainties and maintain long-term viability in the changing aspects of the business environment. In Nairobi County, where SMEs form a significant percentage of the businesses, understanding and implementing robust risk management practices are imperative for sustainable growth and competitiveness.

Firstly, risk identification practices involve the systematic identification of potential risks that may impact the financial sustainability of SMEs. This may include conducting regular risk assessment workshops, utilizing risk management tools and software, and encouraging employees to report and identify risks through formal processes (Chu *et al.*, 2021). According to recent statistics, SMEs in Nairobi County face a multitude of risks, including market volatility, supply chain disruptions, and regulatory changes (Irungu & Arasa, 2017). By effectively identifying these risks, SMEs can proactively develop strategies to mitigate their impact and protect their financial sustainability.

Secondly, risk assessment practices involve evaluating the likelihood and impact of identified risks on SMEs' financial sustainability (Hudáková *et al.*, 2019). Quantitative methods, such as statistical analysis, and qualitative techniques, such as expert judgment, are utilized to assess risks and prioritize them based on their potential impact. A study by Douglas *et al.* (2017) revealed that SMEs in Nairobi County are particularly vulnerable to financial risks such as liquidity constraints and currency fluctuations. By conducting thorough risk assessments, SMEs can gain valuable insights into the potential consequences of various risks and tailor their risk management strategies accordingly.

Thirdly, risk mitigation practices involve implementing processes aimed at decreasing the probability or effect of various identified risks. This may include developing contingency plans, allocating financial resources to implement risk mitigation measures, and integrating risk management considerations into strategic planning processes (Chowdhury *et al.*, 2019). Kiveu *et al.* (2020) reported that SMEs in Nairobi County often struggle with access to finance and are exposed to risks related to loan defaults and interest rate fluctuations. Through effective risk mitigation practices, SMEs can minimize their exposure to such risks and safeguard their financial sustainability.

Risk monitoring practices involve tracking and reviewing key risk indicators (KRIs) to ensure that risk management strategies remain effective over time. According to Beganau (2020), regular audits and evaluations of risk management processes and controls are conducted to identify any weaknesses or areas for improvement. Despite the importance of risk monitoring, a study by the Mwasiaji (2019) found that many manufacturing SMEs in Kenya lack formalized risk monitoring mechanisms, leaving them vulnerable to unforeseen risks. By strengthening risk monitoring practices, SMEs can enhance their ability to detect and respond to emerging risks, thus boosting their financial sustainability.

While past studies have explored the influence of risk management practices on SMEs' financial sustainability, there remains a need for research specifically focused on SMEs in Nairobi County. By examining the unique risk landscape and challenges faced by SMEs in this region, our research seeks to fill this gap and provide valuable insights into the relationship between risk management practices and the perception of financial sustainability among SMEs. Through a comprehensive analysis of risk identification, assessment, mitigation, and monitoring practices, our study aims to inform policymakers, practitioners, and stakeholders on strategies to enhance the resilience and long-term viability of SMEs in Nairobi County.

1.1.2 Financial Sustainability

Financial sustainability is paramount for the success and longevity of SMEs. These businesses are the backbone of the economy, contributing significantly to employment creation, GDP

growth, and innovation. However, achieving and maintaining financial sustainability can be challenging, especially in the face of economic uncertainties, market fluctuations, and competitive pressures. One of the key reasons why financial sustainability is essential for SMEs is its direct impact on business survival. Statistics indicate that a significant proportion of SMEs fail within the first few years of operation, often due to financial mismanagement or inadequate planning. According to a study by Ombongi & Long (2018), approximately 20% of small businesses fail within their first year, while around 50% fail within five years. This highlights the critical importance of financial sustainability in ensuring the continued existence of SMEs.

Furthermore, financial sustainability is crucial for SMEs to access external financing and investment opportunities. Banks and investors are more likely to support businesses that demonstrate strong financial performance and stability. SMEs with sound financial management practices are better positioned to secure loans, attract investors, and negotiate favourable terms for partnerships or collaborations (Santoro, 2019). In contrast, Simota *et al.* (2018) argue that businesses with poor financial health usually struggle to obtain funding, limiting their growth prospects and inhibiting their ability to compete in the market. Moreover, financial sustainability enables SMEs to weather economic downturns and withstand unforeseen challenges. During times of economic uncertainty or crisis, businesses with robust financial reserves and cash flow management practices are better equipped to navigate turbulent waters (Smit and Watkins, 2021). They can adapt their strategies, invest in innovation, and explore new markets, positioning themselves for long-term success. In contrast, businesses that lack financial sustainability may be forced to downsize, cut costs, or even close their doors permanently.

Profitability is a fundamental aspect of financial sustainability for SMEs, as it directly reflects the ability of the business to generate earnings from its operations. According to Schwab *et al.* (2019), a profitable SME is better positioned to cover its expenses, reinvest in the business, and reward stakeholders. However, achieving and maintaining profitability can be challenging for SMEs, particularly in a competitive market environment like Nairobi County. Effective cost management, pricing strategies, and revenue generation initiatives are essential for enhancing profitability and sustaining the financial health of SMEs (Sax and Torp, 2015).

Debt management is another critical aspect of financial sustainability for SMEs. According to Schwab *et al.* (2019), while debt can be a valuable source of funding for business expansion and growth, excessive debt levels can pose significant risks to the financial stability. Therefore, as stated by Belás *et al.* (2017), practical debt management practices, such as maintaining an appropriate debt-to-equity ratio, managing debt repayment schedules, and negotiating favourable terms with lenders, are essential for mitigating the risks associated with debt financing and ensuring long-term financial sustainability of SMEs in Nairobi County.

Cash flow management is also paramount for SMEs, as it directly impacts their ability to meet short-term financial obligations and sustain day-to-day operations. According to Wadesango *et al.* (2019), effective cash flow management involves monitoring and managing cash inflows and outflows, maintaining adequate cash reserves, and implementing strategies to improve cash flow efficiency. By ensuring a healthy cash flow position, SMEs in Nairobi County can better deal with financial challenges, seize opportunities for growth, and maintain stability in the face of economic uncertainties.

1.1.3 SMEs in Nairobi County

SMEs play a crucial role in Kenya's economy, contributing an estimated 20% to the Gross Domestic Product (GDP) and significantly to job creation. In Nairobi County, SMEs form the backbone of the local economy, contributing significantly to its growth and development. These enterprises span a wide range of sectors, including retail, manufacturing, services, and technology. Reflecting on the ground realities, Nairobi County Government's licensing records disclose the existence of 50,252 officially registered SMEs within its jurisdiction (Mugo, *et al.*, 2019). The appeal of SMEs has captivated numerous young entrepreneurs owing to their minimal capital requirements for initiation.

Despite their diverse nature, SMEs in Nairobi County face common challenges, particularly in terms of financial stability (Shibia & Barako, 2017). Access to financing remains a major hurdle for SMEs in Nairobi County, as many small businesses struggle to secure loans or lines of credit from traditional financial institutions such as banks and SACCOS. Unfortunately, banks and

SACCOS tend to maintain high levels of liquidity and are hesitant to extend credit to SMEs, except for those deemed highly creditworthy. Consequently, many SMEs find themselves excluded from accessing crucial financial support. The stringent lending criteria and high collateral requirements often make it difficult for SMEs to access the funding they need to expand their operations, invest in new technologies, or meet working capital needs. As a result, SMEs in Nairobi County often rely on alternative sources of financing, such as informal lending networks (Gure & Karugu, 2018).

Furthermore, SMEs in Nairobi County are vulnerable to economic shocks and fluctuations in market conditions, which can impact their financial stability. Factors such as changes in consumer preferences, regulatory policies, or global economic trends have a profound effect on the profitability and sustainability of the SMEs. Without adequate financial resources and risk management strategies in place, SMEs struggle to weather economic uncertainties and remain competitive in the marketplace (Shibia & Barako, 2017). Therefore, promoting financial literacy, providing access to affordable financing options, and fostering a supportive business environment are essential for enhancing the financial stability of SMEs in Nairobi County.

1.2 Statement of the Problem

While risk management practices are acknowledged as crucial for SMEs, there is a gap in understanding how specific risk management practices influence the financial sustainability of SMEs in Nairobi County. The Kenya National Bureau of Statistics (KNBS) reported that 2.6 million SMEs in Kenya were found to have stopped operating after five years since their businesses. Their closures were attributed to their inability to adapt to consumer preferences and shifting market conditions are at risk of closure (Kiiru *et al.*, 2023). Since effective risk management involves analysing market trends and modifying business strategies as required, there is need to determine the risk management practices that lead to uneven sustainable growth in the SMEs sector in Kenya.

There is a scarcity of studies evaluating the effectiveness of risk assessment practices among SMEs in Nairobi County. Kinyua *et al.* (2019) conducted a study on the effect of risk

management strategies on project performance of SMEs in the ICT field in Nairobi County. Moreover, Kagwathi, *et al.* (2020) conducted a study on risks faced and mitigation strategies employed by SMEs in Nairobi County, Kenya. In both studies, key questions arose concerning the types of risks faced by SMEs in Nairobi County, their current risk management practices employed, and the extent to which these practices impact their financial sustainability. These aspects were not thoroughly explored even though they are crucial to developing informed policies, providing tailored support, and fostering an environment conducive to the growth and resilience of SMEs in the region. Understanding how SMEs assess risks allows for the development of targeted strategies to address these risks and enhance financial sustainability (Chapman, & Cooper, 2018).

There is limited research on the implementation of risk mitigation practices by SMEs in Nairobi County. Effective risk mitigation strategies are essential for SMEs to minimize the impact of identified risks on their financial performance and long-term viability. Therefore, this study seeks to investigate the influence of risk management practices on the financial sustainability of SMEs in Nairobi County, Kenya. By identifying and understanding the specific risk factors affecting SMEs and evaluating the efficacy of their risk management strategies, this research aims to contribute valuable insights that can inform policymakers, business owners, and stakeholders in fostering a sustainable and thriving SME sector in Nairobi County.

1.3 General Objective

The general objective of the study was to assess the effectiveness of risk management strategies on financial sustainability among SMEs in Nairobi, Kenya.

1.3.1 Specific Objectives

- i. To investigate the influence of risk identification practices on financial sustainability of SMEs in Nairobi County, Kenya.
- ii. To evaluate the influence of risk assessment practices on financial sustainability of SMEs in Nairobi County, Kenya.

- iii. To determine the influence of risk mitigation practices on financial sustainability of SMEs in Nairobi County, Kenya.
- iv. To identify the influence of risk monitoring practices on financial sustainability of SMEs in Nairobi County, Kenya.

1.5 Research Questions

- i. What is the influence of risk identification practices on financial sustainability of SMEs in Nairobi County, Kenya?
- ii. What is the influence of risk assessment practices on financial sustainability of SMEs in Nairobi County, Kenya?
- iii. What is the influence of risk mitigation practices on financial sustainability of SMEs in Nairobi County, Kenya?
- iv. What is the influence of risk monitoring practices on financial sustainability of SMEs in Nairobi County, Kenya?

1.6 Significance of the Study

1.6.1 Small and Medium Enterprises Management

Since this study explores the impact of risk management practices on financial sustainability, it is significant for SMEs in Nairobi City County, Kenya. SMEs can gain valuable insights into effective strategies for identifying, assessing, mitigating, and monitoring risks. The findings can help SME owners understand the importance of adopting comprehensive risk management practices, leading to more resilient and financially stable businesses. Implementing these practices can reduce vulnerability to financial shocks, improve decision-making, and ultimately enhance profitability and growth prospects. The research provides actionable recommendations that SMEs can apply to safeguard their operations and ensure long-term sustainability in a competitive market environment.

1.6.2 Nairobi County Government and other Policy Makers

For the Nairobi County Government, this study is essential as it offers data-driven insights into the challenges and opportunities facing SMEs, which are a critical component of the local economy. Understanding the role of risk management in enhancing the financial sustainability of SMEs can inform policy development and support programs aimed at fostering a more robust business environment. The findings can guide the government in designing targeted interventions, such as training programs on risk management, financial literacy initiatives, and providing access to resources that help SMEs build resilience. By promoting effective risk management practices, the Nairobi County Government can help create a stable economic landscape that encourages entrepreneurship and job creation.

1.6.3 Future Researchers and Scholars

This study contributes significantly to the academic field by filling existing gaps in the literature regarding risk management practices and their impact on SME financial sustainability in Nairobi City County. For researchers and scholars, the study provides a comprehensive analysis and empirical data that can be used as a foundation for further research. It enhances the understanding of the interplay between risk management and financial sustainability, offering new perspectives and methodologies that can be applied in different contexts. Additionally, this research may inspire future studies to explore similar themes in other regions or sectors, thereby enriching the body of knowledge and fostering academic discourse on SME resilience and risk management.

1.6.4 Future Researchers and Scholars

Financial institutions, including banks and microfinance organizations, stand to benefit significantly from the insights provided by this research. Understanding how risk management practices influence the financial sustainability of SMEs can help these institutions better assess the creditworthiness and risk profiles of potential SME clients. The findings can inform the development of tailored financial products and services that address the specific needs and challenges of SMEs. Moreover, financial institutions can use the study's insights to provide advisory services and training to SME clients, helping them implement effective risk management strategies. Financial institutions can reduce default rates, improve client

relationships, and contribute to the economic stability of Nairobi City County by supporting SMEs in enhancing their financial sustainability.

1.7 Scope of the Study

The scope of this study included all the registered SMEs in Nairobi County, Kenya. The study focused on targeting the sole proprietors of all 30,252 registered SMEs in this area. This group was chosen because they are the key individuals responsible for managing these enterprises and possess an in-depth understanding of the challenges related to sustaining such businesses in terms of risk management and control. The research was conducted over a span of three months, from April to June 2024. This period allowed for broad data collection and analysis, ensuring that the study's findings are robust and reflective of the current business environment in Nairobi County. The study aimed to gather detailed insights into how these business owners perceive and handle various risks that impact the financial sustainability of their enterprises.

1.8 Chapter Summary

This chapter provides an overview of the study, beginning with the background context of the research topic, which focuses on the influence of risk management practices on the financial sustainability of SMEs in Nairobi City County, Kenya. The chapter identifies the statement of the problem, highlighting the gaps in knowledge and the need for further investigation into this area. It also outlines the general purpose of the study and presents specific objectives and research questions aimed at addressing the research gap. Additionally, the chapter discusses the significance of the study, emphasizing its potential contributions to academic literature, policy-making, and practical implications for SMEs. Finally, the chapter delineates the scope of the study, clarifying the geographical and thematic boundaries within which the research will be conducted. The next chapter presents the literature review.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews existing literature regarding the sustainability of various SMES with regard to risk management practices. A subsection discussing the theoretical framework of the study is also included and it identifies the theories that conceptualise the research topic. The empirical review provides a critical examination of findings by various researchers concerning the topic, followed by the research gaps. A conceptual framework showing the relationship between the variables is also presented, along with a table showing their operationalization.

2.2 Theoretical Framework

2.2.1 Decision Making Theory

Herbert A. Simon, a Nobel laureate in economics, introduced the decision-making theory in 1978, emphasizing the bounded rationality of human beings. According to Simon, individuals do not have unlimited cognitive resources, and their decision-making is often constrained by time, information, and cognitive limitations (Simon, 1979). He argued that in complex and uncertain situations, individuals satisfy rather than optimize, meaning they make decisions that are good enough rather than seeking the best possible outcome. This theory challenges traditional economic models that assume perfect rationality and complete information in decision-making processes.

Applying Simon's decision-making theory to the context of SMEs and their financial sustainability is relevant in understanding the influence of risk identification practices. SMEs often operate in dynamic environments with limited resources. In the face of financial risks, SME owners and managers usually lack the luxury of exhaustive analysis due to time and information constraints. Instead, they rely on heuristics and simplified decision rules to identify and address risks promptly. Understanding the bounded rationality inherent in SME decision-making helps shed light on the practical strategies employed in risk identification, contributing to the broader goal of achieving financial sustainability in these businesses.

With reference to the theory, in the context of SMEs, where uncertainties are common, decision-makers may employ rules of thumb and experience-based judgment in identifying financial risks (Campitelli & Gobet, 2010). Recognizing these bounded rationalities is crucial for designing effective risk management strategies tailored to the practical limitations of SME decision-makers. By acknowledging the constraints on decision-makers, policymakers, financial institutions, and business advisors can provide support and resources that align with the bounded rationality of SMEs, ultimately enhancing their ability to identify and navigate financial risks for long-term sustainability.

2.2.2 Prospect Theory

Prospect Theory, formulated by Kahneman and Tversky during the late 1970s, stands out as a revolutionary concept in behavioural economics since it focusing on how individuals make decisions in the middle of uncertain situations. This theory deeply challenges conventional economic models that presume people make choices based on the expected value of potential outcomes. The theorists suggested that individuals assess possible losses and gains in relation to a reference point, which is typically their current situation or an anticipated outcome. Their research revealed that people generally exhibit risk aversion when dealing with gains but display risk-seeking behaviour when faced with losses of an equivalent size. This imbalance in risk preferences carries profound implications for comprehending decision-making processes in various scenarios (Kahneman & Tversky, 2013).

One key component of Prospect Theory is the concept of “loss aversion,” which posits that the psychological impact of a loss is typically greater than the pleasure derived from an equivalent gain. This asymmetry in the valuation of gains and losses influences decision-makers to be more cautious in the face of potential profits and instead take more risks to avoid losses. Another element is the idea of the “value function,” representing how individuals subjectively evaluate outcomes. The value function is typically concave for gains, indicating diminishing sensitivity, and convex for losses, indicating heightened sensitivity (Wakker, 2010). In the context of risk assessment practices, Prospect Theory provides valuable insights into how SMEs might approach

the evaluation of potential risks and rewards. When SMEs are assessing various risks, decision-makers within these enterprises exhibit risk-averse tendencies when considering potential gains and are more willing to take risks when faced with potential losses. This behavioural nuance can shape the risk assessment process, affecting the types of risks prioritized and the strategies employed to mitigate them.

For SMEs, understanding the psychological biases inherent in Prospect Theory is crucial for effective risk assessment. By acknowledging that decision-makers may be more averse to potential gains and more willing to accept risks to avoid losses, SMEs can tailor their risk assessment practices accordingly. For instance, the risk assessment process may need to include strategies that highlight potential gains more prominently or that address the psychological impact of potential losses. Moreover, incorporating behavioural insights from Prospect Theory can contribute to the development of risk management strategies that align with the cognitive biases of decision-makers within SMEs, ultimately influencing their financial sustainability. In essence, Prospect Theory sheds light on the nuanced ways in which SMEs approach risk assessment and can guide the formulation of risk management practices that better resonate with the behavioural tendencies of those involved in decision-making processes within these enterprises (Kahneman & Tversky, 2013).

2.2.3 Contingency Planning Theory

Contingency Planning Theory was developed by Paul R. Lawrence and Jay W. Lorsch, organizational theorists, in the late 1960s. The theory is rooted in the idea that there is no one-size-fits-all approach to managing organizations, and success depends on aligning organizational structure and management practices with the demands of the external environment. The theorists argue that organizations can only be successful once their structures and strategies can address the changing aspects in a wide range of situations, acknowledging that no single structure or approach will be effective in all circumstances. The core tenet of this theory is that organizations need to be flexible and responsive to changes in their external environment. This theory recognizes that external factors, for example regulatory changes can significantly impact an organization's effectiveness. Therefore, rather than adhering rigidly to a predetermined plan,

organizations should engage in continuous monitoring and adaptation to cope with unforeseen challenges (Lawrence & Lorsch, 1967).

In the context of risk mitigation practices, Contingency Planning Theory becomes particularly relevant. As SMEs face various risks, including economic recessions, or unforeseen regulatory changes, the theory suggests that these businesses should not rely solely on fixed risk management strategies. Instead, SMEs should adopt a dynamic and adaptive approach to risk mitigation. By continuously monitoring the external environment and adjusting their risk mitigation practices in response to emerging contingencies, SMEs can enhance their resilience and increase the likelihood of financial sustainability.

Contingency Planning Theory encourages SMEs to develop flexible risk mitigation plans that can be adjusted based on the specific challenges they encounter. This involves not only identifying potential risks but also preparing alternative strategies to address different scenarios (Lawrence, 2015). For example, if a supply chain disruption occurs, SMEs with a contingency mindset would have pre-planned alternative suppliers or logistic routes. In essence, the theory emphasizes that the effectiveness of risk mitigation practices is contingent on the ability of SMEs to adapt these practices to the ever-changing business environment.

Therefore, contingency planning theory highlights the importance of adaptability and flexibility in organizational strategies. When applied to risk mitigation practices, the theory advocates for dynamic approaches that can be adjusted based on the specific context and challenges faced by SMEs. By embracing a contingency mindset, SMEs can enhance their ability to respond effectively to risks, ultimately contributing to greater financial sustainability. This approach aligns with the changing aspects of the business environment and helps SMEs navigate uncertainties with a more resilient and proactive stance.

2.2.3 Institutional Theory

Introduced by John Meyer and Brian Rowan in the late 1970s, institutional theory is a sociological perspective that examines how institutions shape organizational behaviour,

structure, and practices. The theory, as developed by Meyer and Rowan, focuses on the isomorphism, or similarity, that organizations adopt to conform to institutional pressures and expectations. They identified three types of isomorphism: coercive, normative, and mimetic. Coercive isomorphism occurs when organizations comply with external regulations and pressures. Normative isomorphism is driven by professional standards and norms, while mimetic isomorphism involves organizations imitating successful peers (DiMaggio & Powell, 2012).

In a parallel development, DiMaggio and Powell expanded institutional theory by introducing the concept of institutional isomorphism, emphasizing the role of legitimacy and legitimacy pressures. They argued that organizations strive for legitimacy to gain social approval and access resources. This can lead to the adoption of similar structures and practices across organizations within an institutional field (Greenwood & Meyer, 2008). Meyer and Rowan highlighted the influence of external factors for example government regulations, while DiMaggio and Powell emphasized the importance of conformity to societal expectations. Both versions of Institutional Theory emphasise the role of institutional pressures in shaping organizational behaviour.

Applying Institutional Theory to the influence of risk monitoring practices on financial sustainability of SMEs, one can understand how external pressures and societal expectations influence the adoption of specific risk monitoring mechanisms. SMEs may adopt certain risk monitoring practices not only because they are effective but also to conform to industry norms, gain legitimacy, and ensure compliance with regulatory expectations. For instance, in a business environment where stakeholders value transparency and accountability, SMEs may adopt sophisticated risk monitoring practices to enhance their legitimacy and gain trust.

The theory helps explain why SMEs might mimic the risk monitoring practices of larger and more established firms in their industry, even if they face different risk profiles. By aligning with prevailing norms and expectations, SMEs can signal their adherence to industry standards, potentially enhancing their credibility with stakeholders. Furthermore, SMEs might adopt risk monitoring practices that align with the institutionalized expectations of financial institutions, regulatory bodies, and other relevant stakeholders.

2.3 Empirical Literature Review

2.3.1 Risk Identification Practices and Financial Sustainability of SMEs

Risk identification encompasses identifying a wide range of risks, including but not limited to financial risks, operational risks (supply chain disruptions, technological failures, and regulatory changes), strategic risks (such as competitive threats and changes in consumer preferences), and external risks (economic fluctuations, political instability, and environmental factors) (Chu *et al.*, 2021). In the perspective of this study, risk identification refers to the process of systematically identifying and recognizing potential risks that may affect the financial sustainability of SMEs. This involves identifying various internal and external factors, events, or circumstances that have the potential to pose threats or uncertainties to the financial stability and viability of SMEs operating within the specified geographical area.

In a recent study by Yang *et al.* (2021), an investigation was conducted to pinpoint the primary factors impacting the credit risk of SMEs in China. The aim was to develop a predictive model that could enhance the sustainability of supply chain finance. Utilizing the lasso-logistic model, the research team identified influential factors affecting SMEs' credit risk and crafted a predictive framework for assessing such risk. The empirical findings unveiled six pivotal factors influencing the credit risk of SMEs, which encompassed the level of order data alignment, the ratio of contract enforcement, instances of contract defaults, concentration of business operations, and occurrences of administrative penalties. The study revealed that the lasso-logistic model effectively determined key contributors to credit risk and exhibited superior predictive capabilities. Additionally, the study emphasised the significant impact of transactional credit and reputation oversight on SMEs' credit risk. However, certain limitations were recognised, calling for further investigation. The study's scope was confined to SMEs within the logistics sector, thus limiting the generalizability of the model's effectiveness. Furthermore, the study highlighted the inadequacy of the sample size in generalising conclusive findings.

A study by Yusuwan (2018) investigated risk management techniques within construction project businesses in order to determine the level of awareness regarding risk management. The research utilized a questionnaire-based survey to gather data from respondents in Klang Valley, Malaysia. The survey revealed that 44.4% of the participants had occasionally heard about risk management, while 29.6% had both heard about it and attended training sessions on the subject. Additionally, 14.8% had successfully implemented best practices in risk management, whereas 11.1% had never been exposed to the concept of risk management at all. Moreover, 51.9% of the respondents believed that adopting best practices in risk management would enhance their daily work activities, and 33.4% felt that a risk-based management approach was particularly effective during the occurrence of threats. The aggregated results from the study indicated that the application of risk management strategies led to improved productivity and financial stability. However, the research was limited to developed nations and did not extend to examining risk management practices within the African setting. This limitation suggests a potential area for further research to understand the unique challenges and requirements of risk management in construction projects in less developed regions.

Muli (2013) investigated the management of common hazards within the Kenyan insurance sector. He conducted a case study involving 36 insurance companies, distributing questionnaires to a selected sample of 18 firms. The research utilized an exploratory approach to gather data, incorporating both qualitative and quantitative analyses of existing evidence. Data collected through questionnaires and interviews were meticulously coded, and each response was evaluated using simple percentage frequency tables. The findings were then presented using a descriptive design methodology. The study revealed that, although insurance companies provided substantial information regarding their risk management practices, they lacked efficient methods for storing and retrieving this information. This inefficiency suggested a need for these companies to enhance and digitize their information management systems. However, it is important to note that since this study was specific to the insurance industry, the conclusions drawn may not be directly applicable to the SME sector. The study concluded that the existing manual processes not only slowed down information retrieval but also increased the potential for human error.

Kithinji (2010) conducted a study examining the practices of credit risk management and their influence on the profitability of commercial banks in the Republic of Kenya. The primary objective was to determine the extent to which effective credit risk management contributed to the high profits observed in these financial institutions. The study found that there was no discernible correlation between the implementation of risk controls and the level of profitability achieved by the banks. This conclusion was drawn using a regression model, which confirmed the absence of a significant positive or negative relationship between the banks' earnings and their credit risk management strategies. It is important to note that this experimental study was confined to the banking sector, which operates under conditions that differ substantially from those faced by SMEs. Unlike commercial banks, SMEs encounter a unique set of challenges and threats that influence their financial stability. The study concluded that effective risk detection strategies can play a crucial role in maintaining financial sustainability for SMEs by helping in the prevention of losses. When SME management is well-informed about the risks they face, it becomes viable to avoid some or even all potential risks. However, given the financial inertia that characterizes many SMEs, there is a likelihood that risk identification procedures are not always effectively implemented.

SME owners and managers play a critical role in identifying and managing risks within their businesses (Eyiah, 2015). Effective risk management is essential for the long-term success and sustainability of SMEs. SMEs often face unique challenges when it comes to risk management. They may have limited resources, expertise, and access to sophisticated risk management tools and frameworks compared to larger organizations. However, proactive risk management can significantly contribute to their resilience and ability to navigate uncertainties. The report showed that despite SMEs owners and managers typically being close to the operations they lack a comprehensive understanding of the business environment. They are not well-positioned to identify and assess emerging risks that may impact the organization's objectives, including strategic, operational, financial, and external risks.

The results collectively indicated that by building an effective risk management process, SME owners and managers can systematically identify, assess, and prioritize risks. This involves implementing appropriate risk management strategies, controls, and mitigation measures to address identified risks. It may also involve developing contingency plans and ensuring that the organization has sufficient insurance coverage to protect against potential losses. Additionally, fostering a strong risk management culture within the SME is crucial. This entails creating awareness and promoting a shared responsibility for risk management among employees. It involves encouraging open communication channels to report risks, incidents, and near-misses, as well as establishing mechanisms for continuous monitoring, evaluation, and improvement of the risk management process (Eyiah, 2015). The studies fail to explicitly define risk identification in an SME setting despite elaborating the need to keep identifying them and hence limiting an understanding of how much influence would be towards the sustainability aspect hence depicting a research gap. The intent of this research will be to investigate the influence of risk identification practices on financial sustainability of SMEs in Nairobi County, Kenya.

In conclusion, risk identification will involve conducting a systematic assessment of the potential risks faced by SMEs in Nairobi County, Kenya, considering factors including internal operational processes, regulatory requirements, and market conditions. The goal is to identify and understand the nature, magnitude, and potential impact of these risks on the financial sustainability of SMEs, eventually informing the development of effective risk management strategies to mitigate or address these risks.

2.3.2 Risk Assessment Practices and Financial Sustainability of SMEs

Risk assessment refers to the process of systematically identifying, analysing, and evaluating potential risks that could impact the financial sustainability of SMEs operating within Nairobi County, Kenya. According to Nanthuru *et al.* (2018), this involves identifying various types of risks that SMEs may face, such as financial risks (e.g., liquidity risk, credit risk), operational risks (e.g., supply chain disruptions, technological failures), regulatory risks (e.g., compliance with local regulations), and external risks (e.g., economic downturns, political instability).

Offiong *et al.* (2021) conducted an in-depth investigation into the influence of financial risk on the performance of SMEs. The study drew upon data extracted from statistical bulletin of the Central Bank of Nigeria spanning the years 1986 to 2017. Methodologically, the study employed auto-regressive distributed lag (ARDL) techniques as the analytical tool. The findings of the study unveiled a noteworthy, albeit negative, and statistically insignificant association between financial risk and the performance of SMEs in Nigeria over the long term. The study highlighted the distinct impacts of various types of financial risk on SMEs in both the short and long term. Exchange rate risk, liquidity risk, interest rate risk, and inflation risk were found to exert a significant, albeit adverse, influence on small and medium enterprises over both temporal horizons. Conclusively, the study highlighted the detrimental impact of financial risk on the performance of Nigerian SMEs, advocating for robust risk management practices to bolster their operational efficiency. Moreover, the research postulated that beyond financial risk, other forms of risk, such as enterprise risk, could also exert considerable influence on SME performance. Consequently, the study called for further empirical investigations to elucidate the effects, whether positive or negative, of enterprise risk and other risk categories on SME performance within the Nigerian context.

A study by Pagach and Warr (2010) revealed that evaluating the magnitude of the impact of identified risks typically involves employing both qualitative and quantitative methodologies. This approach ensures a more accurate determination of risk levels. Following this evaluation, a systematic appraisal is conducted, where risks are categorized based on their potential impact. Those with significant potential harm are classified as hazardous, while those with minimal impact are considered less dangerous. This classification process is vital for outlining specific strategies to mitigate these risks, thus improving the sustainability of SMEs. Risks with a high likelihood of occurrence are assigned shared responsibility and are managed with a heightened level of scrutiny. This critical management approach involves implementing robust and validated procedures to minimize associated errors post-assessment. This helps enterprises to better address potential threats, ensuring long-term stability and growth. For SMEs, this careful risk management is vital, as they often have fewer resources to absorb the impact of significant risks, making precise and effective mitigation strategies even more essential.

A study by Ombongi & Long (2018) investigated the factors affecting financial performance of manufacturing SMEs in Kenya. The study emphasised that the financial aspect is particularly important for the longevity of SMEs with regard to access to external financing, such as bank credit, which is crucial for SMEs to invest in their operations, expand their businesses, and innovate. Additionally, investments in technology and human capital are essential for SMEs to remain competitive and drive innovation. A well-trained workforce enables SMEs to conduct research and development activities, leading to innovative outcomes and technological advancements within the firm. The study utilized descriptive research methodology and regression analysis to confirm the econometric least square model of the study. The results of the analysis demonstrate a direct correlation between SMEs' financial performance and factors such as bank credit, GDP, technological costs, and employee costs. The findings of the study have important implications for stakeholders in SMEs and the government of Kenya. It emphasises the importance of ensuring that SMEs have access to external financing to support their growth and innovation initiatives.

Kiptoo *et al.* (2021) conducted a study to assess the extent to which the process of risk assessment plays a key role in improving corporate management within Kenyan insurance companies. This descriptive research involved 25 insurance firms. The study revealed that those unable to effectively assess risks faced extensive operational difficulties. A large portion of their financial resources was drained by expenses related to risk-induced losses. Moreover, firms competing in a limited market space encountered elevated competitive risks, worsened by a continuously declining economic environment. The study highlighted the critical impact of risks on corporate strategy and strongly recommended that insurance companies increasingly adopt long-term forecasting techniques. These techniques offer a thorough external analysis of potential scenarios, allowing companies to anticipate and prepare for future challenges. Emphasizing the importance of calculating both the likelihood of risk events and their potential impacts on targeted businesses, the report suggested that a forward-thinking approach to risk management is essential. Insurance firms can significantly enhance their ability to anticipate and mitigate threats by incorporating practices such as scenario planning and ongoing market

analysis. This proactive stance not only strengthens their resilience but also helps maintain stability amidst an unpredictable economy. Therefore, integrating these strategies enables insurance companies to better navigate the complexities of the market, ensuring sustained operational effectiveness and financial stability.

In conclusion, once identified, risks are assessed to assess their likelihood of occurrence and the potential impact they could have on the financial stability and performance of SMEs. This analysis may involve quantitative techniques, such as statistical modelling, as well as qualitative assessments based on expert judgment and historical data. In the long run, the goal of risk assessment in this study is to provide SMEs with valuable insights into their risk exposure and to inform the development of effective risk management strategies aimed at enhancing their financial sustainability and resilience in the face of uncertainties.

2.3.3 Risk Mitigation Practices and Financial Sustainability of SMEs

Risk mitigation refers to the strategies and actions undertaken by SMEs to identify, assess, and address potential risks that could adversely affect their financial sustainability. Risk mitigation practices aim to minimize the likelihood of negative events occurring and reduce their potential impact on the financial performance and viability of SMEs operating in Nairobi County, Kenya. Chowdhury *et al.* (2019) state that these risk mitigation practices may include implementing internal controls and procedures to identify and manage risks effectively; diversifying business activities, customer base, or geographical markets to spread risk; and obtaining insurance coverage to protect against specific risks, such as property damage, liability, or business interruption.

A study by Nurjannah *et al.* (2023) aimed at examining the interplay between managerial capabilities and the sustainability of Micro, Small, and Medium Enterprises (MSMEs), as well as the relationship between financial literacy and MSMEs' business sustainability. Through rigorous analysis, the study revealed compelling insights into the dynamics shaping MSMEs' strategic approaches and their consequent impact on sustainability. The findings of the study elucidated that managerial expertise put forth a significant, even though partial, influence on the

protective strategy adopted by MSMEs. Similarly, financial literacy emerged as a critical determinant, partially impacting the survival strategy embraced by MSMEs actors. Furthermore, the analysis highlighted the significance of risk mitigation measures in bolstering the survival strategy of MSMEs actors, thereby enhancing their overall sustainability. In light of these findings, the study emphasized the imperative for MSMEs management to prioritize the enhancement of managerial capabilities, financial literacy, and risk mitigation efforts. It was elucidated that a higher level of managerial acumen contributes to the formulation and implementation of more effective competitive strategies within SMEs. Given the pivotal role of managers as key stakeholders in the company, the study emphasised the positive correlation between enhanced managerial capabilities and improved company performance. Hence, fostering an environment conducive to the development and refinement of managerial skills is essential for promoting MSMEs' long-term sustainability and competitiveness in the market landscape.

COSO (2013) in his report prescribes that control activities within an organization should be designed to mitigate risks with the aim of achieving the firm's objectives. Control activities are an integral part of the overall internal control framework and serve to minimize the likelihood and impact of risks that could hinder the organization's success. Control activities should align with the identified risks that are relevant to the organization's business objectives. These risks can vary across different areas, such as operations, finance, compliance, and information technology. The controls implemented should specifically target these risks, aiming to mitigate them effectively. SMEs owners ought develop and enforce clear policies and procedures that guide employees on how to perform their tasks and comply with applicable rules and regulations. Well-documented and communicated policies help ensure consistency and standardization in operations. Procedures provide step-by-step instructions on how specific tasks should be performed, minimizing the risk of errors or deviations (COSO, 2013). The reviewed studies however do not explicitly elaborate the extent and at what point mitigation practice should be enabled as well as what aspects define risk mitigation and its extent of influence hence depicting a research gap. This research determines the influence of risk mitigation practices on financial sustainability of SMEs in Nairobi County, Kenya.

In conclusion, risk mitigation practices play a crucial role in enhancing the financial sustainability of SMEs in Nairobi County by proactively addressing and mitigating the various risks that could impede their operations and growth. The enterprises can enhance this by investing in technology and security measures to safeguard against cyber threats and data breaches, enhancing supplier relationships and establishing alternative supply chains to mitigate supply chain disruptions, and complying with regulatory requirements and industry standards to minimize legal and compliance risks.

2.3.4 Risk Monitoring Practices and Financial Sustainability of SMEs

Risk monitoring involves thoroughly documenting and clearly defining potential risks, as well as providing training and development for the team responsible for evaluating and tracking these risks. This process aims to ensure that risk monitoring becomes an integral, ongoing aspect of the organization's operations. As stated by Rizwan *et al.* (2022), effective risk monitoring requires not only precise documentation but also the establishment of a well-trained team equipped to handle the evaluation and oversight tasks. The goal is to embed this monitoring into the firm's continuous processes, fostering a culture where risk awareness and proactive management are standard practices. This continuous integration helps in early detection and mitigation of potential issues, thereby safeguarding the organization's objectives and assets. Risk monitoring in the context of this study refers to the ongoing process of observing, assessing, and tracking potential risks that may affect the financial sustainability of SMEs in Nairobi County, Kenya. It involves systematically monitoring various risk factors identified during the risk management process to ensure timely identification of any changes or developments that could impact the financial stability of SMEs. Risk monitoring activities may include analysing key risk indicators, evaluating the effectiveness of risk mitigation measures, and updating risk management strategies as needed to mitigate emerging threats (Kinyua, 2010). The goal of risk monitoring is to proactively manage and mitigate risks, thereby safeguarding the financial sustainability and resilience of SMEs in Nairobi County.

In a recent examination by Wideman (2022), it was emphasized that the establishment of a well-defined policy is paramount for guiding managers in effectively monitoring risks and instituting

effective programs aligned with the foundational principles of the organization. The findings of the report underscored the necessity for a dedicated review team tasked with regularly assessing these policies and programs to ensure their alignment with contemporary methodologies for detecting and monitoring emerging threats. Additionally, the study recommended that staff members undergo comprehensive training to acquaint themselves with the organization's risk-based management policy framework and to fully grasp their roles within the entity's risk management endeavours. This training is pivotal to the successful implementation of these policies. Moreover, to nurture optimal collaboration, it is vital that these policies be communicated to all stakeholders involved. Organizations can reinforce their resilience against potential risks in today's dynamic business environment by adopting such measures.

In their investigation, Vasarhelyi *et al.* (2010) initially present the notion of actively monitoring and evaluating an entity's exposure to risks, with a focus on prioritizing audit and risk management procedures in a more immediate and responsive manner. The study gives emphasis to the importance of employing optimal procedures, delineating them into four distinct activities. Firstly, identifying business risks categorized as operational, environmental, or unforeseen events (black swan events). Secondly, continuously assessing the real-time status of these risks through ongoing monitoring of pertinent Key Risk Indicators. Thirdly, consistently recognizing and evaluating significant changes as they occur. Lastly, continuously prioritizing corresponding audit and risk management procedures to selectively scrutinize high-risk areas influenced by the client's elevated risks and associated controls. This approach aims to diminish audit risks and alleviate the client's exposure to high-level risks.

Peecher *et al.* (2017) emphasized in their research that a significant increase in an organization's significant risks can heighten the likelihood of fraudulent financial reporting. This, in turn, raises the audit risk unless vigilant monitoring is undertaken in the early stages and throughout the subsequent growth journey of SMEs. They explain that when an organization's business risks are not adequately controlled, it becomes less attractive to creditors and investors. Consequently, the motivation to misrepresent financial performance disclosures to conceal substantial threats intensifies. The studies under review posit that the risk of material misstatement is a dynamic

factor that evolves over time, mirroring changes in significant business risks. Thus, it is vital to recognize that risk monitoring should never be assumed to be static or obsolete. The study does not bring out a clear picture of why risk monitoring is very healthy in a business enterprise especially on the situation where one require business sustainability, hence depicting a research gap. The intent of this research will be to identify the influence of risk monitoring practices on financial sustainability of SMEs in Nairobi County, Kenya.

In conclusion, risk monitoring is of paramount importance in SMEs as it enables proactive identification, assessment, and management of potential risks that could threaten the financial sustainability and operational continuity of the enterprise. By continuously monitoring various risk factors, such as market fluctuations, regulatory changes, financial volatility, and operational disruptions, SMEs can promptly identify emerging threats and take appropriate mitigation measures to minimize their impact (Kinyua, 2010). Additionally, risk monitoring helps small businesses to maintain resilience and adaptability in the face of evolving challenges, thereby enhancing their ability to seize opportunities and sustain long-term growth. Furthermore, effective risk monitoring instils confidence among stakeholders, including investors, creditors, and customers, by demonstrating the business's commitment to sound risk management practices and safeguarding their interests (Peecher *et al.*, 2017).

2.4 Conceptual Framework

A conceptual framework is a structure or a set of ideas and concepts that guide the research process. It provides a theoretical foundation for understanding the relationships between variables or concepts under investigation in a study. In this study, there are four independent variables and one dependent variable. Figure 2.1 shows the conceptual framework.

Independent Variables

Dependent Variable

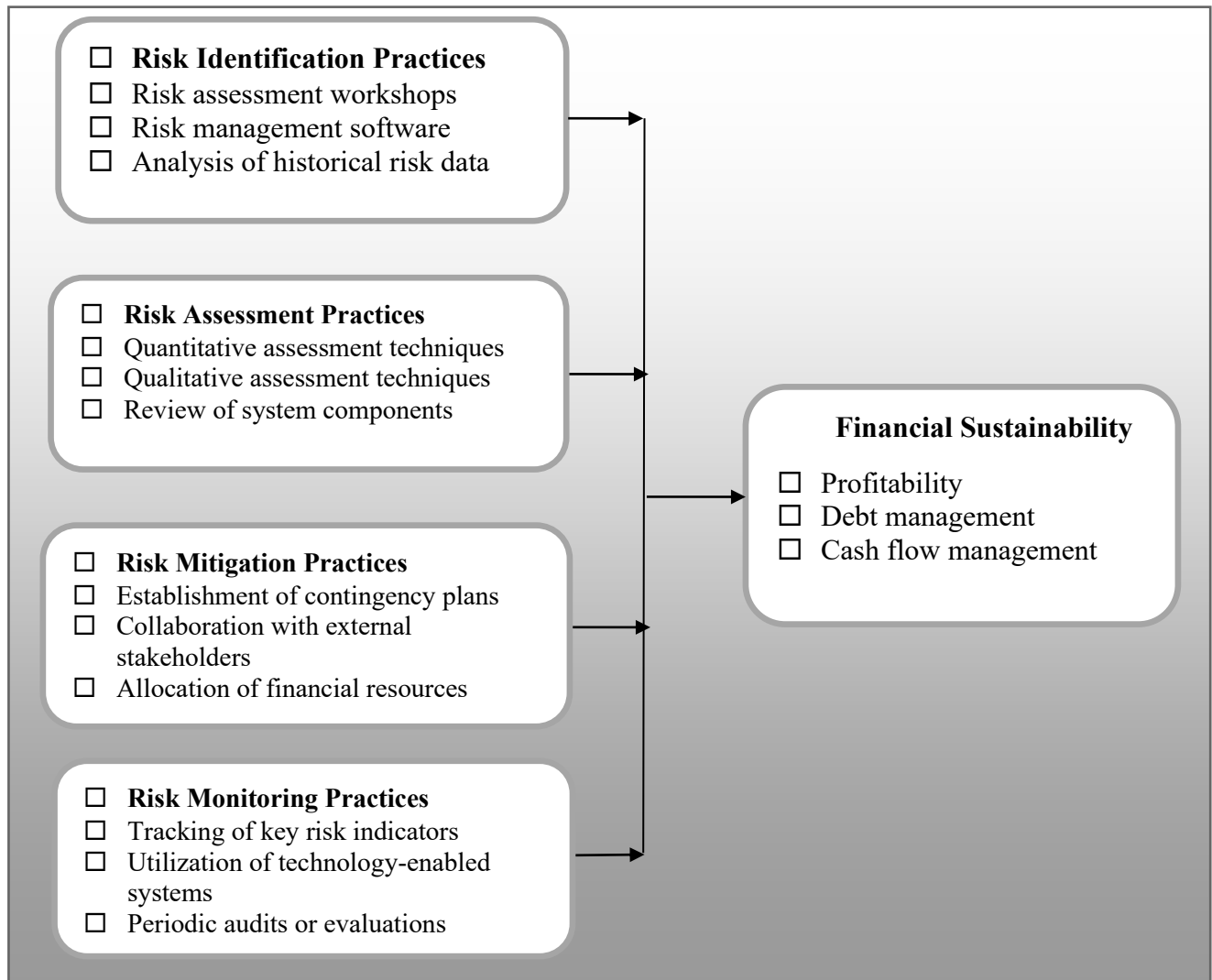


Figure 2.1: Conceptual Framework (Author, 2024)

The conceptual framework shows that the sustainability of SMEs, measured in terms of profitability, market share, reputation, shareholder value, and competitive advancement, hinges on the efficiency and effectiveness of practices related to risk identification, risk assessment, risk mitigation, and ongoing monitoring. Without optimizing each of these critical components of threat management, the sustainability trajectory of an SME may suffer. The importance of these practices becomes even more pronounced if the government actively supports and promotes the presence of SMEs within Nairobi County. The objective of the researcher is to determine whether there is a correlation between these risk management practices and their impact on

sustainability, whether the influence is positive, negative, or neutral. To achieve this, the researcher will analyse how well SMEs identify potential risks, assess the severity and likelihood of these risks, implement strategies to mitigate them, and continuously monitor the effectiveness of these strategies and how they influence the sustainability of SMEs.

2.5 Summary of the Literature Reviewed and Research Gaps

Although the overall sustainability of an organization is influenced by a myriad of challenges, a comprehensive review of the literature underscores the critical importance of risk management. Enterprises must be diligent in addressing risk-related issues within their processes. Vaughan and Vaughan (2008) provide a compelling rationale for why risk management is essential for organizations, emphasizing that the primary objective is ensuring long-term survival. The literature further suggests that improving overall performance must be carefully balanced with the identification, assessment, and mitigation of risks, which should be tailored to the specific operational areas of SMEs. Organizations can develop an optimal risk management program that aligns with their strategic goals by systematically evaluating these risks. Such a program not only fortifies the organization's resilience but also enhances its ability to navigate uncertainties, thereby supporting sustained growth and success. Implementing an effective risk management framework involves continuous monitoring and adaptation to emerging threats, ensuring that the organization's strategies remain robust and proactive in the face of evolving risks.

The above reviewed studies explain the reason why firms sustainability must be safeguarded and how importance a well sustained business means. The study by Yang *et al.* (2021) highlighted the inadequacy of the sample size in generalising conclusive findings. Offiong *et al.* (2021) study called for further empirical investigations to elucidate the effects, whether positive or negative, of enterprise risk and other risk categories on SME performance within the Nigerian context. However, the failure by such strong explanations to really tell the extent of the influence to the sustainability of SMEs means that a gap exists for more explicit research to be conducted depicting a serious gap and calling to future researchers. This study establishes the extent of influence among the study aspects or thematic areas towards sustainability of SMEs in Kenya.

2.7 Operationalisation of the Variables

Table 2.2: Operationalisation of Variables

Variable	Measure	Source	Type of Variable	Variable Category	Variable Indicators	Measurement of Variables
Risk Identification Practices	Descriptive / inferential statistics	Szymański (2017)	Independent	Ordinal	Risk assessment workshops Risk management software Analysis of historical risk data	Variables will evaluate risk identification practices including risk assessment workshops, risk management software, and analysis of historical risk data in SMEs
Risk Assessment Practices	Descriptive / inferential statistics	Florio & Leoni (2017)	Independent	Ordinal	Quantitative assessment techniques Qualitative assessment techniques Review of system component	Variables will be measured by evaluating risk assessment practices including quantitative assessment techniques, qualitative assessment techniques, and review of system components in SMEs based primarily on the characteristics of the risk assessment process.

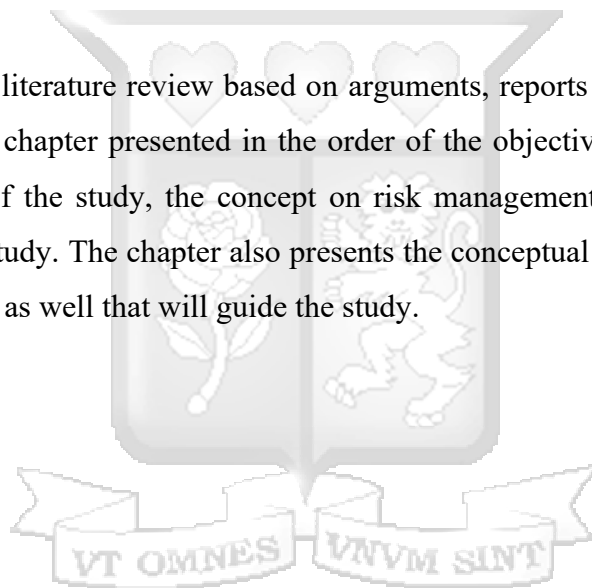
Risk Mitigation Practices	Descriptive / inferential statistics	Yang <i>et al.</i> (2018)	Independent	Ordinal	Establishment of contingency plans Collaboration with external stakeholders Allocation of financial resources	Variables will be measured by evaluating risk mitigation practices including establishment of contingency plans, collaboration with external stakeholders, and allocation of financial resources in SMEs based primarily on the risk mitigation strategy.
Risk Monitoring Practices	Descriptive / inferential statistics	Rizwan <i>et al.</i> (2022)	Independent	Ordinal	Tracking of key risk indicators Utilization of technology-enabled systems Periodic audits or evaluations	Variables will be measured by evaluating risk monitoring practices including tracking of key risk indicators, utilization of technology-enabled systems, and periodic audits in SMEs based primarily on the risk monitoring strategy.

Financial Sustainability	Descriptive statistics	Gleißner <i>et al.</i> (2022)	Dependent	Ordinal	Profitability Debt management Cash flow management	Variables will be measured by evaluating financial sustainability indicators including profitability, debt management, and cash flow management
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Source: Author (2024)

2.8 Chapter Summary

The chapter presents the literature review based on arguments, reports as argued the scholars of different categories. The chapter presented in the order of the objectives besides presenting the theoretical background of the study, the concept on risk management practices as well as the empirical review of the study. The chapter also presents the conceptual framework and summary of the reviewed literature as well that will guide the study.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter delves into the research methodology that guided the investigation. The first section discusses the research philosophy adopted for this study, explaining the fundamental principles and assumptions that inform the research approach. Subsequently, the research design is discussed, outlining the chosen methodology and the rationale behind its selection. The target population of the study is presented to explain the characteristics and demographics of the SMEs operating within Nairobi County. Subsequently, the determination of the sample size and the sampling technique employed are addressed, highlighting the strategies employed to ensure representativeness and generalizability of findings. The chapter further explores the data collection instruments utilised in the study. A detailed account of the piloting phase is provided, expounding the steps taken to refine and optimize the instruments for the main study. It also outlines the data collection procedures, detailing the techniques employed to gather primary data from the identified sample of SMEs. This includes a discussion on the ethical considerations inherent in conducting research involving human participants, emphasizing the measures taken to safeguard their rights and confidentiality. The subsequent section presents the data analysis techniques utilized to analyse the collected data, including both descriptive and inferential statistical methods. Additionally, diagnostic tests were employed to ensure the robustness and reliability of the analytical procedures employed in the study.

3.2 Research Philosophy

The positivism paradigm is an appropriate research philosophy for a study seeking to assess the influence of risk management practices on the sustainability of SMEs in Nairobi County, Kenya. According to Patton (1990), positivism is entrenched in the acceptance that empirical observation and measurement can be used to understand objective reality. In this research, a post-positivist approach would emphasize the collection of quantifiable data related to risk management practices and sustainability outcomes. This might involve employing surveys, structured interviews, and statistical analyses to gather and analyse numerical data on specific

risk management strategies employed by SMEs and their corresponding impact on sustainability metrics (Migiros & Magangi, 2011).

Moreover, a positivist paradigm aligns well with the nature of the study, as it prioritizes objectivity, replicability, and generalizability (Tuli, 2020). By adopting a systematic and structured approach, researchers can establish causal relationships between risk management practices and the sustainability of SMEs. The positivist philosophy's emphasis on empirical evidence would contribute to generating reliable findings that can be applied not only to the SMEs in Nairobi County but potentially to similar contexts in other regions. This approach is particularly valuable for policy-making and practical implications, providing a solid foundation for evidence-based decision-making (Goldkuhl, 2012). This enhanced the resilience and sustainability of SMEs in the face of various risks.

3.3 Research Design

Research design refers to the strategy that a researcher adopts to systematically investigate a research problem or question (Dul and Hak, 2008). It is a blueprint that outlines the procedures, methods, and techniques to be employed in collecting and analysing data to answer the research questions or test hypotheses. A well-structured research design provides a framework for organizing the study, ensuring that the research process is logical, rigorous, and capable of producing meaningful results (Mugenda & Mugenda, 2019). The descriptive survey-research design was used. According to Siedlecki (2020), through this design, the researcher systematically collected and analysed data to provide ample description of the current status, characteristics, and perceptions of SME owners in Nairobi regarding risk management practices and financial sustainability. Descriptive research design also enabled the researcher to use questionnaires to inquire about their awareness and utilization of various risk management practices, perceptions of their effectiveness, and the general financial sustainability of their businesses.

3.4 Target Population

This refers to a group of objects, subjects or people selected to participate in the study (Stratton, 2021). In this study, the target included all the registered SMES within Nairobi County, Kenya. The researcher purposively target a single owner employee of all the 30252 registered SMEs in Nairobi County (KNBS, 2020). The list was obtained from the Nairobi County headquarters.

3.5 Sample Size and Sampling Technique

Stratton (2021) defines a sample size as the number of individual subjects or observations included in a research study or experiment. It is a critical aspect of the research design, influencing the accuracy and reliability of the study's findings. The size of the sample was determined by the researcher and depends on the research objectives, the level of confidence desired, the expected effect size, and the variability in the population being studied. Simple random sampling was used to randomly select participants from the population. The study aimed to include all 30,252 registered SMEs in Nairobi County, with the owner of each SME as the target respondent. Given the large population, a full census was impractical, so simple random sampling was used to select a representative sample of 394 SME owners.

To ensure statistical representativeness, the sample size was calculated using Slovin's formula. Slovin's formula is a statistical method used to determine an appropriate sample size from a given study population when the total population is known, and conducting a full census is impractical (Tejada & Punzalan, 2012). The formula is useful in cases where the population is large, as evidenced in this study, and the researcher needs to balance accuracy with efficiency in data collection. In addition, it is used when there is insufficient information about a population's distribution of a behaviour, in this case, financial sustainability of SMEs in Nairobi County. Slovin's formula is given as follows: $n = N/1 + (N*(e))^2$, where:

n = Sample size

N = Population size

e = Margin of error (at 95% confidence level)

Since the approximate population of SMEs is 30252, the sample size will be:

$$n = 30252/1(1+ 30252*(0.05)^2)$$

$$n = 394.78$$

Therefore, the researcher selected a sample of 394 respondents to take part in the study.

Each registered SME was assigned a unique identification number from 1 to 30,252 to facilitate random selection. Simple random sampling ensures that every SME owner had an equal chance of being selected, eliminating bias. The researcher used Microsoft Excel's RAND as the ideal random number generator to indiscriminately select 394 numbers corresponding to SMEs from the full list. The SME owners linked to these numbers became the final sample.

3.6 Data Collection Instruments

A structured questionnaire was employed as the data collection instrument. A questionnaire is a structured and standardized data collection technique commonly used in research to gather information from individuals or groups. According to Judd (2006), it consists of a series of pre-defined questions, often presented in a written format, that respondents are required to answer. Questionnaires are designed to collect specific data and insights on a particular topic or research question (Kombo & Tromp, 2006). Section A of the questionnaire presents questions on demographic information of the respondent, section B presents questions on risk identification, section C presents queries on risk assessment, section D has questions on risk mitigation whereas the last sections E and F presents questions on risk monitoring and evaluation and financial sustainability respectively.

3.6 Piloting of the Instruments

In order to ensure that the questionnaires were manageable, relevant and effective, the tools were pre-tested through conducting a pilot study. A pilot study refers to a preliminary research conducted before the main study or experiment (Sürücü & Maslakci, 2020). It is carried out to identify the areas that have been overlooked in the design and in instrumentation. The pilot study was conducted using 10-20% of the sampled SMEs. SME owners who participated in the pilot study were later excluded from the main study. This helped in assessing the feasibility of the

research design and data collection instruments to ensure that the chosen methods would yield meaningful and reliable results. From the sample population of 394 respondents from the 11 sub-counties, 41 respondents were selected. Table 3.1 summarises the distribution of the sampled pilot study population.

Table 3.1: Pilot Study Sample Population

#	Sub-county Name	Sample Population	Percentage of Sample Population (%)	Pilot Study Sample
1	Ruaraka	56	10%	6
2	Kasarani	68	10%	7
3	Mathare	19	10%	2
4	Lang'ata	18	10%	2
5	Embakasi	87	10%	9
6	Dagoretti	39	10%	4
7	Westlands	28	10%	3
8	Kibra	17	10%	2
9	Makadara	18	10%	2
10	Kamukunji	24	10%	2
11	Starehe	20	10%	2
Total		394	10%	41

Pilot study questionnaires were analysed to identify the amount of time spent on every tool. This consideration helped in deciding whether these tools need to be reduced or enlarged in length. Furthermore, assessment was conducted in order to determine the relevancy, meaningfulness and usefulness of the data captured from the pilot study with regard to the study aims. The researcher asked the respondents some questions to understand how they feel about the whole process and how the researcher can better it. The participants who undertook the pilot study were also excluded in the overall sample base for the main study.

3.6.1 Validity of Instrument

The validity of research instruments as the extent to which the tools or measures used in a study accurately and appropriately assess the constructs or variables they are intended to measure (Mugenda and Mugenda, 2003). In other words, it evaluates the extent to which a research instrument adequately covers all relevant aspects of the concepts being studied. To ensure validity, content validity was carried out to ascertain consistency and simplicity of the research instrument by seeking the opinions of the supervisor to modify the questionnaires accordingly. The questionnaire was evaluated by experts in risk management, financial sustainability, and SME operations. Their feedback ensured that the items comprehensively measured risk identification, risk assessment, risk mitigation, and risk monitoring while adequately capturing aspects of financial sustainability such as liquidity, solvency, and long-term viability.

Face validity was also used to ensure that the structured questionnaires effectively measured the intended concepts related to risk management strategies and the financial sustainability of SMEs. Face validity involves a subjective assessment by experts or peers who review the questionnaire items to confirm whether they appear to be relevant and appropriate for the research objectives. SME owners reviewed the questionnaires to ensure that the questions were clear, well-structured, and aligned with the variables being studied to ensure that the data collected would accurately reflect the variables of interest.

Construct validity was also used to ensure that the assessment of risk management practices accurately reflects their true influence on the financial sustainability of SMEs. Construct validity refers to the degree to which a test or instrument measures the concept or construct it is intended to measure (Strauss & Smith, 2009). To achieve this, the study analysed validated questionnaires that have been previously tested and proven to effectively measure these specific risk management strategies. While assessing the construct validity of the questionnaire, emphasis was given on the construct outlined in the conceptual framework and the actual content of each part of the research questions of the study. The validity of the constructs was utilised to assess the study variables based on the conceptual framework through factor analysis and the minimum

threshold was an Average Variance Extracted of 0.4. The construct validity results are presented in Table 3.2.

Table 3.2: Average Variance Extracted (AVE) for the Constructs

Variables	Factor Loading	Variance Extracted
Risk Identification Practices		
Risk assessment workshops	0.711	0.538
Risk management software	0.877	0.663
Analysis of historical risk data	0.701	0.656
<i>Average Variance Extracted</i>		0.619
Risk Assessment Practices		
Quantitative assessment techniques	0.735	0.658
Qualitative assessment techniques	0.759	0.555
Review of system components	0.731	0.499
<i>Average Variance Extracted</i>		0.571
Risk Mitigation Practices		
Establishment of contingency plans	0.666	0.515
Collaboration with external stakeholders	0.619	0.624
Allocation of financial resources	0.725	0.512
<i>Average Variance Extracted</i>		0.550
Risk Monitoring Practices		
Tracking of key risk indicators	0.773	0.499
Utilization of technology-enabled systems	0.651	0.601
Periodic audits or evaluations	0.698	0.603
<i>Average Variance Extracted</i>		0.568
Financial Sustainability		
Profitability	0.616	0.605
Debt management	0.675	0.489
Cash flow management	0.596	0.521
<i>Average Variance Extracted</i>		0.538

The results indicate that the average variance extracted for each construct meets the recommended threshold of 0.4, validating the indicators of all the variables. Risk Identification Practices produced an average variance extracted of 0.619, Risk Assessment Practices (0.571), Risk Mitigation Practices (0.550), Risk Monitoring Practices (0.568), and Financial Sustainability (0.538). These findings confirm the validity of the indicators.

3.6.2 Reliability of Instrument

Sürücü & Maslakci (2020) define the reliability of research instruments as the extent to which a measurement tool, such as a survey, questionnaire, or test, consistently produces the same results when used under consistent conditions. In other words, it assesses the stability and consistency of the instrument in measuring the intended construct or variable over time and across different situations. Cronbach's alpha was used as a measure of internal consistency, where a coefficient of 0.7 or higher was accepted. The questionnaire was amended based on the pilot study results to ensure it is effective. The reliability test results are as shown in Table 3.4 below.

Table 3.3: Reliability Test Results

Variables	Cronbach's Alpha	Items	Reliability
Risk Identification Practices	.917	5	Accepted
Risk Assessment Practices	.814	5	Accepted
Risk Mitigation Practices	.763	5	Accepted
Risk Monitoring Practices	.752	5	Accepted
Financial Sustainability	.851	6	Accepted
Scale Combination	0.819	26	Accepted

Table 3.4 shows the reliability test results for four independent variables and one dependent variable. For the independent variables, the results revealed that the Cronbach's Alpha value for Risk Identification Practices, which included 5 items, was 0.917; for Risk Assessment Practices, which included 5 items, was 0.814; for Risk Mitigation Practices, which included 5 items was 0.763; and for Risk Monitoring Practices, which included 5 items, was 0.752. In addition, for the dependent variable, the results revealed that the Cronbach Alpha value for 'Financial Sustainability', which had 6 elements, was 0.851. Since an alpha value of 0.7 or above was the acceptable reliability coefficient, the results demonstrated that all of the variables in the study had satisfactory internal consistency.

3.7 Data Collection Procedures

Before distributing the questionnaires, the researcher diligently secured authorization from NACOSTI and procured an introductory letter from Strathmore Business School, validating the study's purpose and legitimacy. The researcher personally delivered the query questionnaires to each individual participant, ensuring a direct and personal engagement. Questionnaires were emailed to a few participants who were physically unreachable. Participants were afforded two weeks to peruse, comprehend, and articulate their feedback and opinions within the questionnaire. This process was conducted methodically to uphold data integrity, paving the way for subsequent phases of data cleaning and analysis.

3.8 Data Analysis

Data analysis involves the systematic examination, interpretation, and manipulation of collected data to extract meaningful insights, patterns, and relationships. It is crucial as it transforms raw data into understandable information, validating research hypotheses and drawing objective conclusions (Creswell, 2009). To ensure the integrity of the data, the data was subjected to a clean-up process to eliminate any inconsistencies and rectify errors in data entry. The researcher coded the questionnaire responses to effectively remove any hidden data entry errors.

The data was fed into SPSS software version 27 for further analysis. For this study, descriptive statistics were employed, which include measures such as the mean, standard deviation, percentages, and frequencies. The researcher also used multiple regression analysis. The regression equation is as follows:

$$Y = (\Omega_0) + (\Omega_1 X_1) + (\Omega_2 X_2) + (\Omega_3 X_3) + (\Omega_4 X_4) + \varepsilon, \text{ where,}$$

Y = Financial Sustainability of SMEs

Ω_0 = Intercept

X_1 = Risk Identification practices

X_2 = Risk Assessment practices

X_3 = Risk Mitigation practices

X_4 = Risk Monitoring practices

$\Omega_1, \Omega_2, \Omega_3$ and Ω_4 are the coefficients of the regression

ϵ = the error Term

3.9 Diagnostic Tests

Diagnostic tests were carried out and data characteristics taken into consideration. The results were presented using visual aids such as tables as well as the use of descriptive statistics.

3.9.1 Normality

This test determines whether the variables are mesokurtic and non-skewed, and consequently, whether the regression residuals are as well. Kurtosis describes data that is lopsided, whereas skewness describes data that is biased more towards one side of the centre than the other (Gujarati, 2003). The ideal normal distribution should not be leptokurtic (too steep), platykurtic (too flat), or positively or negatively skewed (Gujarati, 2003). Although non-normality of the data has no impact on the consistency of the estimators, it has an impact on their effectiveness and may possibly cause the statistical tests to be erroneous (Green, 2008). This is particularly true for samples with small diameters. However, because of the central limit theory, non-normality of the data shouldn't be a problem in this study (Green, 2008).

3.9.2 Multicollinearity

Predictors that are correlated with one another are referred to as being multicollinear. When a model has several variables that are correlated with both one another and the response variable, it is said to be multicollinear. Multicollinearity, in accordance with Pallant (2013), raises the

standard errors of the coefficients. The result is that some independent variable coefficients may not be determined to be statistically different from 0. This is due to increased standard errors. As a result, multicollinearity renders some variables statistically unimportant when they ought to be significant by exaggerating the standard errors. Those coefficients might be important even in the absence of multicollinearity. The presence of multicollinearity was examined using Pearson's correlation analysis. Multicollinearity is indicated by a Pearson's Correlation Coefficient (PCC) of 0.7, which also denotes the relatedness of the variables. To verify multicollinearity, the variance inflation factor (VIF) will also be used. There is collinearity associated with any variable whose VIF is about 10 or higher, hence that variable needs to be eliminated from the regression model (Aandstad & Simon, 2013).

3.10 Ethical Considerations

Since humans made up the target population of this study, the respondents were assured of anonymity and confidentiality as they will be asked not to specify their names on the survey instrument. The researcher visited the premises of each SME to ensure that the respondents are informed about their role in the study. All approvals were sought from Strathmore University Business School before distributing the questionnaires to the respondents to conduct the study.

3.11 Chapter Summary

This chapter presented the research methodology that was used by the study. This chapter presented the research methodology that will be used in the study. The study used descriptive research design. The population comprise of SME owners in Nairobi County. A sample of 396 students was reached to take part in the study. Data was collected using questionnaires, and analysed using descriptive statistics.

CHAPTER FOUR

PRESENTATION OF RESEARCH FINDINGS

4.1 Introduction

This chapter presents the research findings as per the data analysis. The general purpose of the study was to assess the effectiveness of risk management strategies on financial sustainability among SMEs in Nairobi, Kenya. Tables and figures were used to present the findings obtained from the questionnaires and the researcher discussed them using descriptive statistics and inferential statistics.

4.2 General Information

This section presents the response rate and demographic information of the respondents who took part in the study.

4.2.1 Response Rate

Since the study sampled 394 respondents to participate in the study, the same number of questionnaires were distributed, and 299 of them were filled and returned. This represented a 75.9% response rate. The respondents were contributed to the final sample per sub-county. A study that yields a response rate of 70% and above is adequate for analysis of findings (Mugenda & Mugenda, 2003). Table 4.1 summarizes the findings.

Table 4.1: Response Rate per Sub-county

#	Sub-county Name	No. of questionnaires distributed	No. of questionnaires returned
1	Ruaraka	56	48
2	Kasarani	68	58
3	Mathare	19	11
4	Lang'ata	18	8
5	Embakasi	87	75
6	Dagoretti	39	30
7	Westlands	28	27
8	Kibra	17	10
9	Makadara	18	13
10	Kamukunji	24	13
11	Starehe	20	6
Total		394	299
Percentage		100%	75.9%

4.2.2 Gender

The study examined the respondents' gender to determine whether it influences risk management practices and financial sustainability of SMEs. The gender distribution among respondents shows a fairly balanced representation, with a slight male majority (51.5%) over females (48.5%). This suggests that both men and women actively participate in SME ownership and management in Nairobi County, reflecting a growing inclusivity in entrepreneurship and business leadership. However, the slight male dominance may indicate persistent gender disparities in business ownership and decision-making roles. Figure 4.1 summarises the findings.

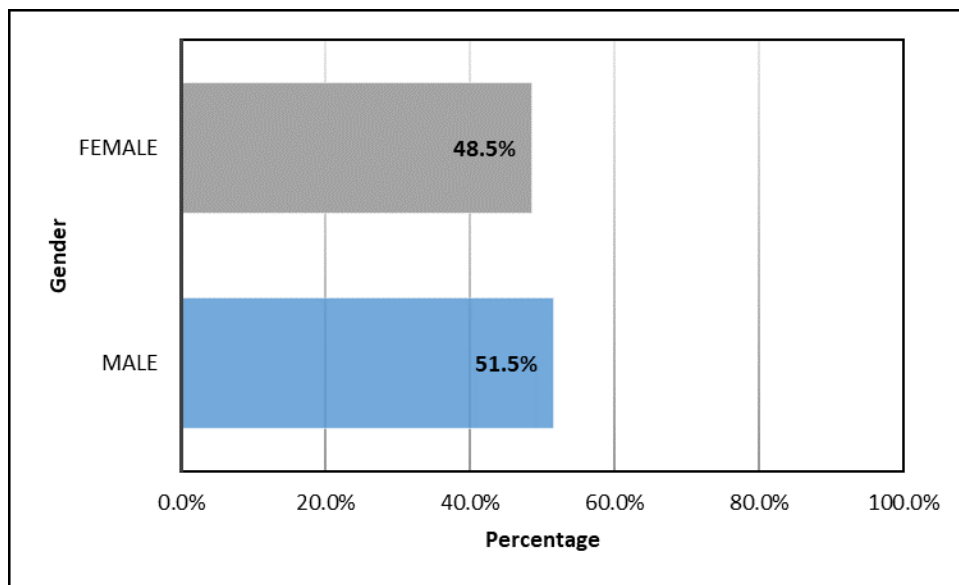


Figure 4.1: Gender Distribution

4.2.3 Age

The study examined the respondents' age to determine whether it influences risk management practices and financial sustainability of SMEs. The age distribution indicates that the majority of SME owners and employees fall within the 31-40 years (26.6%) and 41-50 years (25.6%) age brackets, followed closely by younger individuals below 30 years (21.8%). This suggests that SMEs in Nairobi County are largely driven by individuals in their prime working years, with a mix of youthful entrepreneurs and experienced business leaders. The presence of older participants (51-60 years at 20.3% and above 60 years at 5.7%) indicates a blend of generational perspectives in business management. Figure 4.2 summarises the findings.

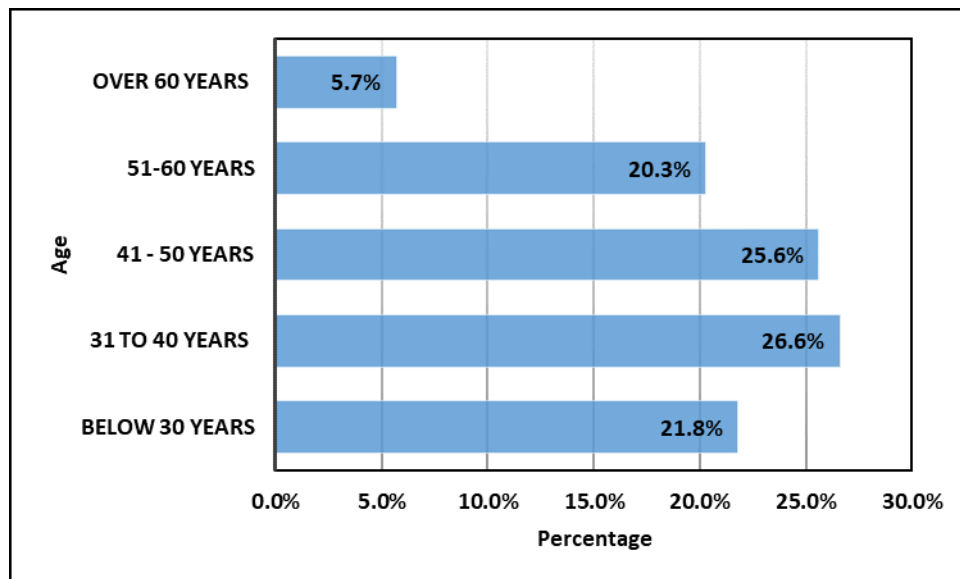


Figure 4.2: Age Distribution

4.2.4 Level of Education

The study examined the respondents’ education levels in order to determine whether it influences risk management practices and financial sustainability of SMEs. The educational background of respondents reveals that most have attained at least a college-level education, with undergraduates (25.9%) forming the largest group, followed closely by college-level graduates (24.9%). A significant portion also comprises individuals with secondary (22.6%) and primary education (18%), while postgraduate degree holders (8.6%) are the minority. This indicates that while formal education is valued in business, many SME owners and employees rely on practical experience rather than advanced academic qualifications. Figure 4.4 summarises the findings.

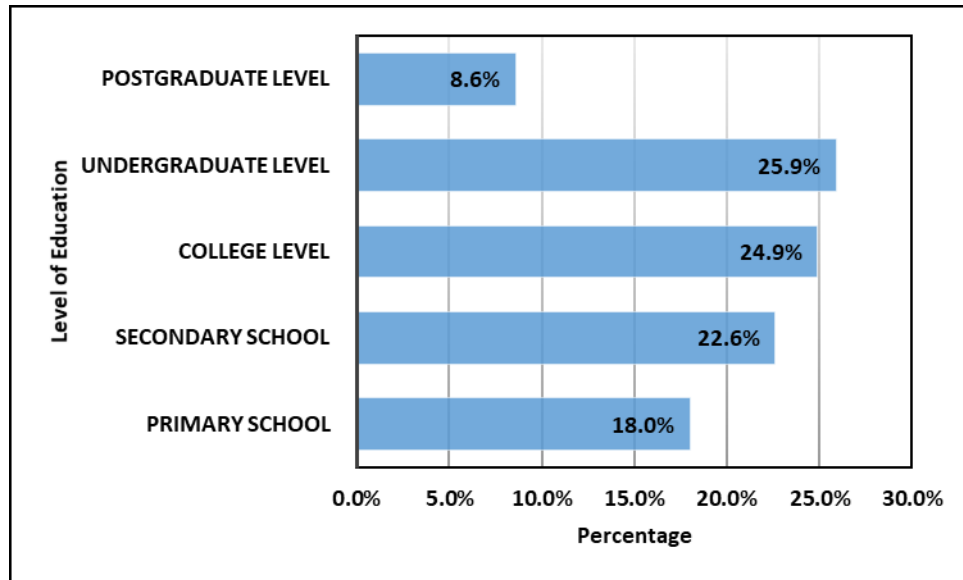


Figure 4.3: Level of Education

4.2.5 Position in the Firm

The study examined the respondents' positions in the firm. The majority of respondents (76.9%) are company owners, emphasizing that this study effectively captures the perspectives of SME owners, who play a critical role in financial decision-making and risk management. Employees and departmental managers form a smaller proportion, with 7.9% each, while 5.3% are departmental managers. This suggests that the study reflects the viewpoints of entrepreneurs, reflecting the study's focus on an owner's perspective. Figure 4.3 summarises the findings.

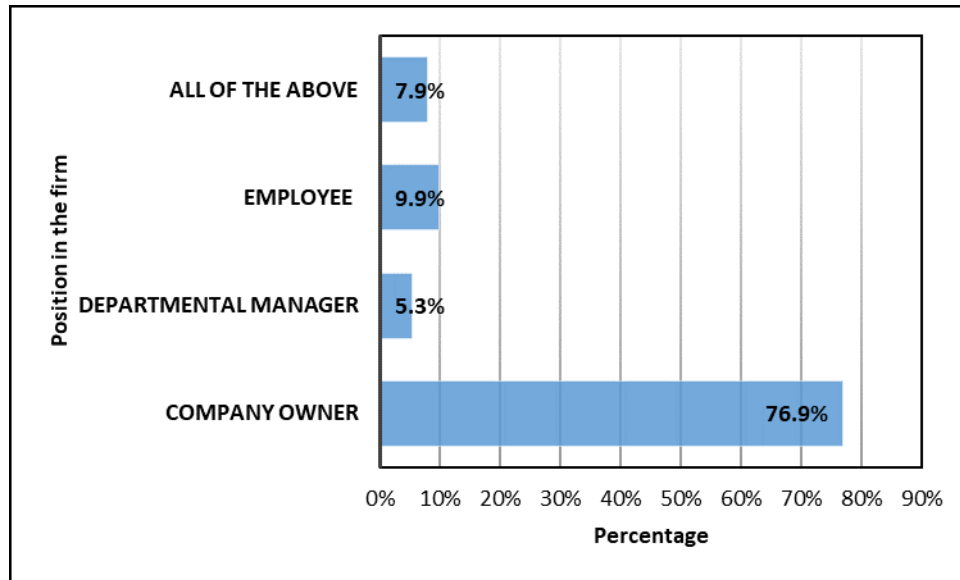


Figure 4.4: Position in the Firm

4.2.6 Work Experience

The study examined the respondents' work experience. The majority of respondents (56.9%) identified as novices in business operations, followed by intermediates (22.1%), mid-level professionals (16.4%), and senior-level individuals (4.6%). This suggests that most SMEs are operated by relatively inexperienced entrepreneurs, which could impact their approach to risk management and financial sustainability. The lower representation of senior-level professionals highlights a potential gap in mentorship and seasoned leadership within the SME sector in Nairobi County. Figure 4.5 summarises the findings.

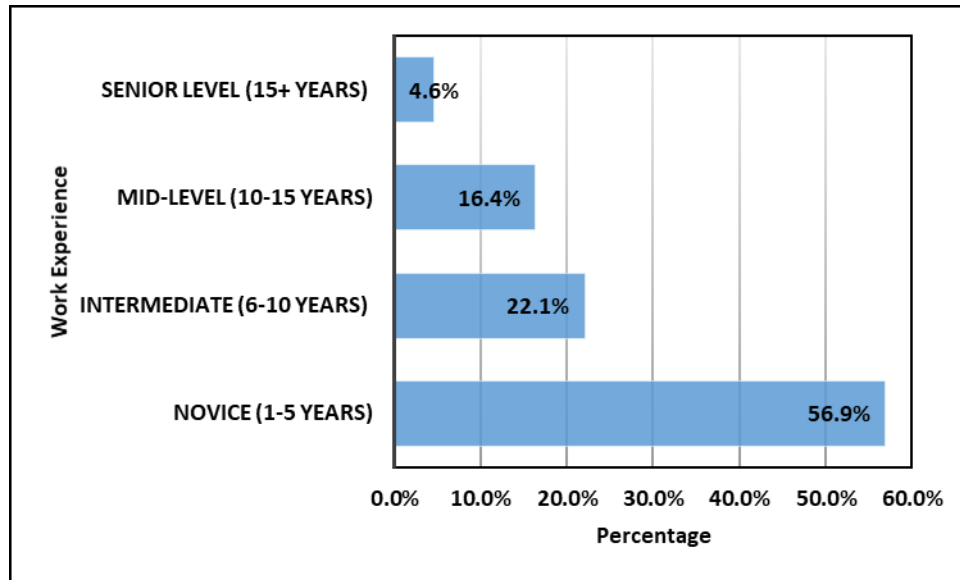


Figure 4.5: Work Experience

4.3 Descriptive Statistics

4.3.1 Financial Sustainability of SMEs in Nairobi County

The study asked the respondents to indicate the extent to which they agreed with various statements regarding the financial sustainability of SMEs in Nairobi County. The respondents strongly agreed that cash flow management practices in SMEs ensure sufficient liquidity to meet financial obligations ($M=4.05$, $SD= 0.741$); and the profitability of SMEs is a reliable indicator of its overall financial health ($M=4.01$, $SD=0.777$). The respondents also agreed that cash flow fluctuations have occasionally hindered SME's ability to meet its financial obligations. ($M=3.86$, $SD=0.603$); SMEs face challenges in managing its debt, which negatively impacts its financial stability ($M=3.11$, $SD=0.504$), and SMEs effectively manages debt obligations, resulting in a healthy financial position ($M=3.26$, $SD=0.715$). The respondents neither agreed nor disagreed that the profitability of SMEs has consistently increased over the past few years ($M=2.92$, $SD=0.617$). Table 4.2 summarises the findings:

Table 4.2: Financial Sustainability of SMEs in Nairobi County

Statement	1	2	3	4	5	M	SD
The profitability of my SME has consistently increased over the past few years.	29.3%	20.0%	20.0%	18.7%	12.0%	2.92	.617
My SME effectively manages its debt obligations, resulting in a healthy financial position.	11.0%	13.7%	10.3%	26.0%	39.0%	3.26	.715
Cash flow management practices in my SME ensure sufficient liquidity to meet financial obligations.	9.3%	10.7%	16.0%	33.3%	41.3%	4.05	.741
The profitability of my SME is a reliable indicator of its overall financial health.	3.3%	6.7%	8.0%	42.0%	40.0%	4.01	.777
My SME faces challenges in managing its debt, which negatively impacts its financial stability.	20.0%	18.7%	12.0%	29.3%	20.0%	3.11	.504
Cash flow fluctuations have occasionally hindered my SME's ability to meet its financial obligations.	2.3%	7.0%	10.0%	48.7%	32.0%	3.86	.603
Average						3.54	.660

4.3.2 Risk Identification Practices and Financial Sustainability of SMEs

This subsection presents the descriptive statistics of the first objective. The study determined how risk identification practices influence financial sustainability of SMEs in Nairobi County by providing statements that described the current situation. A 5-point Likert scale was used to evaluate the findings, where 5-Strongly Agree; 4-Agree; 3-Neither Agree nor Disagree; 2-Disagree; 1- Strongly Disagree. Table 4.3 summarises the findings:

Table 4.3: Risk Identification Practices of SMEs in Nairobi County

Statement	1	2	3	4	5	M	SD
The SME regularly conducts environmental scans or market research to identify external risks.	4.0%	10.7%	20.0%	32.0%	33.3%	3.80	.622
The SME uses specialized risk management tools or software to identify potential risks.	5.3%	14.7%	8.0%	25.3%	46.7%	3.93	.840
The firm maintains up-to-date repository of all identified risks.	0%	13.3%	22.7%	26.7%	37.3%	3.88	.466
Employees are encouraged to report and identify risks through formal processes.	1.4%	12.0%	13.3%	33.3%	40.0%	3.99	.601
Historical data and trends are analysed to identify emerging risks.	8.0%	12.0%	8.0%	41.3%	30.7	3.75	.693
Average						3.87	.644

The respondents agreed that employees are encouraged to report and identify risks through formal processes (M=3.99, SD=0.601); the SME uses specialized risk management tools or software to identify potential risks (M=3.93, SD=0.840); the firm maintains up-to-date repository of all identified risks (M=3.88, SD=0.466); the SME regularly conducts environmental scans or market research to identify external risks (M=3.80, SD=0.622); and historical data and trends are analysed to identify emerging risks (M=3.75, SD=0.693). Overall, the respondents agreed that risk identification practices influence financial sustainability of SMEs in Nairobi County (M=3.87, SD=0.644).

4.3.2 Risk Assessment Practices and Financial Sustainability of SMEs

This subsection presents the descriptive statistics of the second objective. The study determined how risk assessment practices influence financial sustainability of SMEs in Nairobi County by providing statements that described the current situation. A 5-point Likert scale was used to evaluate the findings, where 5-Strongly Agree; 4-Agree; 3-Neither Agree nor Disagree; 2-Disagree; 1- Strongly Disagree. Table 4.4 summarises the findings:

Table 4.4: Risk Assessment Practices of SMEs in Nairobi County

Statement	1	2	3	4	5	M	SD
The SME uses quantitative methods to assess the likelihood and impact of identified risks.	0%	7.0%	13.3%	15.7%	64.0%	4.37	1.192
Qualitative assessment techniques, such as expert judgment, are utilized in risk assessment.	2.7%	6.7%	20.0%	32.0%	38.7%	3.97	.721
Risks are prioritized based on their potential impact on financial sustainability.	20.0%	18.7%	12.0%	29.3%	20.0%	3.11	.504
Both internal and external factors are considered in the risk assessment process.	0.0%	14.7%	12.0%	33.3%	38.7%	3.92	.729
The SMEs' risk assessment processes are regularly reviewed and updated.	2.7%	6.7%	20.0%	32.0%	38.7%	3.97	.721
Average						3.23	.773

The respondents strongly agreed that the SMEs use quantitative methods to assess the likelihood and impact of identified risks (M=4.37, SD=1.192). The respondents agreed that the qualitative assessment techniques, such as expert judgment, are utilized in risk assessment (M=3.97, SD=0.721); SMEs' risk assessment processes are regularly reviewed and updated (M=3.97, SD=0.721); both internal and external factors are considered in the risk assessment process (M=3.92, SD=0.729); and risks are prioritized based on their potential impact on financial

sustainability (M=3.11, SD=0.504). Generally, the respondents agreed that risk assessment practices influence financial sustainability of SMEs in Nairobi County (M=3.23, SD=0.773).

4.3.3 Risk Mitigation Practices and Financial Sustainability of SMEs

This subsection presents the descriptive statistics of the third objective. The study determined how risk mitigation practices influence financial sustainability of SMEs in Nairobi County by providing statements that described the current situation. A 5-point Likert scale was used to evaluate the findings, where 5-Strongly Agree; 4-Agree; 3-Neither Agree nor Disagree; 2-Disagree; 1- Strongly Disagree. Table 4.5 summarises the findings:

Table 4.5: Risk Mitigation Practices of SMEs in Nairobi County

Statement	1	2	3	4	5	M	SD
The SME has specific risk mitigation strategies tailored to address identified risks.	1.3%	12.0%	13.3%	33.3%	40.0%	3.99	.511
Contingency plans are in place to mitigate the impact of potential risks.	0%	13.3%	22.7%	26.7%	37.3%	3.88	.654
Financial resources are allocated to implement risk mitigation measures.	10.7%	9.3%	16.0%	33.3%	41.3%	4.17	.754
Risk management considerations are integrated into strategic planning processes.	0%	12.0%	13.3%	44.0%	30.7%	3.93	.717
The SME collaborate with external stakeholders to mitigate certain risks.	1.3%	6.7%	6.7%	44.0%	41.3%	4.17	.888
Average						4.02	.741

The respondents strongly agreed that financial resources are allocated to implement risk mitigation measures (M=4.17, SD= 0.754); and the SME collaborate with external stakeholders to mitigate certain risks (M=4.17, SD=0.888). The respondents also agreed that the SME has specific risk mitigation strategies tailored to address identified risks (M=3.99, SD=0.511); risk

management considerations are integrated into strategic planning processes. (M=3.93, SD=0.717); and contingency plans are in place to mitigate the impact of potential risks (M=3.88, SD=0.654). Generally, the respondents strongly agreed that risk mitigation practices influence financial sustainability of SMEs in Nairobi County (M=4.02, SD=0.741).

4.3.4 Risk Monitoring Practices and Financial Sustainability of SMEs

This subsection presents the descriptive statistics of the fourth objective. The study determined how risk monitoring practices influence financial sustainability of SMEs in Nairobi County by providing statements that described the current situation. A 5-point Likert scale was used to evaluate the findings, where 5-Strongly Agree; 4-Agree; 3-Neither Agree nor Disagree; 2-Disagree; 1- Strongly Disagree. Table 4.6 summarises the findings:

Table 4.6: Risk Monitoring Practices of SMEs in Nairobi County

Statement	1	2	3	4	5	M	SD
Key risk indicators (KRIs) are regularly tracked and reviewed.	43.1%	25.5%	17.7%	7.8%	5.9%	3.92	.677
Clear roles and responsibilities are established for monitoring risks within the organization.	45.1%	31.4%	7.9%	7.8%	7.8%	3.98	.704
The SME utilises technology-enabled systems for real-time risk monitoring.	39.2%	15.7%	27.5%	3.9%	13.7%	3.63	.557
Periodic audits or evaluations of risk management processes and controls are conducted.	49.0%	25.5%	13.7%	5.9%	5.9%	4.06	.817
Employees are encouraged to report changes in risk factors or emerging threats.	19.6%	39.2%	23.5%	15.7%	2.0%	3.59	.765
Average						3.84	.704

The respondents strongly agreed that periodic audits or evaluations of risk management processes and controls are conducted (M=4.06, SD= 0.817). The respondents also agreed that clear roles and responsibilities are established for monitoring risks within the organization (M=3.98, SD=0.704); key risk indicators (KRIs) are regularly tracked and reviewed (M=3.92, SD=0.677); the SMEs utilise technology-enabled systems for real-time risk monitoring (M=3.63, SD=0.557); and Employees are encouraged to report changes in risk factors or emerging threats (M=3.59, SD=0.765). Generally, the respondents strongly agreed that risk monitoring practices influence financial sustainability of SMEs in Nairobi County (M=3.84, SD=0.765).

4.4 Inferential Statistics

4.4.1 Correlation Analysis

Spearman rank correlation was used to measure the relationship between the independent variables and the dependent variable. Table 4.7 summarises the findings.

Table 4.7: Correlation Matrix

		Financial Sustainability of SMEs	Risk Identification Practices	Risk Assessment Practices	Risk Mitigation Practices	Risk Monitoring Practices
Financial Sustainability of SMEs	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	102				
Risk Identification Practices	Pearson Correlation	.715*	1			
	Sig. (2-tailed)	.023	.000			
	N	102	102			
Risk Assessment Practices	Pearson Correlation	.856*	.711	1		
	Sig. (2-tailed)	.000	.000	.000		
	N	102	102	102		
Risk Mitigation Practices	Pearson Correlation	.780*	.700	.502	1	
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	102	102	102	102	
Risk Monitoring Practices	Pearson Correlation	.677*	.236	.562	.125	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	102	102	102	102	102

*. Correlation is significant at the 0.05 level (2-tailed)

According to the results of the Pearson's correlation test, there was a strongly positive correlation between Risk Identification Practices and Financial Sustainability of SMEs ($r=0.715$, $p<0.05$); Risk Assessment Practices and Financial Sustainability of SMEs ($r=0.856$, $p<0.05$), Risk Mitigation Practices and Financial Sustainability of SMEs ($r=0.780$, $p<0.05$). There was also a moderately positive correlation between Risk Monitoring Practices and Financial Sustainability of SMEs ($r=0.677$, $p<0.05$). Since the p-value in all the results is less than 0.05, it was concluded that the relationship between risk management practices and financial sustainability of SMEs is statistically significant.

4.4.2 Test for Normality

To determine whether the variable was drawn from a non-normal distribution, the researcher conducted the normality test for risk identification practices. As explained by Kafle (2019), a Skewness value from -2.0 to +2.0, and a Kurtosis value between from -7 to +7 indicate that normality is positive. According to the results of the test, all the independent variables produced skewness values between -2.0 to +2.0, as well as Kurtosis values between from -7 to +7. This showed that the data for financial innovation was normally distributed. Table 4.8 summarises the findings.

Table 4.8: Normality Test for Risk Identification Practices

	N Statistic	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Risk Identification Practices	102	.173	.752	-1.112	1.481
Risk Assessment Practices	102	.179	.711	2.026	0.258
Risk Mitigation Practices	102	.181	.759	3.156	0.895
Risk Monitoring Practices	102	.177	.716	1.119	1.125

a. Dependent Variable: Financial Sustainability of SMEs

4.4.3 Test for Multicollinearity

To determine whether risk management practices were highly correlated with Financial Sustainability of SMEs, the researcher conducted the multicollinearity test and interpreted the results by focusing on the Variance Inflation Factor (VIF). According to Garcia *et al.* (2015), VIF values above 10.0 or tolerance is lower than 0.1 shows that multicollinearity exists. Since all the independent variables produced a VIF value that was below the set threshold of 10.0, and tolerance values that were higher than 0.1, this indicated that there was no multicollinearity between risk management practices were and financial sustainability of SMEs. Table 4.9 summarises the results.

Table 4.9: Multicollinearity Test Results for Risk Management Practices

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Risk Identification Practices	.709	1.419
	Risk Assessment Practices	.701	2.681
	Risk Mitigation Practices	.562	1.196
	Risk Monitoring Practices	.365	3.215

a. Dependent Variable: Financial Sustainability of SMEs

4.4.4 Regression Analysis

Table 4.10 summarises the findings of the simple regression analysis conducted to establish the extent to which risk management practices influence the financial sustainability of SMEs. The results indicate that the risk management practices have a significant and strong positive influence on the financial sustainability of SMEs in Nairobi City County, Kenya. The model explains a substantial portion (68.2%) of the variance in financial sustainability, demonstrating the importance of effective risk management practices for the financial health and sustainability

of SMEs. The adjusted R Square value further supports the strength of the model, indicating that the results are reliable and not overly influenced by the number of predictors.

The ANOVA results indicated that the regression model is statistically significant, with an F-statistic of 25.457 and a p-value of 0.000. This suggests that risk management practices significantly explain the variance in the financial sustainability of SMEs. The significant F-statistic confirms that the model provides a better fit to the data than a model with no independent variables. Therefore, risk management practices have a meaningful and significant impact on the financial sustainability of SMEs in Nairobi City County, Kenya.

Table 4.10: Model Summary between Risk Management Practices and Financial Sustainability of SMEs

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.826 ^a	.682	.675	0.0833		
a. Predictors: (Constant) Risk Identification Practices, Risk Assessment Practices, Risk Mitigation Practices, Risk Monitoring Practices						
b. Dependent Variable: Financial Sustainability of SMEs						
ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.539	4	4.180	25.457	.000 ^b
	Residual	25.145	98	.257		
	Total	4.025	102			
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	1.165	.267		3.923	.000
	Risk Identification Practices	.369	.045	.447	0.821	.000
	Risk Assessment Practices	.502	.462	.141	1.086	.000
	Risk Mitigation Practices	.299	.358	.396	0.835	.000
	Risk Monitoring Practices	.461	.635	.456	0.726	.000

a. Dependent Variable: Financial Sustainability of SMEs

The regression analysis results show that all four risk management practices (risk identification, risk assessment, risk mitigation, and risk monitoring) have a positive and significant influence on the financial sustainability of SMEs. The significance levels (p-values) for all variables are below 0.05, indicating strong evidence that each of these risk management practices contributes meaningfully to the financial sustainability of SMEs in Nairobi City County, Kenya. Risk Identification Practices have a substantial positive effect, as shown by the coefficient ($\beta = 0.369$) and its high standardized coefficient (Beta = 0.447); Risk Assessment Practices also positively impact financial sustainability, with a coefficient ($\beta = 0.502$) and a moderate standardized coefficient (Beta = 0.141); Risk Mitigation Practices positively influence financial sustainability, with a coefficient ($\beta = 0.299$) and a standardized coefficient (Beta = 0.396); Risk Monitoring Practices are positively associated with financial sustainability, with a coefficient ($\beta = 0.461$) and a significant standardized coefficient (Beta = 0.456). These findings suggest that SMEs that actively engage in risk management practices are likely to experience better financial sustainability.

Based on the study results, the relationship between the risk management practices and financial sustainability of SMEs can be expressed using the equation:

$$Y = 1.165 + 0.369X_1 + 0.502X_2 + 0.299X_3 + 0.461X_4$$

Where:

X_1 = Risk Identification practices

X_2 = Risk Assessment practices

X_3 = Risk Mitigation practices

X_4 = Risk Monitoring practices

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the summary of the study findings, along with the conclusion, and lastly, the recommendations with regard to each of the four objectives that guided the study.

5.2 Discussion

The general objective of the study was to assess the effectiveness of risk management strategies on financial sustainability among SMEs in Nairobi, Kenya. The study focused on the effectiveness of risk identification practices, risk assessment practices, risk mitigation practices, and risk monitoring practices on the financial sustainability of SMEs. This study was guided by four theories, namely the decision making theory, prospect theory, contingency planning theory, and institutional theory to understand the changing aspects of risk management practices in SMEs. Data was analysed using linear regression analysis and revealed that risk management practices had a positive and significant effect on the financial stability of SMEs. The study also revealed that risk identification practices, risk assessment practices, risk mitigation practices, and risk monitoring practices influence financial sustainability of SMEs in Nairobi County. These findings conform to the decision making theory, which argues that where uncertainties are common, decision-makers employ rules of thumb and experience-based judgment in identifying financial risks (Campitelli & Gobet, 2010). Recognizing these bounded rationalities is important for designing effective risk management strategies tailored to the practical limitations of SME decision-makers. Therefore, the study immensely contributes to filling empirical gap that of conducting explicit research to evaluate the extent to which risk management practices influence the sustainability of SMEs.

5.2.1 Risk Identification Practices and Financial Sustainability of SMEs

The findings revealed that various risk identification practices influence financial sustainability. The majority of the respondents agreed that employees are encouraged to report and identify risks through formal processes. This finding echoes those of Alkurdi *et al.* (2019) whose study

revealed that integrating formal risk reporting mechanisms ensures that employees at all levels can communicate their observations and concerns, thus improving the organization's risk awareness and responsiveness. This not only helps in the early detection of risks but also promotes a sense of ownership and accountability among employees, leading to a more resilient and sustainable business environment. The respondents also agreed that SMEs use specialized risk management tools or software to identify potential risks. As emphasised by De Araújo Lima (2020), risk management software enables SMEs to identify risks early and assess their potential impact with accurately. This technological adoption speeds up the decision-making process, allowing SMEs to allocate resources efficiently and implement timely mitigation strategies. Such sophisticated tools not only improves risk visibility but also integrates risk management into the companies' strategic planning framework (Rodríguez-Espíndola *et al.*, 2022).

The decision making theory corroborates the findings since it emphasizes the process of rational decision-making, which involves identifying and analysing potential risks before making informed decisions (Simon, 1979). The findings support the decision making theory as they highlight the importance of formal processes for risk identification and the use of specialized risk management tools or software, which enable SMEs to systematically identify and manage potential risks. These practices reflect the theory's concept of bounded rationality, where decision-makers use available information and tools to make the best possible decisions within the constraints of their environment. SMEs enhance their decision-making capabilities, ultimately supporting financial sustainability by encouraging employees to report risks and employing advanced tools. Generally, risk identification practices influence financial sustainability of SMEs in Nairobi County.

5.2.2 Risk Assessment Practices and Financial Sustainability of SMEs

The findings revealed that various risk assessment practices influence financial sustainability. The majority of the respondents strongly agreed that the SMEs use quantitative methods to assess the likelihood and impact of identified risks. This finding echoes those of Pagach and Warr (2010) who revealed that systematic appraisal can be conducted using qualitative and quantitative methodologies, where risks are categorized based on their potential impact. This is

why the respondents also agreed that qualitative assessment techniques, such as expert judgment, are utilized in risk assessment. According to Offiong *et al.* (2021), SMEs' risk assessment processes are regularly reviewed and updated to highlight the distinct impacts of various types of financial risk on SMEs in both the short and long term.

Prospect Theory, which describes how people choose between probabilistic alternatives that involve risk, supports the findings regarding SMEs in Nairobi. According to the theory, individuals evaluate potential losses and gains using subjective probabilities rather than objective ones, often leading to inconsistent risk assessment behaviours (Kahneman & Tversky, 2013). The findings that SMEs employ both quantitative methods and qualitative techniques, such as expert judgment, align with this theory, as it suggests that decision-makers use a combination of objective data and subjective assessments to evaluate risks. This corroborates the observed practices where SMEs integrate numerical analysis with personal or expert insights to manage financial sustainability, reflecting the blend of rational and intuitive decision-making processes described by Prospect Theory. Generally, risk assessment practices influence financial sustainability of SMEs in Nairobi County.

5.2.3 Risk Mitigation Practices and Financial Sustainability of SMEs

The findings revealed that various risk mitigation practices influence financial sustainability. The majority of the respondents strongly agreed that financial resources are allocated to implement risk mitigation measures. As emphasised by Nurjannah *et al.* (2023), financial literacy is a critical determinant that impacts the survival strategy of SMEs, thus enhancing their overall sustainability. In addition, the study revealed that the SME collaborate with external stakeholders to mitigate certain risks. This finding resonates with those of Brustbauer (2020) whose study revealed that SMEs engage with wide-ranging stakeholders such as suppliers, customers, industry associations, insurers, and regulatory bodies to gain insights into potential threats and develop comprehensive risk mitigation strategies. These collaborations lead to shared risk intelligence, joint initiatives for risk reduction, and access to risk mitigation tools and services that enhance the resilience of SMEs. For instance, suppliers can provide information on supply chain vulnerabilities, while industry associations can offer guidance on best practices and

emerging risks (Glowka *et al.*, 2021). Generally, the respondents strongly agreed that risk mitigation practices influence financial sustainability of SMEs in Nairobi County.

The contingency planning theory suggests that an organisation's effectiveness is contingent upon the alignment between its internal processes and external environmental demands (Lawrence & Lorsch, 1967). This theory supports the findings of the thesis, as it highlights the importance of adaptability and strategic association in achieving organizational goals. The findings show that SMEs in Nairobi allocate financial resources to implement risk mitigation measures and collaborate with external stakeholders, which aligns with the theory's emphasis on adapting internal strategies to manage external uncertainties. Therefore, the theory corroborates the findings by confirming that SMEs enhance their financial sustainability through tailored risk assessment strategies that respond to external environmental conditions.

5.2.4 Risk Monitoring Practices and Financial Sustainability of SMEs

The findings revealed that various risk monitoring practices influence financial sustainability. The majority of the respondents strongly agreed periodic audits or evaluations of risk management processes and controls are conducted. As echoed by Vasarhelyi *et al.* (2010), actively monitoring and evaluating an entity's exposure to risks, with a focus on prioritizing audit and risk management procedures in a more immediate and responsive manner is crucial. This strategic focus not only enhances operational stability but also builds stakeholder confidence by demonstrating a commitment to rigorous risk management practices. A swift and responsive risk monitoring framework is integral to sustaining long-term success and achieving strategic objectives. The respondents also agreed that clear roles and responsibilities are established for monitoring risks within the organization. This finding is echoed by Yang *et al.* (2021) whose study revealed that clearly defining who is responsible for identifying, assessing, and managing various types of risks ensures that organizations continuously monitor and address all potential threats proactively. This structured approach helps to eliminate ambiguities in responsibilities, thus improving accountability and ensuring that risk management processes are systematically integrated into everyday business operations. Generally, the respondents strongly

agreed that risk monitoring practices influence financial sustainability of SMEs in Nairobi County.

The institutional theory hypothesises that organizations conform to established norms, rules, and rituals within their institutional environment to gain legitimacy, stability, and survival (DiMaggio & Powell, 2012). This theory corroborates the findings, as the adoption of systematic risk monitoring practices like periodic audits and the establishment of clear roles and responsibilities for risk management reflect adherence to institutional norms and best practices. These practices enhance the legitimacy and reliability of SMEs in Nairobi, promoting their financial sustainability by aligning with widely accepted standards and expectations within the business community. Thus, the theory supports the view that institutionalized risk management practices contribute to the financial stability and credibility of SMEs.

5.3 Conclusions

The findings revealed a strongly positive correlation between risk identification practices and financial sustainability of SMEs. This significant relationship highlights the critical role that effective risk identification practices play in improving the financial health and stability of SMEs. Tools such as risk assessment workshops, risk management software, and the analysis of historical risk data have proven to be highly effective in identifying potential risks that could adversely impact financial sustainability in SMEs. The study concludes that these practices enable SMEs to proactively address risks before they spiral into significant problems, thus safeguarding their financial resources and ensuring steady growth.

Furthermore, the findings suggest that SMEs that invest in comprehensive risk identification practices are better positioned to address the uncertainties of the business environment. These enterprises can make informed decisions, allocate resources more efficiently, and implement pre-emptive measures to mitigate potential threats by employing systematic and technology-driven approaches to identify risks. This proactive position not only enhances their resilience but also boosts their ability to maintain financial sustainability in the long term. Consequently, it is vital for SME owners and managers in Nairobi County to prioritize the adoption of effective risk

identification practices as a fundamental aspect of their overall risk management strategy. This will not only strengthen their financial stability but also contribute to their competitive advantage in the market.

The findings also revealed a strongly positive correlation between these risk assessment practices and the financial sustainability of SMEs. This significant relationship reveals the critical importance of systematically assessing risks using both quantitative and qualitative methods. Quantitative techniques, such as statistical models and financial risk metrics, provide SMEs with measurable data to understand potential risks better. On the other hand, qualitative techniques, such as expert judgment and scenario analysis, offer a more in-depth view of risks that may not be easily quantifiable. Therefore, the study concludes that risk assessment practices provide a broad of risks, enabling SMEs to make informed decisions and implement effective risk management strategies.

Moreover, the review of system components as part of the risk assessment process ensures that all aspects of the business, from operational systems to technological infrastructure, are evaluated for potential vulnerabilities. This holistic approach to risk assessment allows SMEs to identify and address weaknesses that could impact their financial sustainability. The positive correlation found in this study indicates that SMEs that diligently apply these risk assessment practices are better equipped to anticipate, mitigate, and manage risks, thus improving their financial resilience and stability. As a result, it is vital for SME owners and managers in Nairobi County to integrate both quantitative and qualitative risk assessment techniques into their risk management frameworks. This can strengthen their financial sustainability, safeguard their business operations, and achieve long-term success in an increasingly changing business environment.

The findings also indicated a strongly positive correlation between these risk mitigation practices and the financial sustainability of SMEs. This significant relationship highlights the importance of proactive risk mitigation strategies in safeguarding the financial health of small and medium enterprises. Contingency plans provide a structured approach for SMEs to manage unforeseen

disruptions, ensuring business continuity and minimizing financial losses. SMEs can quickly respond to crises, maintain operational stability, and protect their financial assets by preparing for potential risks in advance.

Additionally, collaboration with external stakeholders, such as suppliers, customers, and financial institutions, enhances the risk mitigation efforts of SMEs by providing access to additional resources, expertise, and support networks. These partnerships can help SMEs identify and address risks more effectively, thereby strengthening their overall risk management framework. Furthermore, the strategic allocation of financial resources to risk mitigation activities ensures that SMEs are adequately equipped to handle potential threats. Investing in risk mitigation measures, such as insurance, technology upgrades, and employee training, can significantly enhance the resilience of SMEs, enabling them to sustain their financial sustainability even in the face of adverse events. Consequently, it is crucial for SME owners and managers in Nairobi County to prioritize and implement comprehensive risk mitigation practices as part of their general risk management strategy. Therefore, the study concludes that proactive approach to risk mitigation practices not only enhances SMEs' financial sustainability but also position them for long-term success in a competitive and unpredictable business environment.

The fourth objective of this study explored the influence of risk monitoring practices (tracking of key risk indicators, the utilization of technology-enabled systems, and periodic audits or evaluations) on the financial sustainability of SMEs in Nairobi County, Kenya. The findings revealed a moderately positive correlation between these risk monitoring practices and the financial sustainability of SMEs. This moderate correlation suggests that while risk monitoring practices do contribute to the financial stability of SMEs, their impact may not be as strong as other risk management practices such as risk identification or mitigation. Tracking key risk indicators allows SMEs to continuously monitor potential threats and emerging risks, enabling timely responses to mitigate their impact. SMEs can make data-driven decisions to maintain financial stability by keeping a close watch on these indicators.

The utilization of technology-enabled systems, such as risk management software and automated monitoring tools, further boosts the effectiveness of risk monitoring by providing real-time data and analytics. These systems facilitate proactive risk management by alerting businesses to potential issues before they escalate into significant problems. Periodic audits or evaluations ensure that risk management processes are regularly reviewed and improved, fostering a culture of continuous improvement within the organization. Despite the moderate correlation, these practices are essential for maintaining an ongoing awareness of risk factors and adapting strategies accordingly. Therefore, it is essential for SME owners and managers in Nairobi County to integrate risk monitoring practices into their risk management frameworks. Therefore, the study concludes that risk monitoring practises can improve SMEs' ability to anticipate and respond to risks, in due course supporting their financial sustainability and long-term success.

5.4 Recommendations

SMEs should prioritize the implementation of comprehensive risk management practices to enhance their financial sustainability. These enterprises should regularly conduct risk identification workshops, utilize risk management software, and analyse historical risk data. These practices will enable them to identify potential threats early and address them proactively. Additionally, SMEs should adopt both quantitative and qualitative risk assessment techniques and review system components thoroughly to understand the potential impact of identified risks. This will enable SMEs to make informed decisions and allocate resources more effectively to mitigate risks. Furthermore, SMEs should establish robust contingency plans, collaborate with external stakeholders, and allocate sufficient financial resources to risk mitigation activities. Engaging with partners such as suppliers, industry associations, and insurers can provide valuable insights and support in managing risks. SMEs should also implement continuous risk monitoring practices by tracking key risk indicators, utilizing technology-enabled systems, and conducting periodic audits. These measures will help maintain an ongoing awareness of risk factors and ensure timely responses to mitigate their impact.

The Nairobi County Government should support SMEs by creating an enabling environment for effective risk management. This can be achieved by offering training programs and workshops

focused on risk identification, assessment, mitigation, and monitoring practices. Such initiatives will equip SME owners and managers with the necessary skills and knowledge to implement comprehensive risk management strategies. Additionally, the county government should facilitate access to affordable risk management software and tools, ensuring that SMEs can leverage technology to enhance their risk management capabilities. The county government should also establish platforms for collaboration between SMEs and external stakeholders. By promoting partnerships with industry associations, financial institutions, and insurers, the government can help SMEs gain access to resources and expertise that are crucial for effective risk management. Furthermore, the government should consider providing financial incentives or subsidies for SMEs that invest in robust risk management practices, thus encouraging more businesses to prioritize financial sustainability.

Policymakers should develop and implement regulations that promote and support risk management practices among SMEs. This includes creating policies that mandate the integration of risk management frameworks into business operations, especially for SMEs operating in high-risk industries. Policymakers should also ensure that regulatory requirements are practical and feasible for SMEs, taking into account their limited resources and capacity. Moreover, policymakers should advocate for the inclusion of risk management education in business training programs and curricula. By fostering a culture of risk awareness and preparedness, policymakers can help build a resilient SME sector capable of withstanding various challenges. Additionally, policies that encourage the use of technology in risk management, such as tax incentives for purchasing risk management software, can further support SMEs in their efforts to enhance financial sustainability.

Industry associations, financial institutions, and insurers should actively engage with SMEs to provide support and resources for effective risk management. Industry associations can offer training programs, best practice guidelines, and networking opportunities to help SMEs enhance their risk management capabilities. Financial institutions should develop tailored financial products and services that address the unique risk management needs of SMEs, such as affordable insurance policies and risk mitigation loans. Insurers should work closely with SMEs

to design comprehensive insurance packages that cover a wide range of risks. They should also offer risk assessment services and provide guidance on implementing effective risk mitigation strategies.

5.5 Suggestions for Further Research

Based on the findings of this study, future research could investigate the specific mechanisms through which each risk management practice impacts financial sustainability. For instance, studies could investigate how the use of particular risk identification tools (e.g., software versus workshops) directly influences different aspects of financial sustainability, such as profitability, cash flow stability, and access to financing. Additionally, longitudinal studies could be conducted to examine the long-term effects of implementing comprehensive risk management frameworks on SME growth and resilience. This would provide valuable insights into the sustainability of risk management practices over time and their role in fostering enduring business success.

Furthermore, comparative studies across different regions or countries could offer a broader perspective on how local settings, such as regulatory environments and market conditions, influence the effectiveness of risk management practices. Researchers could also explore the role of organizational culture and leadership in the successful adoption and implementation of risk management strategies within SMEs. Another avenue for future research is the impact of emerging technologies, such as artificial intelligence and blockchain, on risk management practices and their potential to further enhance financial sustainability. scholars can contribute to a more comprehensive understanding of risk management in SMEs, ultimately aiding policymakers, business leaders, and other stakeholders in developing more effective strategies to support the SME sector by expanding the scope of research in these areas,.

5.6 Limitations of the Study

The study focuses exclusively on SMEs in Nairobi County, which may limit the applicability of the findings to other regions or settings. Nairobi County has its unique economic, regulatory, and business environment, which might differ significantly from other areas in Kenya or other

countries. Therefore, the results may not be easily transferable to SMEs operating in different regions with varying conditions. In addition, the cross-sectional nature of the study, collecting data at a single point in time, limits the ability to observe changes and trends over time. Longitudinal studies would be more effective in capturing the dynamic nature of risk management practices and their evolving impact on financial sustainability.



REFERENCES

- Adeyele, J. S., & Osemene, O. F. (2018). Small and medium enterprises' risk exposures and mitigation approaches in Nigeria. *The Journal of Entrepreneurial Finance (AEF)*, 20 (1), 21-42. DOI: <https://doi.org/10.57229/2373-1761.1327>
- Alkurdi, A., Hussainey, K., Tahat, Y., & Aladwan, M. (2019). The impact of corporate governance on risk disclosure: Jordanian evidence. *Academy of Accounting and Financial Studies Journal*, 23(1), 1-16.
- Arena, G. Arnaboldi, H and Azzone, M. (2010). *Financial Institutions Management: A Risk Management Approach*, McGraw-Hill, Irwin.
- Bartoš, P., Ključnikov, A., & Doležal, J. (2015). Risk Perception Differences between Micro, Small and Medium Enterprises. *Journal of International Studies*, 8 (3), 20-30. DOI: 10.14254/2071-8330.2015/8-3/2
- Begenau, J. (2020). Capital requirements, risk choice, and liquidity provision in a business-cycle model. *Journal of Financial Economics*, 136(2), 355-378.
- Belás, J., Mišanková, M., Schönfeld, J., & Gavurová, B. (2017). Credit risk management: financial safety and sustainability aspects. *Journal of Security and Sustainability Issues*.
- Belás, J., Bartoš, P., Habánik, J., Novák, P. (2014). Significant Attributes of the Business Environment in Small and Medium-Sized Enterprises. *Economics and Sociology*, 7(3), 22-39. DOI: 10.14254/2071-789X.2014/7-3/2
- Belás, J., Bilal, S., Muhammad, A.N. and Abdul, J. K. (2012). Entity's characteristics and capital structure: A panel data analysis of Pakistan's insurance sector. *African Journal of Business*
- Blazy, R., and Weill, L., (2013). Why do Banks Ask for Collateral in SME lending? *Applied Financial Economics*, 23(13), 1109-1122. <https://doi.org/10.1080/09603107.2013.795272>
- Boniface, U. and Ibe, I. G. (2012). Enterprise Risk Management and Performance of Nigeria's Brewery Industry. *Developing Country Studies*, 2(10), 60– 100
- Brustbauer, J. (2020). Enterprise risk management in SMEs: Towards a structural model. *International Small Business Journal: Researching Entrepreneurship*, 34(1), 70–85. <https://doi.org/10.1177/0266242614542853>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, 25(8), 652-661. <https://doi.org/10.1177/1744987120927206>
- Campitelli, G., & Gobet, F. (2010). Herbert Simon's decision-making approach: Investigation of cognitive processes in experts. *Review of general psychology*, 14(4), 354-364.

- Chapman, C. B., & Cooper, D. F. (2018). Risk analysis: Testing some prejudices. *European Journal of Operational Research*, 14(3), 238–247. [https://doi.org/10.1016/0377-2217\(83\)90260-6](https://doi.org/10.1016/0377-2217(83)90260-6)
- Chowdhury, P., Lau, K. H., & Pittayachawan, S. (2019). Operational supply risk mitigation of SME and its impact on operational performance: a social capital perspective. *International Journal of Operations & Production Management*, 39(4), 478-502.
- Cooper, D. & Schindler, P. (2014). *Business research methods*: (12th Ed.) San Francisco: McGraw Hill
- Creswell, J. W. (2009). *Research Designs. Qualitative, Quantitative, and Mixed Methods Approaches*.
- Crovini, C., Santoro, G. and Ossola, G. (2021), "Rethinking risk management in entrepreneurial SMEs: towards the integration with the decision-making process", *Management Decision*, Vol. 59 No. 5, pp. 1085-1113. <https://doi.org/10.1108/MD-10-2019-1402> .
- de Araújo Lima, P. F., Crema, M., & Verbano, C. (2020). Risk Management in SMEs: A Systematic Literature Review and Future Directions. *European Management Journal*, 38(1), 78-94. <https://doi.org/10.1016/j.emj.2019.06.005>
- Diabate, A., Sibiri, H., Wang, L., & Yu, L. (2019). *Assessing SMEs' sustainable growth through entrepreneurs' ability and entrepreneurial orientation: An insight into SMEs in Côte d'Ivoire. Sustainability* (Switzerland), 11(24) <https://doi.org/10.3390/su11247149>.
- DiMaggio, P. J., & Powell, W. W. (2012). The iron cage revisited: institutional isomorphism and collective rationality in organizational fields [1983]. *Contemporary sociological theory*, 175. <https://doi.org/10.2307/2095101>
- Douglas, J., Douglas, A., Muturi, D., & Ochieng, J. (2017, September). An exploratory study of critical success factors for SMEs in Kenya. In *Toulon-Verona Conference" Excellence in Services* (pp. 223-234).
- Eniola, A. A., Entenbang, H. & Sakariyau, O. B. (2015). Small and medium scale business performance in Nigeria: Challenges faced from an intellectual capital perspective. *International Journal*, 5(1), 212-245.
- Eyiah, D.K (2015). Assessment of Risk Management Practice of Small and Medium Scale Enterprises in the Secondi-Takoradi Metropolis, Ghana. *Unpublished Masters Dissertation, Department of Accounting and finance*, University of Cape Coast. URI: <http://hdl.handle.net/123456789/3124>
- Florio C. & Leoni G. (2017). Enterprise risk management and firm performance: The Italian case. *British Accounting Review*, 49(1), 56-74. <https://doi.org/10.1016/j.bar.2016.08.003>
- Frazer, L. (2012). The effect of internal control on the operating activities of small restaurants. *Journal of Business & Economics Research*, 10(6), 361-374. DOI <https://doi.org/10.19030/jber.v10i6.7027>

- Gatzert, N., & Martin, M. (2015). Determinants and value of enterprise risk management: empirical evidence from the literature. *Risk Management and Insurance Review*, 18(1), 29-53.
- Gleißner, W., Günther, T., & Walkshäusl, C. (2022). Financial sustainability: measurement and empirical evidence. *Journal of Business Economics*, 92(3), 467-516. <https://doi.org/10.1111/rmir.12028>
- Glowka, G., Kallmünzer, A., & Zehrer, A. (2021). Enterprise risk management in small and medium family enterprises: the role of family involvement and CEO tenure. *International Entrepreneurship and Management Journal*, 17(3), 1213–1231. <https://doi.org/10.1007/s11573-022-01081-0>
- Gordon, L. A., Loeb, M. P., & Tseng, C. Y. (2019). Enterprise risk management and firm performance: A contingency perspective. *Journal of Accounting and Public Policy*, 28(4), 301–327. <https://doi.org/10.1016/j.jaccpubpol.2009.06.006>
- Grace, M. F., Leverty, J. T., Phillips, R. D., & Shimpi, P. (2015). The value of investing in enterprise risk management. *Journal of Risk and Insurance*, 82(2), 289-316. <https://doi.org/10.1111/jori.12022>
- Greenwood, R., & Meyer, R. E. (2008). Influencing ideas: A celebration of DiMaggio and Powell (1983). *Journal of management inquiry*, 17(4), 258-264. <https://doi.org/10.1177/1056492608326693>
- Gure, A. K., & Karugu, J. (2018). Strategic management practices and performance of small and micro enterprises in Nairobi County, Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(1), 1-26.
- Gwangwava, E., Manuere, F., Kudakwashe, G., Tough, C., & Rangarirai, F. (2018). An Assessment of Risk Management Practices in SMES in Zimbabwe: A Review and Synthesis. *IOSR Journal of Humanities and Social Science*, 19(8), 06–14.
- Hanggraeni, D., Ślusarczyk, B., Sulung, L. A. K. & Subroto, A. (2019). The impact of internal, external and enterprise risk management on the performance of micro, small and medium enterprises. *Sustainability (Switzerland)*, 11(7). <https://doi.org/10.3390/su11072172>
- Hudáková, M., Schönfeld, J., Dvorský, J., & Lusková, M. (2019). The market risk analysis and methodology of its more effective risk management in smes in the Slovak Republic. *Montenegrin Journal of Economics*, 13(2), 151–161. DOI: 10.14254/1800-5845/2017.13-2.10
- Irungu, A. W., & Arasa, R. (2017). Factors influencing competitiveness of SMEs in Nairobi County, Kenya. *International Journal of Entrepreneurship and project management*, 2(1), 22-46.
- Jiang, D., & Kalyuga, S. (2020). Confirmatory Factor Analysis of Cognitive Load Ratings Supports a Two-Factor Model. *The Quantitative Methods for Psychology*, 16(3), 216–225.

- Kagwathi, G. S., Kamau, J. N., Njau, M. M., Kamau, S. M., Darya, G., Maheshwari, S., & Tiwari, S. K. (2020). Risks faced and mitigation strategies employed by small and medium enterprises in Nairobi County, Kenya. *Journal of risk and insurance*, 5(1), 83-88.
- Kahneman, D., & Tversky, A. (2013). Prospect Theory: An Analysis of Decision under Risk. In *Handbook of the Fundamentals of Financial Decision Making: Part I* (pp. 99-127).
- Kenya National Bureau of Statistics (2010). Annual Abstract of Statistics. Federal Republic of Nigeria. SME, business risks and sustainability in Nigeria. *European Journal of Business and Social Sciences*, 2(9), 1-10.
- Khan, M.J., Hussain, D. and Mehmood, W. (2016). Why do firms adopt enterprise risk management (ERM)? Empirical evidence from France. *Management Decision*, 54(8), 1886-1907. <https://doi.org/10.1108/MD-09-2015-0400>
- Kiiru, D. K., Mukulu, E., & Ngatia, P. (2023). Innovativeness and Performance: Evidence from Kenyan SMEs. *European Journal of Business and Management Research*, 8(2), 113-119. DOI: 10.24018/ejbmr.2023.8.2.1810
- Kinyua, E., Ogollah, K. & Mburu, D. K. (2015). Effect of risk management strategies on project performance of small and medium information communication technology enterprises in Nairobi County, Kenya. *International Journal of Economics, Commerce and Management*, 2(3), 1-30.
- Kiptoo, I. K., Kariuki, S. N., & Ocharo, K. N. (2021). Risk management and financial performance of insurance firms in Kenya. *Cogent Business & Management*, 8(1), 1997246.
- Kithinji, A. (2010): Merger Restructuring and Financial Performance of Commercial Banks in Kenya. *Economic, Management and Financial Markets Journal*, 2: 9 - 39 48.
- Kiveu, M. N., Namusonge, M., & Muathe, S. (2019). Effect of innovation on firm competitiveness: the case of manufacturing SMEs in Nairobi County, Kenya. *International Journal of Business Innovation and Research*, 18(3), 307-327.
- KNBS (2016). Micro, Small and Medium Establishment (SMME Survey. Retrieved from <http://www.knbs.or.ke/>
- Kombo, D & Tromp, L.A. (2006). Proposal and thesis writing: an introduction. Laukkanen, T. C. (2009). *Comparing consumer resistance to mobile banking in Finland and Portugal*. In: (J. O.B. Filipe, Ed.) Berlin: Springer.
- Kothari, C. R. (2014). *Research Methodology: Methods & Techniques (3)*. New Delhi: New Age International (P) Ltd.
- Kwanum, I., & Luper, I. (2018). An Assessment of Risk Management of Small and Medium Scale Enterprises in Nigeria. *Research Journal of Finance and Accounting*, 3(5), 151–159.

- Lawrence, F. P. (2015). Jay Lorsch's Contingency Theory of Organizations -Differentiation and Integration - To Organization Development and Matrix Structures. *Organizational Behavior 4: From Theory to Practice*, 247.
- Lawrence, P. R., & Lorsch, J. W. (1967). Differentiation and integration in complex organizations. *Administrative science quarterly*, 1-47. <https://doi.org/10.2307/2391211>
- Li, Q., Wu, Y., Ojiako, U., Marshall, A., & Chipulu, M. (2014). Enterprise risk management and firm value within China's insurance industry: Original Research. *Acta Commercii*, 14(1), 1-10. <https://hdl.handle.net/10520/EJC149555>
- Linton, G., & Kask, J. (2017). Configurations of entrepreneurial orientation and competitive strategy for high performance. *Journal of Business Research*, 70, 168–176. <https://doi.org/10.1016/j.jbusres.2016.08.022>
- Lukianchuk, G. (2015). The impact of enterprise risk management on firm performance of small and medium enterprises. *European Scientific Journal*, 11(13), 37-52
- Luper, I., & Kwanum, I. (2012). Capital structure and firm performance: Evidence from manufacturing companies in Nigeria. *Research Journal of Finance and Accounting*, 3 (5), 151-158. <https://doi.org/10.1016/j.sbspro.2012.11.105>
- Magembe, Y. K. (2019). Growth of SMES in Dar es Salaam in Tanzania: Factors Influencing their Growth and the Challenges they face in the Course. *Global Journal of Human-Social Science (E)*, 19(2), 45–56.
- Markowitz, H. (1952). *Portfolio selection: Efficient diversification of investments*, New York: Wiley
- Maseko. & Manyani, O.(2011). Accounting Practices of SMEs in Zimbabwe: An Investigative Study of Record Keeping for Performance Measurement (A case Study of Bindura). *Journal of Accounting and Taxation*, 3(8), 171- 181.
- Meidell, A. and Kaarbøe, K. (2017), How the Enterprise Risk Management Function Influences Decision-Making in the Organization – A Field Study of a Large, Global Oil and Gas Company. *British Accounting Review*, 49 (1), 39-55. <https://doi.org/10.1016/j.bar.2016.10.005>
- Mugenda, A. & Mugenda, O. (2019). *Research methods: quantitative and qualitative approaches*. Africa Center for Technology (ACTS): Nairobi County Kenya.
- Mugo, A. N., Kahuthia, J., & Kinyua, G. (2019). Effects of infrastructure on growth of small and medium enterprises in Kenya: A case of clothing and textile businesses in Nairobi Central Business District. *International Academic Journal of Human Resource and Business Administration*, 3(6), 133-149.
- Muhammad, I. S. & Amber O. (2011). The Essence of Enterprise Risk Management in Today's Business Enterprises in Developed and Developing Nations. *European Journal of Social Sciences*, 25(4), 515- 524.

- Muli, N. F. (2013). An assessment of the factors affecting the growth in real estate investment in Kenya. *Unpublished Post graduate Diploma in Housing Administration project*, University of Nairobi County.
- Mumassabba, J. (2024). *Risk Management Strategies and Competitiveness of Small and Medium Enterprises in Kenya* (Doctoral dissertation, JKUAT-COHRED).
- Mwasiaji, E. T. (2019). The effect of government policy on the performance of selected manufacturing enterprises in Kenya. *International Journal of Economics, Business and Management Research*, 3(12), 198-210.
- Nanthuru, S. B., Pingfeng, L., Guihua, N., & Mkonya, V. L. (2018). An assessment of risk management practices of SME taxpayers in Malawi and their impact on tax compliance. *International Journal of Management Science and Business Administration*, 4(4), 7-17. DOI: 10.18775/ijmsba.1849-5664-5419.2014.44.1001.
- Njuguna, M. W. (2023). *Survival and Sustainability of Small and Medium Enterprises in Nairobi County Under Corona Virus Disease-19 Pandemic* (Doctoral dissertation, University of Nairobi).
- Ntlhane, K. (2010). The application of risk management principles to smaller enterprises. *Unpublished Masters of Business Administration thesis*, University of Witwatersrand, Johannesburg.
- Nurjannah, D., Wardhana, E. T. D. R. W., Handayati, P., Winarno, A., & Jihadi, M. (2023). The Influence of Managerial Capabilities, Financial Literacy, and Risk Mitigation on MSMEs Business Sustainability. *Journal of Law and Sustainable Development*, 11(4), e520-e520.
- Odoom, R., Anning-Dorson, T., & Acheampong, G. (2017). Antecedents of social media usage and performance benefits in small- and medium-sized enterprises (SMEs). *Journal of Enterprise Information Management*, 30(3), 383–399. DOI: <https://doi.org/10.1108/JEIM-04-2016-0088>
- Ombongi, P. N., & Long, W. (2018). Factors affecting financial performance of small and medium enterprises (SMEs): A case of manufacturing SMEs in Kenya. *International Journal of Research in Business Studies and Management*, 5(1), 37-45.
- Panigrahi, A.K. (2012). Risk management in Micro, Small and Medium Enterprises (MSMEs) in India: A Critical Appraisal. *Asia Pacific Journal of Marketing & Management Review*, 1(4). <https://ssrn.com/abstract=2342484>
- Petroni, G., Venturini K., & Verbano C. (2012). Open innovation and new issues in R & D organization and personnel management. *The International Journal of Human Resource Management*, 23(1), 147-173. <https://doi.org/10.1080/09585192.2011.561250>
- Power, H Ashby, J and Palermo, D. H. (2013). Toward a performance assessment of microfinance institutions in Europe.

- Rehman, A. U., & Anwar, M. (2019). Mediating role of enterprise risk management practices between business strategy and SME performance. *Small Enterprise Research*, 26(2), 207– 227. <https://doi.org/10.1080/13215906.2019.1624385>
- Richard W.T (2009). Measuring Organizational Performance: Towards Methodological Best Practice. *Journal of Management*. <https://doi.org/10.1177/0149206308330560>
- Rizwan, M., Shabbir, A., Javed, A. R., Srivastava, G., Gadekallu, T. R., Shabir, M., & Hassan, M. A. (2022). Risk Monitoring Strategy for Confidentiality of Healthcare Information. *Computers and Electrical Engineering*, 100, 107833. <https://doi.org/10.1016/j.compeleceng.2022.107833>
- Rodríguez-Espíndola, O., Chowdhury, S., Dey, P. K., Albores, P., & Emrouznejad, A. (2022). Analysis of the adoption of emergent technologies for risk management in the era of digital manufacturing. *Technological Forecasting and Social Change*, 178, 121562.
- Santoro, G., Mazzoleni, A., Quaglia, R. and Solima, L. (2019). Does age matter? The impact of SMEs age on the relationship between knowledge sourcing strategy and internationalization. *Journal of Business Research*, 5 (1). 1-9. <https://doi.org/10.1016/j.jbusres.2019.05.021>
- Sax, J. and Torp, S.S. (2015). Speak up! Enhancing risk performance with enterprise risk management, leadership style and employee voice. *Management Decision*, 53(7), 1452-1468. <https://doi.org/10.1108/MD-10-2014-0625>
- Schwab, L., Gold, S., & Reiner, G. (2019). Exploring financial sustainability of SMEs during periods of production growth: A simulation study. *International Journal of Production Economics*, 212, 8-18.
- Shibia, A. G., & Barako, D. G. (2017). Determinants of micro and small enterprises growth in Kenya. *Journal of Small Business and Enterprise Development*, 24(1), 105-118.
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12.
- Simon, H. A. (1979). Rational decision making in business organizations. *The American economic review*, 69(4), 493-513.
- Simota, J., Tupa, J., & Steiner, F. (2018). Risk Management to Enhance Performance in the Construction SME Sector; Theory and Case Study. *Risk Management Treatise for Engineering Practitioners*, 2(1), 1-15. <https://library.oapen.org/handle/20.500.12657/49268>
- Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) (2013). SMEDAN and National Bureau of Statistics collaborative survey: Selected findings. Retrieved from <http://www.nigerianstat.gov.ng>
- Smit, Y. and Watkins, J.A. (2021). A literature Review of Small and Medium Enterprises (SME) Risk Management Practices in South Africa. *Africa Journal of Business Management*, 6, 6324-6330. <http://www.academicjournals.org/AJBM>

- Songling, Y., Ishtiaq, M., & Anwar, M. (2018). Enterprise Risk Management Practices and Firm Performance, the Mediating Role of Competitive Advantage and the Moderating Role of Financial Literacy. *Journal of Risk and Financial Management*, 11(3), 35.
- Srivastava, A. (2020). Overview of methods to address heteroscedasticity in factor analysis. *Economic and Social Development: Book of Proceedings*, 103-112.
- Stratton, S. J. (2021). Population research: convenience sampling strategies. *Prehospital and disaster Medicine*, 36(4), 373-374.
- Strauss, M. E., & Smith, G. T. (2009). Construct validity: Advances in theory and methodology. *Annual review of clinical psychology*, 5(1), 1-25.
- Sürücü, L., & Maslakci, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 8(3), 2694-2726.
- Szymański, P. (2017). Risk management in construction projects. *Procedia engineering*, 208, 174-182. <https://doi.org/10.1016/j.proeng.2017.11.036>
- Tanzania Invest Centre. (2022). *Tanzania Small and Medium Enterprises* <https://www.tanzaniainvest.com/sme>
- Tejada, J. J., & Punzalan, J. R. B. (2012). On the misuse of Slovin's formula. *The philippine statistician*, 61(1), 129-136.
- Verbano, C. and Turra, F. (2010). *A human factors and reliability approach to clinical riskmanagement: Evidences from Italian cases*. Safety Science, 48(59), 625
- Verbano, C., & Venturini, K. (2020). Managing risks in SMEs: A literature review and research agenda. *Journal of Technology Management and Innovation*, 8(3), 186–197. <http://dx.doi.org/10.4067/S0718-27242013000400017>
- Verbano, C., & Venturini, K. (2022). Development Paths of Risk Management: Approaches, Methods and Fields of Application. *Journal of Risk Research*, 14(5-6), 519 – 550. <https://doi.org/10.1080/13669877.2010.541562>
- Wakker, P. P. (2010). *Prospect Theory: For Risk and Ambiguity*. Cambridge University Press.
- Wadesango, N., Tinarwo, N., Sitcha, L., & Machingambi, S. (2019). The impact of cash flow management on the profitability and sustainability of small to medium sized enterprises. *International Journal of Entrepreneurship*, 23(3), 1-19.
- Wideman, R. M. (2022). *Project and program risk management a guide to managing project risks and opportunities*. Project Management Institute, Inc.
- Yakob, S., Hafizuddin-Syah, B.A.M., Yakob, R., & Raziff, N.A.M. (2020). The Effect of Enterprise Risk Management Practice on SME Performance. *The South East Asian Journal of Management*, 13(2), 151-169. <https://scholarhub.ui.ac.id/seam/vol13/iss2/7>
- Yang, S., Ishtiaq, M., & Anwar, M. (2018). Enterprise Risk Management Practices and Firm Performance, the Mediating Role of Competitive Advantage and the Moderating Role of

Financial Literacy. *Journal of Risk and Financial Management*, 11(3), 35.
<https://doi.org/10.3390/jrfm11030035>

Yang, Y., Chu, X., Pang, R., Liu, F., & Yang, P. (2021). Identifying and predicting the credit risk of small and medium-sized enterprises in sustainable supply chain finance: evidence from China. *Sustainability*, 13(10), 5714. <https://doi.org/10.3390/su13105714>

Yolande, S. & Watkins, J.A. (2012). A literature review of small and medium enterprises (SME) risk management practices in South Africa. *African Journal of Business Management*, 6(21): 6324-6330. <http://www.academicjournals.org/AJBM>



APPENDICES

Appendix I: Informed Consent Form

Dear Sir/Madam,

My name is Salim Mohamed, a student at Strathmore University pursuing, a degree in Master of Business Administration. I wish to conduct a research entitled **Perception of Small and Medium Enterprise Owners in Nairobi, Kenya on the Impact of Risk Management Practices on Financial Sustainability.**

You have been chosen to participate in this study by giving honest answers that will reflect your understanding of the subject. You are kindly requested not to indicate your name, physical address, phone number or any information that may lead to you for the sake of anonymity. Your participation is voluntary and you may skip any questions that you do not wish to answer. You may refuse to take part in the study or exit at any point that you may wish to.

Your identity and information will be kept confidential. You are free to decline to participate or withdraw when you do not feel comfortable. Upon your written consent to participate, the researcher will give you a 5-part questionnaire that should take about 20 minutes to complete. You have two weeks to fill the questionnaire until they are collected by the researcher. If you have any questions concerning the study, feel free to reach out to me through their email address: salim.mohamedc@yahoo.com

Consent to participate

“I understand my participation is voluntary and I am free to withdraw my participation at any time during the study without any consequence.”

Signature of participant _____	Date: _____
Signature of witness _____	Date: _____

Appendix II: Letter of Transmittal

Salim Mohamed

P.O Box 12321-00100

Nairobi

Dear Sir/ Madam,

Re: Data Collection

I am a student currently enrolled in the Master of Business Administration program at Strathmore University. For my research project, I am interested in investigating the perceptions of small and medium enterprise (SME) owners in Nairobi, Kenya, regarding the impact of risk management practices on financial sustainability. This topic holds significant relevance to SMEs since they play a crucial role in driving economic growth and development.

I am writing to request your organization's permission to collect data for this study. The data collection will be carried out through a structured questionnaire designed to capture relevant insights from SME owners. This research is solely for academic purposes, aimed at contributing to the existing body of knowledge in the field of business management.

Rest assured, all information provided will be treated with utmost confidentiality and in adherence to strict ethical standards. Participants' privacy and anonymity will be safeguarded throughout the research process. The findings of this study will be used solely for academic purposes and will not implicate any individual or organization involved.

Your approval to conduct this research within your organization would be immensely appreciated. Thank you for considering my request.

Yours faithfully,



Salim Mohamed

Appendix III: Research Questionnaire

I kindly request your participation in a questionnaire designed to gather insights on the perception of SME owners in Nairobi, Kenya on the impact of risk management practices on financial sustainability. Please carefully select the most appropriate response.

Section A: Demographic Information

1. Kindly indicate your gender

- Male
- Female

2. Kindly indicate your age bracket

- Below 30 years
- 31 to 40 years
- 41 - 50 years
- 51-60 years
- Over 60 years

3. Kindly indicate your highest level of education

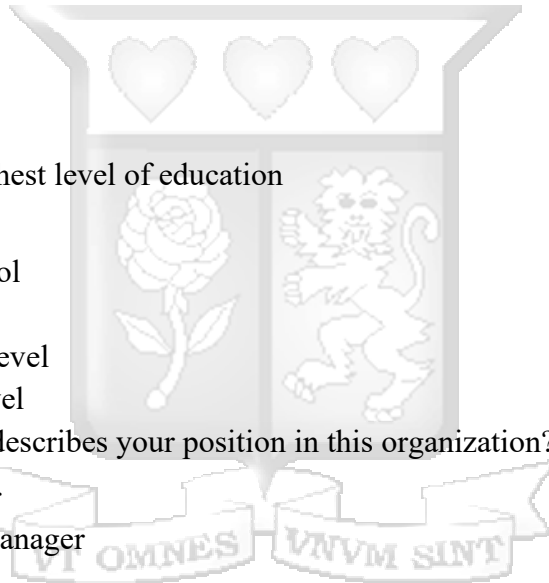
- Primary School
- Secondary School
- College level
- Undergraduate level
- Postgraduate level

4. Which designation best describes your position in this organization?

- Company owner
- Departmental Manager
- Employee
- All of the above
- Others (please specify)

5. Which of the following categories best describes your level of work experience?

- Novice (1-5 years)
- Intermediate (6-10 years)
- Mid-level (10-15 years)
- Senior level (15+ years)



Section B: Risk Identification Practices of Small and Medium Enterprises

6. The following statements are related to risk identification of SMEs in Kenya. Kindly indicate your agreement with each of the components.

Statement	1	2	3	4	5
The SME regularly conducts environmental scans or market research to identify external risks.					
The SME uses specialized risk management tools or software to identify potential risks.					
The firm maintains up-to-date repository of all identified risks.					
Employees are encouraged to report and identify risks through formal processes.					
Historical data and trends are analysed to identify emerging risks.					

Section C: Risk Assessment Practices of Small and Medium Enterprises

7. The following statements are related to risk assessment of SMEs in Kenya. Kindly indicate your agreement with each of the components.

Statements	1	2	3	4	5
The SME uses quantitative methods to assess the likelihood and impact of identified risks.					
Qualitative assessment techniques, such as expert judgment, are utilized in risk assessment.					
Risks are prioritized based on their potential impact on financial sustainability.					
Both internal and external factors are considered in the risk assessment process.					
The SMEs' risk assessment processes are regularly reviewed and updated.					

Section D: Risk Mitigation Practices of SMEs

8. The following statements are related to risk mitigation of SMEs in Kenya. Kindly indicate your agreement with each of the components.

Statements	1	2	3	4	5
The SME has specific risk mitigation strategies tailored to address identified risks.					
Contingency plans are in place to mitigate the impact of potential risks.					
Financial resources are allocated to implement risk mitigation measures.					
Risk management considerations are integrated into strategic planning processes.					
The SME collaborate with external stakeholders to mitigate certain risks.					

Section E: Risk Monitoring Practices and Sustainability of SMEs

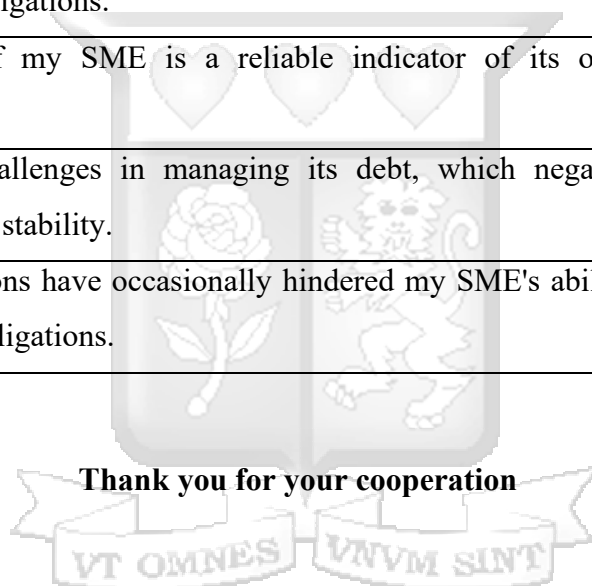
9. The following statements are related to risk assessment and financial sustainability of SMEs in Kenya. Kindly indicate your agreement with each of the components.

Statements	1	2	3	4	5
Key risk indicators (KRIs) are regularly tracked and reviewed.					
Clear roles and responsibilities are established for monitoring risks within the organization.					
The SME utilises technology-enabled systems for real-time risk monitoring.					
Periodic audits or evaluations of risk management processes and controls are conducted.					
Employees are encouraged to report changes in risk factors or emerging threats.					

Section F: Financial Sustainability of SMEs

10. To what extent has the following been enhanced in your SME as pertains to its overall financial sustainability of SMES in Nairobi County, Kenya.

Measures of Financial Sustainability	1	2	3	4	5
The profitability of my SME has consistently increased over the past few years.					
My SME effectively manages its debt obligations, resulting in a healthy financial position.					
Cash flow management practices in my SME ensure sufficient liquidity to meet financial obligations.					
The profitability of my SME is a reliable indicator of its overall financial health.					
My SME faces challenges in managing its debt, which negatively impacts its financial stability.					
Cash flow fluctuations have occasionally hindered my SME's ability to meet its financial obligations.					



Appendix IV: Ethical Approval



14th May 2024

Mr Mohamed Salim,
salim.mohamed@strathmore.edu

Dear Mr Mohamed,

RE: Perception of Small and Medium Enterprise Owners in Nairobi, Kenya on the Impact of Risk Management Practices on Financial Sustainability

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU-masters** research proposal. Your application reference number is **SU-ISERC2200/24**. The approval period is from **14th May 2024 to 13th May 2025**.

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 V: NACOSTI Licence


REPUBLIC OF KENYA


NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **499087** Date of Issue: **17/April/2024**


RESEARCH LICENSE




This is to Certify that Mr., SALIM MOHAMED of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: PERCEPTION OF SMALL AND MEDIUM ENTERPRISE OWNERS IN NAIROBI, KENYA ON THE IMPACT OF RISK MANAGEMENT PRACTICES ON FINANCIAL SUSTAINABILITY for the period ending : 17/April/2025.

License No: **NACOSTI/P/24/34622**

499087
Applicant Identification Number


Director General
NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION

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Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix VI: Criteria for Distribution

To distribute 394 questionnaires among the sub-counties of Nairobi County in a balanced manner, the questionnaires will be allocated to each sub-county based on its population size. This ensures that each sub-county receives a fair representation in the study. Population data obtained from the Kenya National Bureau of Statistics with reference to the 2019 census is as follows.

#	Sub-county Name	Population
1	Ruaraka	626,482
2	Kasarani	780,656
3	Mathare	206,564
4	Lang'ata	197,489
5	Embakasi	988,808
6	Dagoretti	434,208
7	Westlands	308,854
8	Kibra	185,777
9	Makadara	189,536
10	Kamukunji	268,276
11	Starehe	210,423
	Total	4,407,653

Source: KNBS (2019)

Note: Due to their proximity, three sub-counties have been combined. These include Embakasi East, Embakasi West, Embakasi North and Embakasi South (Embakasi); Dagoretti South and Dagoretti North (Dagoretti); and Kasarani and Roysambu (Kasarani).

To distribute the 394 questionnaires among the sub-counties of Nairobi County in a balanced manner, we will use proportional allocation based on the population.

Since the total population of all sub-counties is 4,407,653, we calculate the proportion of the population each sub-county represents:

Proportion of Population = Population of Sub-county / Total Population

Ruaraka = $626,482 / 4,407,653 \approx 0.142$

Kasarani: $780,656 / 4,407,653 \approx 0.177$

Mathare: $206,564 / 4,407,653 \approx 0.047$

Lang'ata: $197,489 / 4,407,653 \approx 0.045$

Embakasi: $988,808 / 4,407,653 \approx 0.224$

Dagoretti: $434,208 / 4,407,653 \approx 0.099$

Westlands: $308,854 / 4,407,653 \approx 0.070$

Kibra: $185,777 / 4,407,653 \approx 0.042$

Makadara: $189,536 / 4,407,653 \approx 0.043$

Kamukunji: $268,276 / 4,407,653 \approx 0.061$

Starehe: $210,423 / 4,407,653 \approx 0.048$

The no. of questionnaires will be allocated to each sub-county based on its proportion of the total population:

No. of questionnaires = Proportion of Population * Total Questionnaires

Ruaraka = $0.142 * 394 \approx 54.79 \approx 56$
 Kasarani: $0.177 * 394 \approx 67.49 \approx 68$
 Mathare: $0.047 * 394 \approx 18.05 \approx 19$
 Lang'ata: $0.045 * 394 \approx 17.28 \approx 18$
 Embakasi: $0.224 * 394 \approx 86.02 \approx 87$
 Dagoretti: $0.099 * 394 \approx 37.97 \approx 39$
 Westlands: $0.070 * 394 \approx 26.88 \approx 28$
 Kibra: $0.042 * 394 \approx 16.13 \approx 17$
 Makadara: $0.043 * 394 \approx 16.51 \approx 18$
 Kamukunji: $0.061 * 394 \approx 23.42 \approx 24$
 Starehe: $0.048 * 394 \approx 18.43 \approx 20$

After rounding, the no. of questionnaires to be distributed to each sub-county is as follows:

#	Sub-county Name	No. of questionnaires
1	Ruaraka	56
2	Kasarani	68
3	Mathare	19
4	Lang'ata	18
5	Embakasi	87
6	Dagoretti	39
7	Westlands	28
8	Kibra	17
9	Makadara	18
10	Kamukunji	24
11	Starehe	20
	Total	394

Appendix VII: Summary of Literature Reviewed

Table 2.1: Summary of Literature Reviewed

Author & Year of Publication	Country of Study	Theories Used	Measurement of Risk Management Practices	Research Methodology Used	Financial Performance Measure	Findings
Adeyele & Osemene (2018)	Nigeria	Theory of risk management	Standard deviation	Descriptive quantitative	Return on assets Share capital	Risk exposures and mitigation approaches influence SMEs sustainability
Crovini <i>et al.</i> (2021)	Switzerland	The Theory of the Growth of the Firm	Beta,	Descriptive quantitative	Return on assets Share capital	Risk management in entrepreneurial SMEs was found significant towards the integration with the decision-making process and sustainability of SMEs
Diabate <i>et al.</i> (2019)	China	Portfolio Theory	Regression model output	Descriptive quantitative	Return on assets Share capital	The impact of internal, external and enterprise risk management was significant
de Araújo Lima <i>et al.</i> (2020)	Ghana	theory of growth determinism	Conditional value at risk (CVaR)	Descriptive quantitative	Return on assets Share capital	A positive relationship between future directions and risk management
Florio & Leoni (2017)	Ghana	Theory of ability to pay, Theory of willingness to pay	Mean scores Regression model output	Descriptive qualitative	Share capital, customer base	Enterprise risk management positively influenced firm performance
Glowka <i>et al.</i> (2021)		Theory of planned behaviour	Standard deviation	Descriptive quantitative	Return on assets Share capital	Enterprise risk management entirely depends on the significant role of family involvement and CEO tenure
Hanggraeni <i>et al.</i> (2019)	Switzerland	Theory of risk management	Sharpe ratio	Descriptive quantitative	Share capital, customer base	Sustainable growth and risk management practices was highly correlated to the entrepreneurs' ability and entrepreneurial orientation
Hudáková <i>et al.</i> (2017)		Portfolio Theory	Mean scores Beta	Descriptive quantitative	Share capital, customer base	The market risk analysis methodology was found the best critical on

						sustainability of SMEs
Hudáková <i>et al.</i> (2019)	China	Theory of planned behaviour	Value at risk	Descriptive quantitative	Return on assets Share capital	Best risk management yielded better sustainability of small enterprises.
Linton & Kask (2017)	Tanzania	Theory of risk management	Sharpe ratio,	Descriptive quantitative	Return on assets Share capital	A positive significant relationship between risk management practices, entrepreneurial orientation and competitive strategy for high sustainability of SMEs
Magembe (2019)	Tanzania	Theory of risk management	Beta	Descriptive quantitative	Share capital, customer base	Several factors influenced the growth and the challenges SMEs face in Dar-es-salaam
Meidell and Kaarbøe (2017)	Britain,	classical decision theory	Regression model output	Descriptive quantitative	Return On Investment	Enterprise Risk Management Function positively Influences Decision-Making in the Organization Large, Global Oil and Gas Companies
Nanthuru <i>et al.</i> (2020)	Malawi	Portfolio Theory Theory of risk management	Mean scores Sharpe ratio	Descriptive quantitative	Share capital, customer base	Risk Management Practices of SME Taxpayers in Malawi and their Impact on Tax Compliance. Was found to be positive. Sustainability was affected negatively.
Gwangwava <i>et al.</i> (2019)	Nigeria	Portfolio Theory	Conditional value at risk	Descriptive quantitative	Profitability Dividends	Associated risks and performance sustainability benefits in SMEs.
Rehman & Anwar (2019)	China	Classical decision theory	R-square.	Descriptive quantitative	Accrued profits	A positive association between the mediating role of enterprise risk management practices and business strategy on SMEs sustainability
Kagwathi <i>et al.</i> (2020).	Kenya	Theory of risk management	Standard deviation,	Descriptive quantitative	Profitability Dividends	Risks faced and mitigation strategies employed by SMEs
Smit and	South Africa	Classical decision	Value at risk	Descriptive	Profitability	Risk Management Practices influenced

Watkins (2021)		theory		quantitative	Dividends	the life of the enterprises in South Africa.
Songling <i>et al.</i> (2018)	China	Theory of risk management	Standard deviation	Descriptive quantitative	ROI	A positive relationship was established between enterprise risk management practices and firm performance.
Brustbauer (2020)		Theory of risk management	Regression, t-test	Descriptive quantitative	Profitability Dividends	Risk management practices were significant towards business performance and sustainability of construction SMEs
Tanzania Invest Centre (2022)	Tanzania	Theory of risk management	Beta	Descriptive quantitative	ROA	Risk management was a key determinant towards sustainability of Tanzania's SMEs
Verbano and Turra (2021)	Italy	Classical decision theory	Value at risk	Descriptive quantitative	Profitability Dividends	There was a positive relationship between risk management practices influenced by human factor and reliability approach to risk evidences from Italian cases
Verbano & Venturini (2022)	Malawi	Theory of risk management	Conditional value at risk	Descriptive quantitative	Return on assets	Development Paths of Risk Management were highly dependent on the approaches, Methods and Fields of Application
Yakob <i>et al.</i> (2020)	South East Asia	Portfolio Theory & Classical decision theory	Standard deviation	Descriptive quantitative	Profitability Dividends	There was a positive effect of enterprise risk management practice on performance of SME