CORPORATE SUSTAINABILITY STRATEGIES AND PERFORMANCE OF MULTINATIONAL MANUFACTURING FIRMS IN KENYA

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SEPTEMBER, 2026

DECLARATION

This dissertation is my own work and has not been presented for examination in any other University.

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Declaration by Supervisors

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DEDICATION

I take this opportunity to appreciate and dedicate this work to the Almighty God for the gift of life, strength and ability. I dedicate this research dissertation to my children; Antonio Jamal, Asher Jayson and Arianna Jasmine for their unwavering support throughout this Journey. May God bless you abundantly.

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ABSTRACT

The manufacturing industry is important in the economic growth of Kenya, but multinational manufacturing corporations keep facing fluctuating performance, despite the increasing regulatory and stakeholder pressure to practice sustainability. Research on the influence of sustainability strategies on the performance of firms in Kenya is scarce in terms of empirical research. This study analyzed how corporate sustainability strategies influence the performance of multinational manufacturing companies in Kenya. In particular, identified the effect of the sustainability strategies of the environment, social, and governance sustainability strategies on the performance of firms. The general objective of the study was to assess how corporate sustainability strategies influence firm performance, while the specific objectives were to determine the effect of environmental sustainability strategies, examine the effect of social sustainability strategies, and assess the effect of governance sustainability strategies on firm performance. The study was based on triple bottom line theory, stakeholder theory, resource-based view theory, and legitimacy theory. The study adopted a quantitative cross-sectional explanatory design, which sampled 116 multinational manufacturing companies in Kenya. The collection of primary data was carried out with the help of structured questionnaires that were administered to the senior managers. Descriptive statistics and multiple regression analysis with the help of SPSS were used for data analysis. The results indicated that the three corporate strategies were found to be significant and positive to the performance of the multinational manufacturing companies in Kenya. Social sustainability was found to be the best predictor of the firm performance ($\beta = 0.386$, $p < 0.05$); environmental sustainability showed the highest coefficient ($\beta = 0.241$, $p<0.05$); and governance sustainability showed the highest coefficient ($\beta = 0.184$, $p<0.05$). The overall regression model was statistically significant and accounted for 63.1% of the variance in firms' performance ($R2 = .631$), suggesting that the three types of corporate strategies collectively had a significant impact on firms' performance. The study also concluded that all the null hypotheses were rejected, which means that the three strategies of environmental sustainability, social sustainability, and governance sustainability have a significant positive effect on individual firm performance. They found that corporate strategies are critical to the performance of the multinational manufacturing companies in Kenya. Social sustainability strategy and governance sustainability strategy were the next most influential factors affecting firm performance, followed by environmental sustainability strategy. The study reveals that corporate sustainability strategies have a significant impact on the performance of the companies, of which environmental sustainability is the strongest predictor, followed by social sustainability and governance sustainability. It suggests the reinforcement of energy efficiency, waste management, pollution control, employee welfare, occupational safety, community involvement, transparency, accountability, and ethical leadership. The Government of Kenya and other stakeholders should create enabling policies to encourage sustainable practices and good governance to improve the competitiveness, resilience and sustainability of multinationals manufacturing companies in Kenya.

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ABBREVIATIONS AND ACRONYMS

BETA:	Bottom-Up Economic Transformation Agenda
CFA:	Confirmatory Factor Analysis
CSR:	Corporate Social Responsibility
CSS:	Corporate Sustainability Strategies
FP:	Firm Performance
GDP:	Gross Domestic Product
ISO:	International Organization for Standardization
KNBS:	Kenya National Bureau of Statistics
MMFs:	Multinational Manufacturing Firms
NACOSTI:	National Commission for Science, Technology and Innovation
NEMA:	National Environment Management Authority
RBV:	Resource-Based View
SPSS:	Statistical Package for the Social Sciences
TBL:	Triple Bottom Line
VRIN:	Valuable, Rare, Inimitable, and Non-substitutable

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Multinational manufacturing firms (MMFs) are very significant in economic development and industrial growth, especially in developing economies like Kenya. These companies are also a major source of job creation, transfer of technology, inflow of capital, as well as the building of local supply chains, thus boosting the entire manufacturing industry. MMFs help bring modern management practices, innovation, and efficiency in the production systems that lead to productivity and competitiveness in the host countries through their global experience and highly developed production systems. Moreover, multinational manufacturers enable knowledge leakage and capacity building between local companies and employees to help local industries grow and enhance skills in the labour market (Ahmed, 2025). Thus, the presence of multinational manufacturing companies is frequently linked to better industrial performance, more exports, and more integration of the developing economies into global value chains (Ahmed, 2025).

The variables that were considered in this research on multinational manufacturing companies in Kenya are corporate sustainability strategies (CSS) and firm performance (FP). Corporate sustainability strategies can be described as incorporating the environmental, social, and economic aspects in corporate policies, operations, and the making of long-term decisions. Some of these strategies include efficient use of resources, environmental protection, ethical management of suppliers in the supply chain, and corporate social responsibility programs (Nnedu, 2025). Firm performance, in its turn, is the degree to which an organization performs according to its financial and strategic

missions and is typically measured by the means of profitability, productivity, market share, and operational efficiency. Researchers underline that sustainability-related strategies can help companies increase their competitive edge, strengthen their relationship with stakeholders, and enhance the sustainability of their organizations in the ever-competitive international markets (Chopra et al., 2024).

Global trade integration, industry expansion, and technical innovation are all significantly aided by multinational manufacturing enterprises (MMFs). Due to their extensive manufacturing networks spread across several continents, multinational corporations such as Toyota Motor Corporation, Siemens AG, and Unilever are able to access various markets and optimize their production efficiency (Zarkua et al., 2025). These businesses serve as the hub of global value chains since they outsource manufacturing to other nations and provide the host economies with cutting-edge technical systems, management expertise, and innovative opportunities (Zarkua et al., 2025). Through large-scale industrial operations and foreign direct investment, multinational manufacturing corporations promote productivity growth, improved competitiveness, and sustainable industrial transformation across the global economy (Ahmed, 2025).

The multinational manufacturing companies also play a huge role in industrialization and economic transformation of various regions of Africa. Several other corporations, like the Renault Group, have built giant automotive manufacturing plants in Morocco, cementing the automotive export business in North Africa. Nestle is a multinational company that has production plants in Ghana and Nigeria in West Africa, producing food and beverage products to supply them to the regional markets as well as developing agro-processing industries. In a similar manner, some businesses like Volkswagen Group have set up

manufacturing in South Africa, which promotes export-oriented manufacturing and employment (Outlook, 2022). Such multinational investments enable the development of regional value chains, transfer of skills, and enhancement of infrastructure; thus, enhancing the industrial capacity and economic integration of Africa (Ahmed, 2025).

In Kenya, multinational manufacturing companies work in a vibrant environment that is, however, demanding at the local level. The industry is known to be one of the major pillars of the Vision 2030 and the Bottom-Up Economic Transformation Agenda. With these strategic policy frameworks, manufacturing accounts for less than 10 percent of Kenya's GDP, with its performance being volatile and showing moderate growth (Njuguna & Juma, 2024). High energy prices, inadequate infrastructure, compliance costs, and stiff competition from imports persist. However, the operational efficiency and positioning of multinational manufacturers compared to local companies in Kenya are relatively better forbecause of having global capital, technologies, and well-organized governance systems. Sustainable practices in relation to the environment, including energy efficiency, waste, and pollution control, are becoming more and more popular to meet the requirements of such authorities as the National Environment Management Authority (NEMA) (Muigua, 2024). Such initiatives not only guarantee compliance, but also lower the cost of production, as well as improve performance levels. Another factor in the Kenya labour intensive manufacturing situation is social sustainability.

According to Aguinis & Glavas (2019), the well-being of the employees and their interaction with the community increases productivity and organizational image. Wanjiru & Kepha (2021) also note that firm performance in manufacturing firms based in Nairobi has a positive impact on environmental sustainability, but governance practices are usually

considered independently. The implementation of ESG practices is steadily growing, but the impact of ESG practices on the performance of multinational manufacturing in Kenya is a little explored area (Odha, 2024). The issues of policy uncertainty, fluctuating demand, and dependence on international supply chains remain a challenge for companies. Hence, it is important to comprehend how environmental, social, and governance sustainability strategies collectively contribute to performance to enhance competitiveness and sustain industrial growth in the long term in Kenya.

The study was motivated by the need to empirically examine how environmental, social, and governance (ESG) sustainability strategies influence the performance of multinational manufacturing companies in Kenya, particularly within a developing-country context where empirical evidence remains fragmented and limited. Although these studies have shown positive correlations between sustainability practices and the performance of firms in developed economies, most reports either separate each of the ESG dimensions or target developed markets, which is missing in emerging markets (Boso et al., 2020; Odha, 2024). Using an integrated ESG framework, this paper adds to both theory and practice by producing context-specific evidence that will be used in policy development, managerial decision-making, and sustainability-oriented strategic management. The results offer practical implications to regulators and corporate executives who want to make their companies more competitive, efficient in their operations, and profitable in the long run in the Kenyan manufacturing industry.

1.1.1 Firm Performance

The concept of firm performance has been extensively discussed within the literature of management and sustainability and is typically perceived as an encompassing concept of the quality with which an organization meets its goals. As Richard et al. (2019) define, firm performance is the effectiveness and efficiency of the use of resources to attain the required financial and operating deliverables of a firm. On the same note, Combs et al. (2020) refer to firm performance as the extent to which an organization achieves strategic, financial, and market-based goals compared to rivalry. A sustainable approach to the firm includes the ability of a company to provide economic returns without compromising its effectiveness and sustainability. These definitions, in sum, highlight efficiency, goal achievement, competitiveness, and sustainability as some of the primary components of firm performance. Based on these views, this study defines firm performance as the extent to which a multinational manufacturing organization is efficient and effective in meeting its financial and operational goals and is also being capable of maintaining competitiveness and long-term sustainability in its operating environment. Such a definition fits multinational manufacturing companies, which are at the capital-intensive environment where financial returns as well as operational efficiency are key to survival and development.

Organizational performance is one of the important indicators of the success, competitiveness, and sustainability of the organization. In the case of multinational manufacturing firms, the high performance enables the companies to invest back in technology, product development and capacity creation as well as in jobs and development of the host countries' economies (Taouab & Issor, 2019). Companies with high performance

are in a better position to absorb costs of environmental and social compliance, address regulatory pressures, and adapt to changes in the market environment (Taouab & Issor, 2019). On the other hand, low performance limits the flexibility in the strategy and discourages the capacity of firms to carry out sustainability initiatives successfully (Taouab & Issor, 2019).

To reflect the multidimensional nature of firm performance, empirical studies usually quantify firm performance via a mix of financial and non-financial indices. Financial measures (profitability and return on assets, ROA) indicate how a firm generates returns on invested capital, whereas non-financial measures (sales growth, market share, and operational efficiency) help assess the competitive position and effectiveness of internal processes (Gentry & Shen, 2021). Operational efficiency is especially applicable in manufacturing scenarios because of the focus on the efficient utilization of resources, cost management, and reliability of production.

To give a comprehensive view of firm performance, this study adopted only the non-financial performance measures. Market and operational performance are captured in terms of sales growth and operational efficiency. These steps combined are in line with the current body of sustainability and strategic management studies and are highly applicable in the Kenyan manufacturing environment, where there might not be access to audited financial information, and perceptual performance indicators would be the most suitable and valid substitutes.

1.1.2. Corporate Sustainability Strategies

Plans for Sustainability are increasingly part of the package of the long-term success of an organization, particularly in relation to environmental management, social responsibility, and good governance practices. According to Barreiro-Gen and Lozano (2020), sustainability strategy refers to the coherent incorporation of environmental and social provisions in the essential business procedures to create long-term value and reduce the adverse effects. On the same note, Bansal and Song (2017) define corporate sustainability as the capacity of companies to address current economic requirements without jeopardizing the planet's environment and social fairness, pointing to the equilibrium between profitability and accountability. Moreover, Aguinis and Glavas (2019) outline sustainability-oriented practices as strategic organizational behaviors that give rise to shared value to both an organization and its stakeholders. According to these perspectives, this study identifies sustainability strategies as organization policies and practices intelligently selected and interrelated to include the environment protection and social responsibility, and governance accountability issues in the main decision-making processes, thus enhancing the competitiveness, trust of the stakeholders, operational effectiveness and long-term performance of the firm (Aguinis & Glavas (2019).

Sustainability is no longer considered a moral obligation, but rather a strategy to become more competitive and resilient in a business decision-making process; this is why economic, environmental, and social components of sustainability are considered together and in a coordinated way (Barreiro-Gen & Lozano, 2020). Incorporating sustainable operations into the central processes, companies can pursue cost savings, enhance

relationships with stakeholders, and attain a competitive edge in the ever-changing markets of the world.

The issue of environmental sustainability is at the core of manufacturing companies because of the high consumption of resources and generation of waste in manufacturing. Energy consumption, emissions, waste minimization, etc. are necessary steps to fulfill the regulatory requirements, reduce the operational cost, and enhance the overall performance (Bansal & Song, 2019). Traditional environmental sustainability is considered to the measurement of energy consumption per unit of production, carbon emissions, water use, waste recycling, and environmental certification (Testa et al., 2021). These are the short-term effects on the environment of operations and the effectiveness of sustainability programmes. The selected measures in this study are resource efficiency and emission reduction, which are significant measures in terms of clarity, comparability, and feasibility for understanding the environmental performance of multinational manufacturing companies.

Social sustainability emphasizes the importance of human and community wellbeing in the activities of businesses. Promoting the welfare of the employees, safe working conditions, and positive interaction with the local communities help in productivity, trust, and social legitimacy (Aguinis & Glavas, 2019; Baumgartner and Rauter, 2019). The traditional indicators are employee satisfaction and retention, workplace accident rates, diversity and inclusion rates, community investment, and adherence to Labor standards. The study's main thrust is to include indicators that directly address the welfare of the workforce and the owner communities of firms so that the overall efficiency of the firm in terms of generating social value can be evaluated.

Good governance is key to incentivizing ethical decision-making, transparency, and increasing accountability, and demonstrates sustainability. Good governance systems help minimize the risk of corruption, mismanagement, and agency problems, and boost investor and other stakeholders' trust (Gerged et al., 2021). The most popular indicators are composition of the board, frequency and quality of disclosures, compliance with codes of ethics, the effectiveness of internal controls, and the results of audits (Gerged et al., 2021). This study does include the actions that demonstrate transparency, ethical behaviour, and accountability systems and provides a practical analysis of the actions that are taken in the multinational manufacturing cases studied.

These measures allow for a focus on the practical and vivid aspects of corporate sustainability in the environmental, social, and governance aspects (Barreiro-Gen & Lozano, 2020). The study adds to the theoretical reflection, and it brings practical implications to manufacturing companies that seek strategies to achieve sustainability in the context of the generation of long-term value and the resolution of current societal and environmental problems, associating these variables with the performance of the companies (Barreiro-Gen & Lozano, 2020).

1.1.3. Manufacturing Sector in Kenya

The manufacturing sector in Kenya has been developing as an industry over the decades, where the initial agro-processing and non-agricultural products constituted a more diversified structure of manufacturing industries in the post-independence period. Traditionally, the industry was characterized by small and medium-sized businesses with little penetration into regional and global value chains. Over time, there was an increase in larger formal companies and informal businesses, in accordance with improvements in

technology and growing market opportunities both locally and in exports. Though this growth has been observed, the sector's contribution to the national economy has continued to improve over the years. The tourism sector contributed approximately 10.4% of Kenya's GDP in 2022, recovering strongly after the COVID-19 slowdown. In 2023, the contribution was estimated at 8.4%, while recent government reports indicate that the sector contributed about 7% of GDP in 2024 and is projected to approach 10% by 2025/2026 due to increased international arrivals and tourism earnings (Njuguna & Juma, 2024). Both competitiveness and export diversification may be difficult in the industry due to the dominance of subsectors that are food processing, beverages and tobacco, refined petroleum products, and textiles, both in potential and practice (Njuguna & Juma, 2024).

Policies, laws, and regulatory bodies are combined with each other to create the operating environment within the sector to encourage industry development, quality standards, and sustainable practices. The Kenya Vision 2030 framework, which includes the vision of the globally competitive manufacturing sector, the Industrial and Enterprises Act that regulates business activity, and the sector-specific guidelines provided by such organizations as the Kenya Association of Manufacturers (KAM) and Kenya Bureau of Standards (KEBS) are the key instruments (Wanyonyi, 2023). Labor practices are dictated by the Employment Act and the occupational safety regulations, and environmental management in manufacturing is determined by the Environmental Management and Coordination Act. All these frameworks aim to balance growth the with environmental protection, social welfare, and compliance with the regulations, which establishes a situation where sustainability practices are not only promoted but also become a need to achieve long-term operational success.

In this context, the research variables, which are environmental, social, and governance sustainability, are very applicable. The sustainability of the environment is imperative, as the sector has a high energy, waste, and emission rate, only to note that efficient deployment of resources and control of pollution should be put in place. Social sustainability is also relevant because the welfare of employees, safety in the workplace, and involvement in the community directly affect productivity, societal acceptance, and adherence to Labor laws. The adoption of ethical business practices, accountability, and transparency is based on the sustainability of good governance, which ensures that risks are reduced due to corruption, mismanagement, and non-compliance with regulations (Muigua, 2022). Irrespective of these urgencies, there are indications of an imbalanced adoption of sustainability practices by Kenyan manufacturing, and the SMEs and informal enterprises are frequently left trailing behind formal companies in adopting well-organized ESG policies.

The need for this research is explained by the historical development, the regulatory framework, and the problems that are specific to the variables. The research adds to the understanding of the adoption of sustainability in a developing economy setting, as it will focus on the ways in which multinational manufacturing companies in Kenya have incorporated environmental, social, and governance considerations in their activities. The findings will be used in policy, best practice in the industry, and to give practical advice to firms that need to improve their competitiveness without compromising the expectations of the society and the environment. The study, therefore, bridges the gaps in theory and practical issues as a timely study on sustainable growth in the industrial sector in Kenya.

1.2. Statement of the Problem

The manufacturing sector is key in the economic development agenda because of its employment generation, industrial growth, value addition, export promotion, and technological advancement. The sector has been identified in the national development blueprint - Kenya Vision 2030 and the Bottom-Up Economic Transformation Agenda (BETA), which highlight industrialization and sustainable production as the pillars of economic transformation in Kenya. Ideally, a manufacturing multinational is supposed to be efficient, competitive, sustainable, and be a major contributor to the country's Gross Domestic Product (GDP) and long-term economic sustainability.

In the face of these policy initiatives and expectations, the manufacturing sector in Kenya has not performed as expected. The sector accounted for about 10.5% of Kenya's GDP in 2024, which is a relatively low growth rate and level of competitiveness compared to other emerging economies (Njuguna & Juma, 2024). The Kenyan environment remains challenging for manufacturing multinationals due to some issues, including the availability of a qualified workforce, high production costs, lack of infrastructure, and tough environmental laws. These issues have impacted their productivity, profitability, operational efficiency, and sustainability.

To solve these issues, a growing number of organisations around the world have started implementing Environmental, Social and Governance (ESG) as their strategic ways of enhancing the performance and sustainability of their organisations. Some of the advantages of ESG practices are resource utilization, stakeholder relationships, corporate reputation, and competitiveness (Muigua, 2022). But the connection between ESG practices and firm performance is not yet clear from the empirical studies. Research

indicates that there is a connection between good ESG practices and organizational performance, and some research highlights that the costs of sustainability practices may have a negative impact on organizational economics and/or performance.

Moreover, most of the existing literature about the link between ESG and firm performance in Kenya has been restricted to mostly Nairobi City County firms and neglected to consider the multinationals operating in the other Industrial areas of the country. This brings about an empirical gap and a contextual gap in the impact of ESG practices on the performance of MNCs in the manufacturing sector in Kenya. If this is not solved, manufacturers could struggle to create effective sustainability strategies that improve competitiveness, profitability, and long-term organizational performance. In addition, policymakers can still create industrial and sustainability policies without sufficient empirical evidence of how effective ESG practices are in the manufacturing industry.

Hence this study aimed in looking at how the environmental, social and governance practices affect the performance of multinational manufacturing companies in Kenya. The study will be a valuable addition to the existing body of academic literature that has lacked managerial and policy relevance in addressing existing contextual and empirical gaps, and will give managers and policymakers practical insights on the use of sustainable business practices for enhancing organizational performance and competitiveness.

1.3. Objectives of the Study

1.3.1. General Objective

To examine the effect of corporate sustainability strategies on the performance of multinational manufacturing firms in Kenya.

1.3.2. Specific Objectives

i. To determine the effect of environmental sustainability strategies on the performance of multinational manufacturing firms in Kenya.

ii. To examine the effect of social sustainability strategies on the performance of multinational manufacturing firms in Kenya.

iii. To assess the effect of governance sustainability strategies on the performance of multinational manufacturing firms in Kenya.

1.4 Research Hypothesis

$H_0$1: Environmental sustainability strategies have no significant effect on the performance of multinational manufacturing firms in Kenya.

$H_0$2: Social sustainability strategies have no significant effect on the performance of multinational manufacturing firms in Kenya.

$H_0$3: Governance sustainability strategies have no significant effect on the performance of multinational manufacturing firms in Kenya.

1.5 Significance of the Study

This study was relevant to theory as it brought together a study of corporate sustainability strategies (environmental, social, and governance (ESG) and how their combination affects the performance of multinational manufacturing companies. The study fills the conceptual gaps in the understanding of the transformation of the sustainability strategy into quantifiable performance results, especially in the context of developing countries, by going beyond disaggregated analysis of every single dimension of sustainability. The study shows how ESG practices can be used strategically to build competitive advantage, operate more efficiently, and create value in the long run for manufacturing companies.

At the policy level, the study results will help government institutions and regulators concerning industrial development and environmental governance. In particular, the results will help the Kenya Association of Manufacturers to advocate for sustainable manufacturing in its member companies. The study will also be a useful input to the National Environment Management Authority and Ministry of Investments, Trade and Industry for policy formulation and regulatory measures on promoting environmental protection, ethical governance and social responsibility in the manufacturing industry. Furthermore, evidence-based recommendations to county governments and county policymakers regarding how to enhance the competitiveness and sustainable economic growth for industries will be offered.

The study offers, in practice, practical guidance to managers and practitioners for aligning the sustainability strategies with the capacity of the internal organisational resources and external regulatory requirements. Through the incorporation of ESG principles in overall operations, multinational manufacturing companies to enhance efficiency, improve stakeholder relationships, improve market positioning, and achieve sustainable long-term growth.

1.6. Scope of the Study

The period of this study is the current operational lifespan of the Multi-National Manufacturing Companies in Kenya and their current sustainability practices and sustainability performance outcomes of the last financial years to this research. It reflects the state of the art of the environmental, social, and governance (ESG) sustainability strategies adopted by a firm and their impact on the firm's performance today. The study

takes a present-day perspective to capture the dynamics of the regulations and markets, as well as the sustainability aspirations in the manufacturing operations in Kenya.

The methodology of the study was a quantitative approach with a cross-sectional explanatory research methodology. The target population is a population of 116 registered multinational manufacturing companies in Kenya in the major industrial sectors that include food and beverage, pharmaceuticals, textile and electronic industries. Senior managers and operations managers are part of the unit of analysis, as they are directly involved with strategy formulation and implementation. Primary data collection will be done using structured questionnaires; the questionnaires will be administered through both physical and online survey for covering a wider area and get credible answers.

The study covers corporate sustainability strategies, environmental sustainability (quantified by such indicators as energy efficiency, waste management, and pollution control), social sustainability (quantified by such indicators as employee welfare, occupational health and safety, and community engagement), and governance sustainability (quantified by indicators like transparency, accountability, and ethical leadership). The non-financial aspects of assessing firm performance will include changes in sales, efficiency of operations, customer retention and employee productivity. An integrated set of these indicators will provide a comprehensive picture of how well the organizations are doing with respect to the sustainability strategies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter summarizes the literature (both theoretical and empirical) from developed and developing countries. The review provides a conceptual and theoretical foundation for the study by examining theories in the literature that explain the factors influencing the adoption of corporate sustainability strategies and their impact on organizational performance. The chapter also provides a literature review of the variables used in the study and their relevance, providing a state of the art based on evidence from global, regional, and local studies. The empirical review considers the findings, methods, and conclusions of previous research, along with gaps in previous research, inconsistencies, and contextual limitations that require the need for the present research. The chapter also summarizes the literature reviewed, with the major gaps highlighted, which the current study aims to fill. Lastly, a framework is given which demonstrates the presumed relationship between corporate sustainability strategy and the performance of manufacturing multinational firms in Kenya, clearly outlining variables of the study and the assumed relationship between the variables.

2.2 Theoretical Review

The research was based on the triple bottom line theory, which offers a strong conceptual framework of corporate sustainability practice in terms of environmental, social, and economic fronts. The anchoring theory is supported by stakeholder theory and legitimacy theory.

2.2.1 Tripple Bottom Line Theory

The theory that underpins this study is the triple bottom line (TBL) theory that was created by (Elkington & Rowlands,1999). According to the theory, the three inter-relational dimensions should be used in determining the success of organizations and their sustainability in the long term: economic performance (profit), environmental responsibility (planet), and social responsibility (people). However, as opposed to the traditional models of performance, which concentrate only on the financial results, the TBL theory puts forward the concept of a holistic approach whereby firms generate value through balancing economic growth and environmental protection as well as social well-being.

The applicability of the triple bottom line theory to the study is the fact that it is directly related to the independent variables of this study, which are environmental sustainability strategies, social sustainability strategies, and governance sustainability strategies, and the dependent variable of firm performance. Energy efficiency, waste reduction, and control of pollution are some of the environmental sustainability plans that increase overall efficiency of operations and cut down on the long-term expenses (Basuony et al., 2023). Plans of social sustainability such as employee welfare, safety at work, and involvement with the community enhance productivity, commitment of the employees, and corporate reputation. The sustainability governance strategies of transparency, accountability, ethical leadership, and board effectiveness enhance strategic decision-making and minimize agency problems, which result in better performance of an organization (Basuony et al., 2023).

Applying the TBL theory to the context of multinational manufacturing companies, this theory explains why companies that consider sustainability as the main part of their strategic approaches have better performance. The environment of manufacturing firms is resource-intensive, and they face growing environmental regulations and scrutiny by stakeholders. Companies that maintain profitability and, at the same time, have responsible environmental and social practices are in a better position to control risks, meet regulations, and remain competitive in the long run. As a result, TBL theory offers an all-inclusive model for explaining the impact of corporate sustainability strategies on financial and non-financial performance outcomes (Gallardo-Vázquez, 2025).

The triple bottom line (TBL) theory has been refined over the years as a result of academic discussions and research. As researchers have been trying to enhance the conceptual framework and the usefulness of the TBL theory in corporate sustainability evaluation, it has continued to be developed. Others, like Markus and Gray (2013), reiterated that organisations should go beyond symbolism in their sustainability reporting and embed the economic, environmental, and social aspects within their business processes. Likewise, Visser (2014) emphasized that contemporary sustainability approaches are based on the triple bottom line and are increasingly linked to other corporate responsibility and governance frameworks to enhance accountability and long-term value creation. Empirical research has also included TBL in Environmental, Social and Governance (ESG) performance measurement systems and integrated reporting, allowing firms to better measure sustainability outcomes and harmonize them with strategy. The refinements signify the progress of the theory from the concept of a sustainability philosophy to a practical tool that organizations utilize to assess sustainable performance, enhance

transparency, and meet the growing demand from stakeholders in today's business landscape. Although it is generally accepted, the Triple Bottom Line Theory has been condemned by the fact that it is difficult to measure, and it is also prone to trade-offs among its three facets. Nevertheless, its comprehensive vision renders it as the best anchoring theory to be used to understand sustainability-driven performance in manufacturing companies, especially in new economies like Kenya.

2.2.2 Stakeholder Theory

The stakeholder theory, as formulated by Freeman (1984), suggests that organizations are in a set of relations with a set of stakeholders, such as employees, customers, suppliers, communities, regulators, and shareholders. Based on the theory, companies with successful stakeholder relationship are more likely to achieve legitimacy, trust, and long-term performance (Juráček et al., 2025).

This theory is very applicable because the stakeholders' expectations have an important impact on the strategies that are formulated to achieve sustainability of the company. Environmental sustainability measures deal with regulators and communities' issues and concerns; social sustainability strategies deal with employee and community welfare issues; and governance sustainability practices deal with investor confidence and regulatory compliance. The firms with aligned business practice and interest of their stakeholders gained good reputation and customer loyalty, as well as employees' commitment which resulted into better firm performance (Khamisu et al., 2024).

R. Edward Freeman's stakeholder theory has evolved, becoming a more comprehensive strategy and an empirical concept that allows modern-day business studies to be grounded in this theory. The first theory was based on the idea that firms to consider the interests of various stakeholders, apart from the shareholders, while making decisions. Over time, the theory was expanded to instrumental and managerial perspectives, and researchers demonstrated that there were benefits to involving stakeholders in an effective way that would improve the organization's innovation and sustainability. More recent studies have added stakeholder theory to the concept of corporate sustainability, environmental governance, and social responsibility, and how firms can create shared value by striking the right balance between economic aspirations and both social and environmental accountabilities. The theory is currently frequently used in the context of the contemporary literature to describe the way companies create legitimacy, improve reputation, and gain competitive advantage by proactively operating with stakeholders, especially in multinational organizations and sustainability-driven businesses (Awa et al., 2024; Khamisu et al., 2024.

The stakeholder theory, therefore, also explains why multinational manufacturing companies that engage with stakeholders and initiate sustainability efforts are more successful at realizing positive performance results. The theory has, however, been faulted on account of its normative orientation and absence of clarity on priorities of competing stakeholder interests. Despite these shortcomings, it is still a critical paradigm for figuring out sustainability-oriented firm performance (Awa et al., 2024).

2.2.3 Legitimacy Theory

Like organizations that are always trying to operate within the boundaries and rules of their societies, legitimacy theory was developed by Suchman (1995). The theory argues that once the socially created systems of norms, values, beliefs, and definitions are established, a firm is deemed to be legitimate as the firm is perceived to behave in a way deemed to be desirable, proper, and appropriate. The survival and performance of organizations then depend on the extent of acceptance that a company gets from society.

In the context of corporate sustainability, it is important to see how legitimacy theory applies to this situation, that is, the reasons why companies are adopting CS strategies to meet the expectations and the pressure of society. Manufacturing companies are also associated with the pollution of environment, labor hazards and governance problems, and so on can be seen by the masses, regulatory bodies and society as well (Buallay, 2019). To be kept legitimate, these companies implement sustainability practices such as environmental protection programs, employee welfare programs, ethical governance systems, and transparency in reporting.

Over the years, the concept of Legitimacy Theory has evolved from being a basic sociological explanation of the lifespan of organizations into a full-fledged model, which can be used to explain corporate accountability and sustainability practices. Early research concentrated largely on how organizations are trying to gain recognition in society by taking their activities in conformity with existing social expectations and standards. The following studies expanded the theory to include the dynamic and strategic nature of legitimacy and how firms actively manage the perception of the people through disclosure, sustainability reporting, corporate social responsibility (CSR), and environmental

governance. Along with legitimacy theory, other theories such as stakeholder and institutional theories were also used by scholars to understand how organizations are responding to the increasing demands for transparency, ethics, and sustainability. The theory of legitimacy has become popular in contemporary research to explain how businesses are able to stay socially acceptable and competitive with the use of sustainability programs, especially in multinationals in areas with a high level of environmental sensitivity/development (Buallay, 2019).

The theory of legitimacy seems especially useful for the study in the context of firm performance on the basis of social acceptance and reputation with regard to the sustainability strategies. Companies with socially and environmentally responsible images have higher chances of having community support, goodwill in the regulating bodies, customer loyalty, and less confrontation with stakeholders. These advantages are translated to the enhanced operational stability, access to markets, and financial performance. Conversely, if these companies fail to perform as expected by society, they will face negative consequences such as damage to their image, regulation, and market shares, which in turn would lead to poor performance (Bitektine & Haack, 2015).

It is vital to maintain a degree of legitimacy in Africa, where the economy is developing for multinational manufacturing companies working in sensitive social and environmental environments, such as Kenya. Important sustainability strategies are then the means by which companies coordinate their activities with the values and expectations of society in such a way that they can be supplied with resources, markets, and institutional support to maintain their viability. The legitimacy theory is thus linked with the institutional and

stakeholder theories, as it emphasizes the social aspect of sustainability and how it affects firm performance (Buallay, 2019).

2.2.4 Resource Based View (RBV) Theory

The Resource-Based View (RBV) Theory was put forward by Jay Barney (1991), and it focuses on how companies gain competitive advantage as a result of the effective use of resources and capabilities within the companies. It is hypothesized that not all resources lead to the success of a firm; only valuable, rare, inimitable, and non-substitutable (VRIN) resources can be used to create sustained high performance (Zvarimwa & Zimuto, 2022). Conventional practices emphasize external orientation towards the market, while RBV emphasizes the internal orientation towards the strengths of the organization as the basis for competitiveness and sustainable performance. Applied to corporate sustainability, RBV offers a solid theoretical basis to comprehend how the environmental, social, and governance (ESG) strategic initiatives may be turned into strategic capabilities. Energy efficiency, Waste reduction, and Pollution control are all environmental sustainability measures that help cut down costs, boost efficiency, and drive value to the business. The social sustainability strategies like welfare of employees, safety in the workplace, community involvement, and so on will increase the human capital, commitment of the employee, and reputation of the organization. A few practices of sustainability in governance that boost institutional trust, reduce agency costs, and improve decision-making processes are transparency, accountability, and ethical leadership. If these sustainability practices can be effectively integrated into the core business of the company,

they become part of the organization's intrinsic processes and are difficult to replicate by competitors (Zvarimwa & Zimuto, 2022).

This study employs RBV because it can be utilized to understand how sustainability strategies can be utilized as an internal resource to enhance the performance of the firm in the context of MMC in Kenya. Companies that take the initiative to undertake sustainability initiatives not only comply with the regulatory requirements, but they also acquire unique skills to improve effectiveness, creativity, and responsiveness in a changing and dynamic business environment. As an example, resource wastage in production systems can be minimized by using environmentally efficient systems, whereas productivity of the workforce and the relationship with stakeholders can be enhanced by socially responsible practices. Correspondingly, robust systems of governance boost strategic fit and stability within the organization (Murimi et al., 2019). All these capabilities result in improved non-financial outcomes such as customer retention, better operational efficiency, and employee productivity. The concept of RBV has, over the years, undergone a transformation to take into consideration dynamic capabilities, with focus on the capacity of a firm to continuously adjust, integrate and redesign internal resources in reaction to varying environmental conditions. The evolution applies specifically in the context of sustainability studies, where companies have to react to the changing regulatory framework, technological progress, and expectations of stakeholders.

Empirical studies have increasingly associated sustainability practices with firm-specific abilities that can help achieve long-term competitive advantage, and thus offered support for the applicability of RBV in explaining relationships between sustainability practices and performance. Although it has strong points, RBV has been criticized because it pays

little attention to the external environmental factors and institutional pressures, which also play a role in determining organizational strategies. However, alongside other theories such as the stakeholder theory and legitimacy theory, RBV can help to develop an understanding of the role of the firm's internal resources and the expectations of the external environment in affecting the firm's performance (Kero & Bogale, 2023). The resource-based view theory can therefore be summarized as a new concept added to the three theories (triple bottom line, stakeholder and legitimacy) that explains how corporate sustainability strategies work as strategic resources that can help improve the performance and competitiveness of multinationals in manufacturing in Kenya.

2.3 Summary of Theoretical Literature

The combination of the theories reviewed explains the relationship of the variables of the study. The triple bottom line theory is a connected theory that integrates the environmental, social, and governance sustainability strategies with the performance of companies. The stakeholder theory is a concept that explains the need for an organization to be responsive to the needs of significant stakeholder groups to foster organizational legitimacy, trust and performance outcomes. The legitimacy theory also notes the importance of "accepting" society in which firms are "on track" with the social norms and expectations, thereby aiding in the survival of access to resources and improved performance, through the adoption of sustainability practices. Moreover, the Resource-Based View (RBV) Theory enhances the theoretical base of the work as it clarifies how corporate sustainability strategies could be used as internal strategic resources and capabilities that lead to competitive advantage and enhanced firm performance. According to RBV, companies can achieve best performance when they employ valuable, rare, inimitable, and non-substitutable resources, such as

sustainability-oriented resources, which are made up of environmental, social, and governance practices. Combined, these theories support the incorporative conceptual approach that will be taken in the present study.

Table 1: *Summary of Theoretical Literature*

Theory	Author (s) and Year	Key Postulations	Variables Supported
Triple Bottom Line Theory	(Elkington & Rowlands, 1999)	Firm performance is achieved through the balanced integration of environmental, social, and governance sustainability alongside economic objectives	Corporate Sustainability Strategies and Firm Performance
Stakeholder Theory	(Freeman,1984)	Stakeholder management enhances performance	Corporate Sustainability Strategies and Firm Performance
Legitimacy Theory	(Suchman ,1995)	Organizations adopt sustainability practices to align with societal norms and expectations to secure legitimacy and improve performance	Corporate Sustainability Strategies and Firm Performance
Resource-Based View (RBV) Theory	(Barney, 1991)	Firms achieve sustained competitive advantage by utilizing valuable, rare, inimitable, and non-substitutable (VRIN) resources and capabilities, including sustainability strategies	Corporate Sustainability Strategies and Firm Performance

Note: Researcher, 2025

2.4 Empirical Literature Review

The available empirical evidence in the last few years has been summarized in this section, which examines the relationship between corporate sustainability and firm performance. Specifically, the review will focus on three areas of corporate sustainability: eco-sustainability, social sustainability, and governance sustainability, and the interaction of the three on the performance of the organization in different contexts. The literature review is

based on empirical studies conducted on a global, regional and local level over the past five years to ensure that the discussion is based on current developments, trends and modern business practice. Studies have been organised thematically, according to the independent variables of the study, so that it is possible to make a systematic comparison of the results, research methods and theories used in previous studies. In addition, the review critically evaluates the strengths and weaknesses of the body of literature that currently exists, as well as any methodological gaps, knowledge gaps and contextual gaps that are not filled. The gaps identified are in turn the basis for the current research and for developing the field of firm performance and corporate sustainability strategy.

2.4.1 Environmental Sustainability Strategies and Firm Performance

Mensah and Adams (2024) examined the effect of environmental sustainability on firm performance in manufacturing in the emerging economies of the world in their study. The research question was about the relevance of energy efficiency, waste management, and pollution control practices to the improvement of financial and non-financial performance. The environmental management system adoption index and environmental emissions reduction index were used to evaluate environmental sustainability, while the profitability, growth in sales, and operations efficiency indexes were used to evaluate the firm's sustainability. The study revealed that environmental sustainability strategies and firm performance are highly correlated based on the survey data of 298 manufacturing companies and structural equation modelling. However, the article was written as a cross-country study, which lacked a range of context-specifics and did not concern practices relating to governance.

Boateng et al. (2023) also investigated the performance and environmental sustainability efforts of manufacturing companies in Ghana at the regional level. Regulations and eco-efficiency programs were used as an indicator of environmental sustainability and returns on assets and productivity as a measure of firm performance were used as a measure for the research. A cross-sectional survey design and regression analysis yielded the results that firms with good environmental performance reported better performance. However, only financial performance indicators were analyzed, and the aspects of governance and social sustainability were not analyzed.

To explore the relationship between environmental sustainability practices and good performance of manufacturing companies in China, Zhang et al. (2024) conducted a study. The two financial and two operational measures of firm performance included in the study were used to measure environmental sustainability, with the primary indicators of green innovation, energy efficiency, and waste reduction. The findings show that the environmental practices of sustainability have a significant contribution to the performance of the firm, whether in efficiency or cost of production; this is found through regression analysis and the use of panel data. However, the emphasis of the research was on large companies in a well-developed manufacturing environment, which could only be extrapolated to a developing economy such as Kenya.

Nogueira et al. (2023) conducted a meta-regression that pooled the empirical evidence from several studies on environmental sustainability actions and firm performance. The analysis showed that there is a positive correlation between environmental sustainability strategies and some of the results of performance, including market performance, operational efficiency, and reputation of the business. It means that in addition to the legal

requirements, environmental efforts such as resource conservation, emission reduction, and waste management can be implemented with benefits that are not monetary, thus reinforcing the business argument for integration of sustainability in manufacturing companies.

The research conducted in emerging markets also revealed a mediation effect between the strategic orientations and the firm performance by environmental sustainability practices. Amongst others, the use of energy efficiently, avoidance of unnecessary waste, and the use of green technologies can enable companies to turn their vision into better operational performance and competitiveness (Al-Bekele et al., 2026). In conclusion, the finding is a reminder of the significance of environmental sustainability as a performance driver and a means for manufacturing companies in emerging economies.

Eco-innovative practices also have been shown to be an important driver of firm performance. Eco-innovation (process, product and/or organizational innovations which contribute to a reduction in environmental impact) has a positive impact on economic and competitive performance, particularly in more fluctuating markets. In enterprises, eco-innovations can enhance operational efficiency and market positioning because environmental sustainability is one of the long-term business factors that need to be maintained for enterprises' competitiveness (Larbi-Siaw et al., 2022).

Alheet (2019) studied the relationship between environmental sustainability practices and performance indicators in the manufacturing sector in Jordan, where it was found that the positive relationship between environmental sustainability practices (e.g., emissions reduction and resource conservation) and performance indicators (e.g., customer retention)

also holds. The results indicate that the programs of environmental sustainability are important for business performance in developed as well as in developing countries, and they are useful not only to improve the corporate image, but also to increase profitability and access to the market.

Likewise, Ogbo et al. (2020) studied the effect of environmental management practices on the performance of manufacturing firms in Nigeria. Environmental sustainability was assessed in terms of pollution control, resource efficiency, and environmental compliance, and firm performance in terms of productivity and market growth. It was a cross-sectional survey study with a regression analysis, and the findings showed that there was a positive and significant correlation between environmental sustainability and the performance of the firms. However, the research did not contain the governance and social sustainability aspects, which is a gap in the research that the present research fills.

Wanjiru and Kepha (2021) in their study sought to establish the effect of environmental sustainability practices on the performance of manufacturing companies in Nairobi County of Kenya. The operationalization of environmental sustainability was in terms of waste recycling, energy conservation, and environmental compliance, and performance was operationalized in terms of profitability and market share. Through a descriptive survey design and regression analysis, the research found a positive significant association between environmental sustainability and firms' performance. The researcher was constrained by the small geographical area covered and the omission of governance sustainability practices.

2.4.2 Social Sustainability Strategies and Firm Performance

Zhaolei et al. (2023), on the international level, examined the connection between social sustainability strategies and performance in manufacturing companies in Asia. The study sought to establish whether there exists any relationship between employee welfare, occupational safety, and community involvement and firm performance. Employee training intensity, health and safety and compliance, and corporate social responsibility indexes were used to measure social sustainability, and financial and reputational indices were used to measure firm performance. The researcher was able to obtain the survey data as well as the partial least squares (PLS) structural equation modelling results that confirmed that the social sustainability strategies were, in fact, significantly and positively affecting firm performance. The model, however, did not include governance sustainability.

Oladipupo and Kelvin (2022) conducted a study regarding social sustainability practices and the performance of manufacturing companies in Nigeria. The paper used social sustainability as labor practices, worker engagement, and corporate investment, and operational efficiency and returns on assets as a measure of performance. The results obtained through the cross-sectional survey and regression analysis indicate that there is a strong positive relationship between social sustainability and firm performance. Environmental sustainability policies and situational regulatory factors have not been covered in the article.

Le (2024) conducted a detailed study on the measures of social sustainability that manufacturing companies in Southeast Asian countries are taking, including improving labour rights, employee involvement programs, and community development projects. The research used a mixed-methods approach and revealed that companies with high social

sustainability scores had a higher rate of employee motivation, reduced attrition, and enhanced brand reputation. Importantly, the study showed that the reasons for the relationships were stronger in the companies with a social sustainability policy, suggesting that the strategic institutionalization of social practices increases the relationship with the firm's performance.

Rong (2025) finished another research project that explored social sustainability in European manufacturing organisations on the three dimensions of equality at the workplace, employee engagement, and corporate philanthropy. The study was based on longitudinal panel data and revealed that companies with well-developed social sustainability frameworks achieved better productivity performance and market share compared to their peers. By contrast, many cross-sectional studies only provided evidence of immediate performance gains, and therefore social sustainability strategies are only associated with immediate performance impact rather than with long-term strategic benefits.

Duong (2023) conducted a meta-analysis review to examine the findings of several empirical studies around the world about social sustainability practices in the manufacturing sector. The review recommended that social sustainability positively impacts the financial and non-financial KPI's, such as operational efficiency, reputation, and employees' satisfaction. Another insight from the analysis was that contextual factors act as a buffer to these links, such as industry competition and regulatory support. This indicates the importance of considering the contextual elements of assessing social sustainability impacts on firm outcomes.

Kim and Park (2021) studied the effect of social sustainability practices on the performance of manufacturing companies in Korea. The researcher used employee welfare, on-the-job safety, and corporate social responsibility programs as indicators of social sustainability, and the performance of the firms in terms of productivity and organizational reputation as indicators of firm performance. The conclusions obtained from the results are that social sustainability practices have a positive effect on the performance of companies in improving employee satisfaction and organizational commitment using the technique of structural equation modeling. But, sustainability practices in the environment and governance have not been incorporated in research.

Dzage et al. (2024) studied manufacturing firms in Ghana in terms of social sustainability practices and firm performance. Operationalization of social sustainability in the study has been in terms of labour practices, employee engagement, and community involvement, whereas firm performance has been operationalized in terms of operational efficiency and customer satisfaction. The outcomes of the survey data and regression analysis showed that there was a very strong positive correlation between social sustainability and the performance of the firm. Nonetheless, the research was on SMEs and could not be generalized to multinational manufacturing companies.

In Kenya, Njoroge (2025) conducted a study to check the impact of social sustainability on the performance of manufacturing companies. The research design was descriptive; the measurement of social sustainability was carried out with the welfare scheme and safety levels of the workplace, while the measurement of the performance of the firm was done based on its profitability and the productivity of its employees. The results showed that companies with high social sustainability performance were those that have practiced high

social sustainability performance. However, the research was conducted in SMEs; the study did not include governance sustainability practices, limiting its applicability to multinational manufacturing firms.

2.4.3 Governance Sustainability Strategies and Firm Performance

To the performance of multinational manufacturing companies in Asia, implemented in the rest of the world, Wang et al. (2020) have studied the influence of governance sustainability. The study aimed to analyze the relationship between board independence, transparency, and ethical leadership and firm performance. Corporate governance indices were used to measure governance sustainability, whereas financial and market-based indicators were used to measure performance. The findings were based on panel data and regression and revealed that there was a significant and positive relationship between governance sustainability and firm performance. Environmental and social sustainability strategies were not, however, included in the research.

In order to gather more studies available in the international arena, Molnar et al. (2017) conducted a study on the effect of corporate governance structure on the performance of publicly listed manufacturing industries in China. The governance sustainability areas reviewed comprised board composition, the performance of the audit committee, transparency in executive remuneration, and shareholder protection. The study used panel regression analysis and showed that the firms that had higher governance quality scores had better financial performance and market valuation. The study emphasized transparency in governance and how it helps to reduce agency costs, build investor confidence, and encourage profitability and stability. The environmental and social sustainability aspects were not examined in detail, as in previous research.

Alodat et al. (2022) conducted a study to examine the impact of corporate governance on firm performance in manufacturing firms in Jordan. Governance sustainability was defined based on-board independence, transparency, and accountability, and financial and operational measures were used as governance performance. The paper employed panel data analysis and found out that firm performance is significantly improved when it has good governance practices, as it promotes better decision-making and reduces the agency problem. But it didn't take into account the environmental and social sustainability aspects.

Liem and Hien (2025) studied the sustainability of governance and manufacturing companies' performance in the same way in Vietnam. This research focused on the governance systems, such as the quality of audit, disclosure information, and ethical management, and the performance of the firms in terms of profitability and productivity. The results showed that there is a positive and significant correlation between governance sustainability and firm performance with the help of regression analysis. Nonetheless, there was no integration of the ESG dimensions in governance.

Similarly, Alabdullah et al. (2022) looked at governance mechanisms and firm performance in emerging economies, concentrating on governance characteristics like board diversity of the board, audit quality, and the concentration of ownership. The study used structural equation modelling and found that the ability of the effective governance to improve strategic governance and eliminate managerial opportunism has a significant impact on the performance of the company's finances. The results confirmed the notion of governance sustainability as a mechanism of control that guarantees efficient use of resources and ethical standards. However, the primary focus of the study was financial performance

indicators and it didn't include the broader sustainability indicators such as social responsibility and environmental management (Alabdullah, 2022).

Bhattarai (2024) evaluated the sustainability of governance in ESG integration in European manufacturing companies in a longitudinal study. The governance sustainability was measured through a transparency reporting, anti-corruption policies, board gender diversity and stakeholder engagement policies. The study showed that the more sustainable governance performance the better the operational efficiency, the higher the reputation and the better access to capital markets, for the companies. Importantly, the study showed that there are interactions among the other sustainability domains and governance, as it also showed that strong governance practices create trust in environmental and social programs. But the research was conducted in developed economies and couldn't be applied to developing economies.

Bansal and Kaicker (2024) conducted a meta-analysis of governance sustainability and performance of manufacturing firms across the globe. The study combines empirical evidence and confirms the robust positive association between the quality of governance and accounting-based and market-based measures of performance. The findings also showed that governance sustainability has a positive influence on strategic decision-making, risk management, and regulatory compliance, and thus long-term value creation for the firm. The authors, however, noticed that the effect of governance on performance was not the same for all regions, suggesting that the institutional environment is a moderator of this effect.

On an operationalized regional scale, Ngo et al. (2023) examined the practices of governance and the performance of firms in the manufacturing industry of Vietnam. The sustainability of governance was measured in terms of accountability, disclosure practices, and compliance with regulations, whereas firm performance was quantified in terms of profitability and productivity. Good practices in governance positively influenced the performance of firms, and the study employed hierarchical regression analysis to arrive at this conclusion. The research, however, did not account social sustainability practices.

Scio (2025) conducted research in the vicinity (Kenya) regarding the compliance of governance practices and performance of local manufacturing companies. The research assessed the sustainability of governance through the code of corporate governance and ethical standards of governance and performance via financial requirements. Based on survey results and regression analysis, the study found that governance sustainability positively influenced the performance of the companies. Governance was, however, approached as an isolated aspect and not as an element of a comprehensive sustainability approach.

2.5 Summary of Literature Review

The empirical studies reviewed show that both environmental, social, and governance sustainability strategies have a positive impact on firm performance in various contexts. Nevertheless, most of the studies discuss these aspects of sustainability separately and not in a combined system. In addition, most world and regional research is not contextually relevant in Kenya, whereas local research is confined in geographical scope and generally deals with SMEs or one dimension of sustainability. It is based on these conceptual, contextual, and methodological gaps that describe the necessity of considering the

environmental, social, and governance sustainability strategies and their influence on the performance of multinational manufacturing companies in Kenya that the current study aims to cover.

2.5.1 Summary of Empirical Literature Review

Table 2: *Summary Table of Empirical Literature Review*

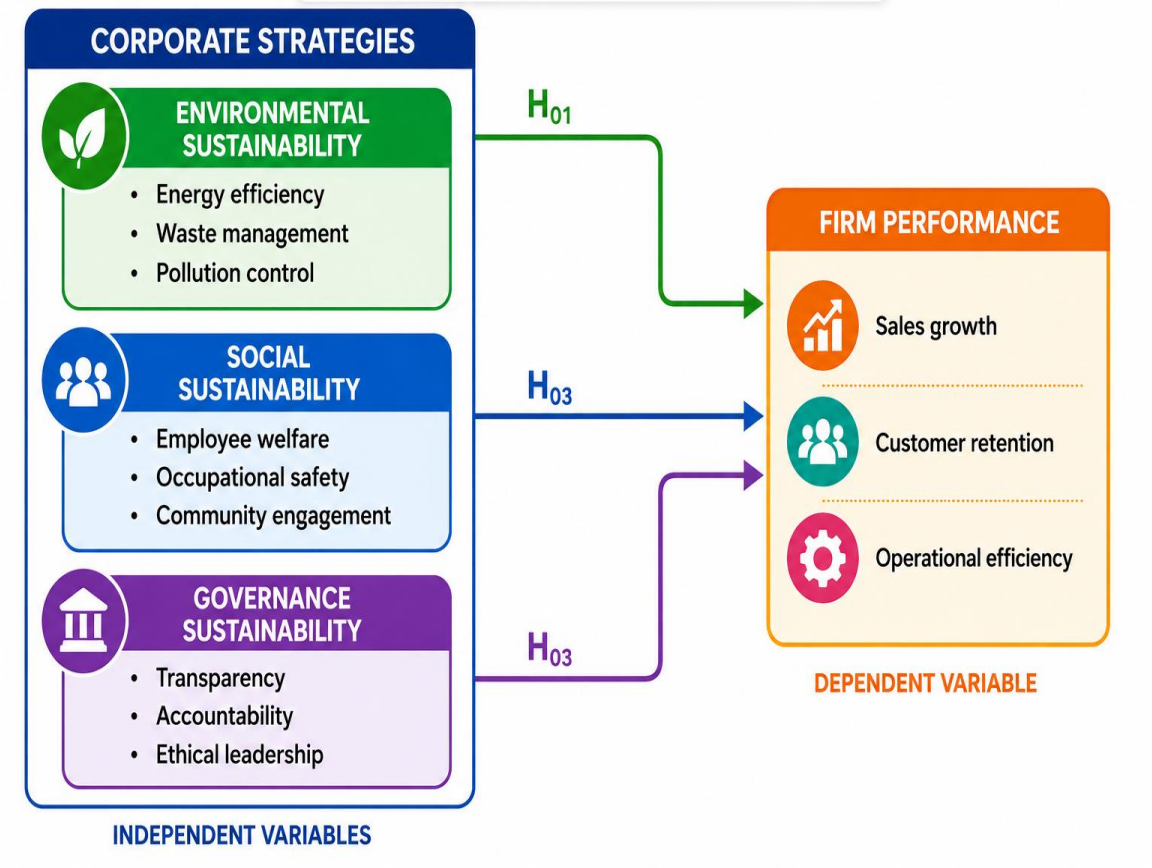
Author(s) & Year	Focus of the Study	Key Findings	Methodology	Research Gaps	How This Study Addresses the Gaps
Mensah & Adams (2024)	EEnvironmental sustainability and firm performance in emerging economies	Environmental sustainability practices positively influence financial and operational performance	Cross-country survey; SEM	Cross-country design limits contextual specificity; governance not examined	Focuses on Kenyan manufacturing context and integrates governance sustainability
Boateng et al. (2023)	Environmental sustainability initiatives and performance in Ghanaian manufacturing firms	Environmental compliance and eco-efficiency improve firm performance	Cross-sectional survey; regression	Relies mainly on financial indicators; social and governance dimensions omitted	Incorporates social and governance sustainability and multiple performance indicators
Khan et al. (2023)	Social sustainability strategies and firm performance in Asian manufacturing firms	Employee welfare and community engagement significantly enhance firm performance	Survey design; PLS-SEM	Environmental and governance sustainability excluded	Examines all three ESG dimensions simultaneously
Njoroge (2025)	Social sustainability practices and performance of Kenyan manufacturing firms	Social sustainability positively affects productivity and profitability	Descriptive survey; regression	SME focus limits generalization to multinationals	Focuses on multinational manufacturing firms
Wang et al., (2020)	Governance sustainability and firm performance in Asian manufacturing firms	Strong governance practices improve financial and market performance	Panel data; regression analysis	Environmental and social sustainability not integrated	Uses an integrated ESG framework)
Scio, (2025).	Governance compliance and performance of Kenyan manufacturing firms	Governance sustainability positively influences firm performance	Cross-sectional survey; regression	Governance treated as a standalone variable	Examines governance as part of ESG sustainability strategies

Note: Researcher, 2025

2.6 Conceptual Framework

A conceptual framework guides the study and is the researcher's own position on the problem. It is defined as a set of ideas used to structure the research, a sort of map.

Figure 1: ***Conceptual Framework***



Note: Researcher, 2025

The conceptual model shows the correlation between corporate sustainability strategies and firm performance of multinational manufacturing companies. The sustainability plans of the companies are theoretical variables with three types (environmental sustainability, social sustainability, and governance sustainability) and are the independent variables. Energy-efficient, waste-free, and pollution-containment green initiatives should be applied

so that environmental sustainability can be used to help firms enhance their performance by better using their resources and improving their operational efficiency. The social sustainability plans, which include employee issues, workplace health and safety plans, and community engagement, will be designed to improve employee performance and corporate respectability. Sustainability strategies of governance, which include transparency, accountability, ethical leadership, and board effectiveness, are likely to improve the quality of decision-making and trust in a firm by the stakeholders and, in turn, facilitate better performance of the firm.

These other measures of firm performance, such as operational efficiency, corporate reputation, and employee productivity, are considered non-financial metrics of firm performance and are used to illustrate the overall benefits of sustainability practices. The framework is built on the Triple Bottom Line theory, the Stakeholder theory, and the Legitimacy theory, which gives a combination of the reasons for how integrated sustainability strategies result in the best organizational performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the research methodology adopted for the study of the corporate strategies, environmental sustainability, social sustainability, and governance sustainability and the performance of the multinational manufacturing companies in Kenya. The chapter details the research design, research population, sampling method, research data collection procedure, pilot testing, research instruments' reliability, research instruments' validity, variables measurement, empirical model, data analysis methods as well as ethical considerations. The methodological decisions are justified based on the purpose of the study, theory, and research problem.

3.2 Research Design

The research was conducted using an explanatory research design with a quantitative approach. An explanatory research design is used to test hypotheses to identify cause-and-effect relationships between the variables, and the strength and direction of the relationship. (Skinner & Dancis, 2026). Environmental, social, and governance sustainability strategies were the independent variables, and firm performance was the dependent variable in this study.

An explanatory design was appropriate for this study as the study was expected to investigate not corporate sustainability strategies have a significant effect on the performance of manufacturing firms. The study design enabled the researcher to empirically test the hypothesized relationship as predicted by theory and previous empirical

studies in a statistically significant way. The study aimed to determine whether there were differences in environmental, social, and governance sustainability strategy that could explain differences in firm performance outcomes; quantitative data collection and analysis techniques were used, including regression analysis and structural equation modelling.

This has been extensively used in sustainability studies in the manufacturing industry. For example, Li (2022) used an explanatory quantitative research design in the study on sustainability of governance and firm performance in Asia; Mensah and Adams (2024) in the parts that evaluate the environmental and social sustainability consequences; and Khan et al. (2023) in the explanatory research design using regression techniques. Hence, using an explanatory research design would be appropriate and in tandem with the previous methodological solutions that have been used in the study of sustainability-performance research.

3.3 Target Population

The population of this research comprised all multinational manufacturing companies in Kenya, a total of 116 companies. These companies are in various industries, which are food and beverage, pharmaceutical, textile, and electronic sectors, and are largely concentrated in major industrial cities like Nairobi, Mombasa, and Kisumu. The companies have different sizes, and they include large companies with large domestic and global supply chains. This population was justified as multinational manufacturing companies are subject to increased regulatory oversight and are under greater scrutiny and pressure from their stakeholders in their home countries and across the world to implement structured environmental, social, and governance sustainability practices.

As they are exposed to global standards, international reporting frameworks, and competition from markets abroad, they need to be more systematic in incorporating sustainability into their strategic decision-making than smaller or purely domestic companies. Moreover, their size makes them important to consider in the study of the link between sustainability strategies and firm performance because they have large workforces and complex governance structures and have strong environmental footprints. The advantage of studying this population is that it makes the results more relevant, robust, and more generalizable to the outside world, especially when trying to understand the impact of sustainability practices on performance in developing economies such as Kenya. The study used a census sampling technique.

3.4 Data Collection

A structured data collection strategy was used to ensure the objectives of this study were met and to provide empirical evidence that was reliable. This method was consistent with the quantitative design of the study and the desire to measure accurately and objectively the hypothesized relationships. The study was largely dependent on primary data which are first hand data collected directly with the respondents through a structured questionnaire that will provide first hand data about the research problem and improve the validity of the study. This questionnaire was structured to collect respondents' perceptions of the study variables using standardized measurement scales to allow quantitative analysis. A systematic data collection procedure was used to create uniformity, completeness, and accuracy of the data retrieved from all subjects. All the respondents' information was confidential; all the information was collected with informed consent, and respondents participated voluntarily in the data collection process. The structured questionnaire helped

the researcher to collect measurable, reliable, and comparable data that can be statistically analyzed and tested for the purpose of achieving the purpose of the study.

3.4.1 Data Sources

This study used primary data, obtained using a well-structured questionnaire as the primary source of empirical evidence. Primary data is the one whose information is gathered at the very outset with the intent of responding to the research objectives. Senior managers and operations managers of the 116 multinational manufacturing companies in Kenya were sampled in order to extract data direct to the respondents since they are in a good position to give informed responses on corporate sustainability strategies. Primary data also contributed to the contextual relevance and accuracy of the information since the data was customized to the variables of the study and received through a person who is involved in sustainability practices. In addition, primary data gave some flexibility, punctuality, and the ability to control data quality and consistency.

3.4.2 Data Collection Procedure

The actual process of data collection was initiated by obtaining ethical approval from the University's Institutional Scientific and Ethics Review Committee (ISERC) to ensure that the study complies with established ethical standards regarding confidentiality, voluntary participation, and informed consent. In addition, a research permit was sought from the National Commission for Science, Technology and Innovation (NACOSTI) in line with Kenyan research regulations. Before starting data collection, permission letters will also be sought from the management of the targeted multinational manufacturing companies and from the appropriate county authorities.

Structured questionnaires were used to gather data, and they were distributed via secure online platforms or in-person visits, depending on the organizations' accessibility and preferences. This diverse distribution strategy reduced logistical limitations, increased coverage, and improved participation rates. In order to promote responses, address any concerns brought up by respondents, and guarantee the accuracy and completeness of the data gathered, follow-up emails and phone conversations were made. Respondents may give socially acceptable information about corporate performance and sustainability practices, which could lead to response bias. To reduce this, the study used impartial, unambiguous questionnaire items and guaranteed respondents' anonymity and confidentiality

3.4.3 Data Collection Instruments

The primary data collection tool in this study was a structured questionnaire that was used to develop quantitative data regarding the variables of importance tothe study. The independent variables were environmental, social, and governance sustainability, and the dependent variable is the performance of the firm. Validated constructs from the empirical literature that were relevant to the questionnaire were used in the creation of the questionnaire in order to have content validity. The measures of each construct were fitted on a 5-point Likert scale, where strong disagreement and strong agreement were measured with multiple items, which made the answers to these items standardized and analyzable statistically. This instrument was structured into sections in accordance with the objectives of the study, which allowed effective and thorough data collection befitting the census design.

3.5 Pilot Testing

A pilot test was conducted on 10 per cent, that is, 16 firms of the sample drawn from manufacturing firms that are not multinational in order to avoid contaminating the main study population. The purpose of the pilot test was to assess the clarity, relevance, sequence, and time required to complete the questionnaire. It also helped identify ambiguous or unclear items and evaluate whether the questions adequately capture the study variables. Before the primary data collection exercise, the questionnaire was improved and refined based on the comments received. To avoid bias and guarantee the integrity and validity of the primary research findings, the companies that take part in the pilot study will not be included in the final study.

3.6 Quality of the Instrument

The quality of the data gathering tools used has a significant impact on the validity and usefulness of any empirical study. To ensure that the instrument consistently and accurately assesses the constructs under inquiry, it is crucial to ensure both validity and reliability. Strict methods will be used to evaluate and determine the psychometric features of the research instrument in the context of this study, which aims to investigate the corporate sustainability policies and performance of multinational manufacturing enterprises in Kenya. This section presents a detailed discussion on the reliability and validity strategies that were employed to enhance the accuracy, consistency, and overall robustness of the data collection instrument.

3.6.1 Research Instrument Reliability

Research instrument reliability is aimed at establishing the consistency and stability of the measuring tool in measuring the intended constructs. A valid tool yields the same results when a test is conducted in a similar environment, and it makes sure that the behavior that is observed is the real nature of the variables and not measurement errors. In quantitative research, it is very important that reliability is established since this increases the credibility, accuracy, and dependability of results. Reliability evaluation in this research was applied to ensure that the items used in measuring environmental, social and governance sustainability strategies, and performance of the firms, are always accurate of the respective constructs.

Cronbach Alpha coefficient was used to determine internal consistency reliability. The approach determines the level of correlation between the items in a construct and measures the same construct. All the constructs, such as corporate sustainability strategies and firm performance, will be tested separately to establish the level of reliability. The acceptable Cronbach's Alpha value was 0.70 and above, which means that it is well internally consistent, and values of 0.80 and more were said to be good in terms of reliability. The constructs not meeting the acceptable threshold were revisited and improved, and then the final data analysis was done.

3.6.2 Research Instrument Validity

Validity is aimed at determining whether the research instrument measures what it is intended to measure. Validity is used to ascertain that the questionnaire items are sufficient to measure the environmental, social, and governance sustainability strategies and firm performance without systematic error. Face and content validity were determined in this

paper using academic supervisors and experienced professionals in sustainability and manufacturing management to make expert reviews. These professionals checked the suitability, relevance, comprehensiveness, and clarity of the items n the questionnaires concerning the objectives of the study and theoretical constructs. The feedback informed them of the required changes to help them to have an instrument that effectively captured the domain of the variables being studied.

Confirmatory factor analysis (CFA) was used to determine construct validity because it was important to establish that the questionnaire items have significant and proper loadings into their constructs. The factor loadings were analyzed to ascertain that items comply with the theoretical aspects of environmental, social, and governance sustainability strategies and firm performance. Low or cross-loadings were checked and, in case of need, were revised or eliminated. The modulations also based on the pilot study, such as rephrasing unclear questions, better arrangement of items, and bettering of scales of measurement contributed to the validity of the tool before the primary data collection phase.

3.7 Diagnostic Tests

Robustness and reliability of the regression results were investigated through diagnostic tests, as well as to verify the conditions imposed by the regression model. To check normality of the data distribution, skewness and kurtosis were used, and to check for the existence of multicollinearity among the independent variables, Variance Inflation Factors (VIF) were used. The heteroscedasticity of the error terms was also investigated by running the Breusch–Pagan test. The validity of the regression estimates is improved using these diagnostic tests. If assumptions were violated, appropriate adjustments were made,

including variable transformations and using robust standard errors for the estimates to make them more accurate and reliable.

Table 3: *Diagnostic Tests*

Assumption	Description / Purpose	Test	Interpretation	Remedy if violated
Normality	Ensures that the residuals of the regression are normally distributed, which is necessary for valid hypothesis testing and confidence intervals.	Skewness & Kurtosis statistics; Shapiro-Wilk test	Residuals are normal if skewness ≈ 0, kurtosis ≈ 3, or p-value > 0.05	Apply log, square-root, or other variable transformations; use robust or bootstrapped standard errors
Multicollinearity	Checks if independent variables are highly correlated, which can distort coefficient estimates and inflate standard errors.	Variance Inflation Factor (VIF)	VIF > 10 indicates high multicollinearity	Remove or combine highly correlated variables; use principal component analysis if necessary
Homoscedasticity	Ensures constant variance of residuals; violation can bias standard errors and lead to unreliable test statistics.	Breusch-Pagan test; White test	p-value < 0.05 indicates heteroscedasticity	Use robust standard errors; transform dependent variable (log or square root)
Linearity	Ensures a linear relationship between independent and dependent variables, which is required for valid regression estimates.	Scatterplots of residuals vs. predicted values; partial regression plots	Non-linear patterns in plots indicate violation	Transform variables (log, polynomial); include interaction or quadratic terms where appropriate

Note: Researcher, 2025

3.7.1 Study Variables Measurement on Operationalization

Environmental, social, and governance are indicators of corporate strategy. Non-financial measures were used to determine firm performance, including sales growth, operational efficiency, customer retention, and employee performance. Likert-scale questions were used to measure all constructs and were derived from previous studies.

Table 4: *Study Variables Measures*

Variable		Indicator	Measurement
Environmental Sustainability *(Independent variable)*	IV	▪ Energy efficiency	Ordinal
		▪ Waste management	Ordinal
		▪ Pollution control	Ordinal
Social Sustainability *(Independent variable)*	IV	▪ Employee welfare	Ordinal
		▪ Occupational safety	Ordinal
		▪ Community engagement	Ordinal
Governance Sustainability *(Independent variable)*	IV	▪ Transparency	Ordinal
		▪ Accountability	Ordinal
		▪ Ethical leadership	Ordinal
Firm Performance *(Dependent variable)*	DV	▪ Sales growth	Ordinal
		▪ Customer retention	Ordinal
		▪ Operational efficiency	Ordinal

Note: Researcher, 2025

3.8 Empirical Model

The study employed multiple regression analysis using the Ordinary Least Squares (OLS) method to test the hypothesized relationships between corporate sustainability strategies and firm performance. Firm performance was treated as the dependent variable, while environmental, social, and governance sustainability strategies were the independent variables. The OLS technique is appropriate because it provides the best linear unbiased estimates (BLUE) of the regression coefficients when the standard assumptions of linear regression are satisfied, including linearity, independence, homoscedasticity, and normality of residuals. OLS allows for the simultaneous assessment of the individual and combined

effects of multiple independent variables on the dependent variable, making it suitable for evaluating the relative influence of environmental, social, and governance strategies on firm performance. Furthermore, OLS is widely used in quantitative studies in corporate sustainability and firm performance research, which ensures comparability and robustness of results.

The baseline regression model is specified as follows:

$FP=\beta0+\beta1ES+\beta2SS+\beta3GS+\varepsilon$

Where:

- FP= Firm Performance
- ES= Environmental Sustainability
- SS= Social Sustainability
- GS= Governance Sustainability
- β_0= Constant term
- $\beta_1, \beta_2, \beta_3$= Regression coefficients
- ε= Error term

3.9 Data Analysis and Presentation

Collected data were coded, cleaned, and checked for accuracy/completeness in SPSS before analyzing the data. The data were summarized using descriptive statistics (mean, standard deviation [SD], and coefficient of variation [CV]) to gain an overview of the trends, dispersion, and patterns in the responses. This approach helped in understanding the central tendencies and variability of the corporate sustainability strategies and firm performance variables. Inferential analysis was done using correlation analysis to see the

strength and direction of the relationship between environmental, social, and governance sustainability strategies and firm performance. The hypothesized effects of the independent variables on the dependent variable were then tested using multiple regression analysis using the Ordinary Least Squares (OLS) method. Furthermore, regression-based techniques can be used, if appropriate, to look at mediation or moderation effects to gain a better understanding of the interrelationships among variables.

Descriptive and inferential analyses were reported in tables, charts, and graphs in a clear and organized way. This allowed for easy interpretation and comparison of findings, and visually highlighted key trends and relationships, making the conclusions more accessible and informative to the readers.

3.10 Ethical Considerations

This study observed ethical standards of research in order to protect the rights of the participants during the research. All the participants were informed about the purpose of the study, their roles, and how the data would be used, and were requested to sign an informed consent. Participation was fully voluntary, and the respondents to discontinue with the study at any point without any adverse repercussions. It also respected the confidentiality and anonymity of the study by not capturing or revealing the identities of the participants in the reports or publications. Data on all research was stored in a secure location, and only the researcher and authorized personnel had access to the data, hence protecting the data during the research. The researcher also sought all the required permissions and licenses, including, but not limited to, an official permit at the National Commission for Science, Technology, and Innovation (NACOSTI), an authorization letter at the university, and a consent at the Institutional Scientific and Ethics Review Committee

(ISERC) in accordance with the ethical and legal provisions. The industry-specific authorities or the management of the company were also consulted, and other permissions were requested where needed. This consent was a source of ethical and legal validity and trustworthiness, and helped in cooperation, thus improving the quality and reliability of the data collection process.

CHAPTER FOUR

DATA ANALYSIS, RESULTS, AND DISCUSSION

4.1. Introduction

This chapter reports the results of the data collected to explore the effect of the corporate sustainability strategies on the performance of manufacturing companies in Kenya. The methodology used for the analysis was consistent with the research methodology outlined in Chapter Three, with the procedures for data collection, coding, and analysis being consistently followed. The data collected were processed, coded, entered and analyzed with the aid of the Statistical Package for the Social Sciences (SPSS) to aid the accurate management of data collected and performing statistical computation. The results are presented systematically based on the goals of the study to facilitate the interpretation of the results. Both descriptive and inferential statistical techniques were employed in analyzing the data. Frequencies, percentages, means, and standard deviations were used to describe the characteristics of the respondents and the key study variables. The relationships between the variables, the test of the study hypotheses and the extent to which the performance of manufacturing companies in Kenya can be influenced by the adoption of corporate sustainability strategies were examined using inferential statistics which included correlation analysis and multiple regression analysis.

4.2 Response Rate

The study aimed at 116 respondents who are the managers employed in the registered 116 manufacturing companies in Kenya. Among the 116 questionnaires that were distributed, 110 were appropriately filled out and sent back, making a 95 percent response rate. Mugenda & Mugenda (2003) add that a response of above 70 percent is regarded as

satisfactory in the statistical analysis of social science research. Hence, the response rate was excellent and adequate for the generalization of the findings.

Table 5: *Response Rate*

Category	Number Distributed	Number Returned	Response Rate (%)
Questionnaires Issued	116	110	95.00%

Note: Field Data (2025)

The questionnaires were sent to 116 managers in registered manufacturing companies in Kenya, of which 110 were returned due to the high response rate, as presented in Table 5 above. The number of questionnaires distributed to selected respondents was 116, and all the questionnaires were distributed successfully. Of these, 110 questionnaires were properly filled and returned, and 6 questionnaires were either not returned or incomplete and were not included in the final analysis. This led to an overall response rate of 95.00% that is very high for survey-based research. High participation rates and the level of engagement from respondents show their interest in the topic of corporate sustainability strategies and organizational performance and indicate their willingness to participate in the study.

The relatively high response rate obtained in this study is one of its strengths because this reduces non-response bias and thus strengthens the credibility of the research results. Response rates over 90% are considered good in organizational and social science research because it allows for increased confidence that the respondents' views represent the views of the target population (Baruch & Holtom, 2008). The 95.00% response rate achieved in this study therefore indicated that the sample was representative of the managers in

registered manufacturing companies in Kenya and hence the reliability and generalization of the study results.

In addition, the high response rate is an indication of the success of the data collection method used by the researcher. The questionnaires were administered successfully because of the following reasons: the questions in the questionnaire were well worded and structured, the research was relevant to the respondents, and there was cooperation from the manufacturing companies involved. The researcher also provided sufficient post-intervention support and ensured that he adhered to ethical principles, including confidentiality and voluntary participation, thereby enhancing the participation of the respondents in completing the questionnaires. The overall response rate was good and provides a good basis for the subsequent analyses, making the findings of the study credible, valid, and reliable.

The high rate of questionnaire return also increases the internal validity of the study, as fewer sampling errors are to be expected due to missing questionnaire responses. Only a small number of respondents (5.00%) were not involved, thus limiting the chance that the non-respondents had significantly different characteristics that might affect the outcome of the study. This gives a sense of confidence that the statistical analyses used descriptive, correlation, regression, mediation, and moderation analyses were conducted on adequate and representative data.

4.3 Reliability Analysis

To evaluate the internal consistency and reliability of the measurement scales used in the questionnaire, Cronbach's Alpha (α) coefficient was calculated for each construct. Cronbach's Alpha is widely regarded as a measure of how well the items within a scale are correlated and thus reliably assess the same underlying concept. A coefficient value of 0.7 or higher is generally deemed acceptable for research in the social sciences. Table 6 displays the reliability test results for the key constructs examined in this study.

This was done to make sure that the research instrument was reliable enough to measure the variables being studied before carrying out further statistical analyses. The high reliability coefficients suggest that there is a high level of internal consistency among the questions of the questionnaire, which is appropriate for analysis and the provision of reliable and accurate data. Reliability of measurement scales is very important as it reduces measurement error and contributes to the validity of the results of the study. Therefore, the Cronbach's Alpha coefficient values confirmed that the research instrument was suitable for this study to examine the relationship between corporate sustainability strategies and the performance of manufacturing companies in Kenya.

Table 6: *Cronbach's Alpha*

Construct	**Number of Items**	**Cronbach's Alpha**	**Decision**
Environmental Sustainability	4	0.83	Reliable
Social Sustainability	4	0.86	Reliable
Governance	3	0.81	Reliable
Sustainability Firm Performance	5	0.85	Reliable
Overall Scale	**21**	**0.84**	

Note: Field Data (2025)

All constructs were reliable, as suggested by the minimum value of 0.70 as shown in Table 6, which means that the questionnaire items were valid and internally consistent in measuring the study variables. The four items for environmental sustainability had a Cronbach's alpha coefficient of 0.83, which is very reliable. These indicate that the measures assessing product development were valid measures of the intended construct.

A Cronbach's Alpha value of 0.86 was obtained for social sustainability (measured with four items), which showed good internal consistency among the measurement items. Likewise, the reliability coefficient for governance sustainability (assessed by three items) was 0.81, showing that the scale was reliable in measuring governance strategies used by manufacturing companies.

Likewise, the reliabilities obtained for the dependent variable, Organizational Performance, showed a Cronbach's Alpha value greater than the recommended value of 0.70, suggesting that the items of the measurement well captured the intentions of the performance dimensions. The results of the study overall show that all the constructs had good internal consistency and would be suitable for further statistical analysis. The Cronbach's Alpha values of 0.70 and above are considered to be acceptable, 0.80 is good, and 0.90 is excellent. Thus, the reliability obtained from the study in this research indicates that the research instrument was reliable and did not experience any doubts in producing results that were consistent and credible, so that the results of the study could be more accurate and valid.

4.4 Demographic Information

This section reports demographic characteristics of the respondents who took part in the study. The information gathered was used to establish the suitability of the respondents in providing information on the sustainability strategies and performance of multinational manufacturing companies in Kenya. The demographic variables that were studied were the years the firm had been in business, the years of service with the firm by the respondents, and the number of employees in the organizations. The ability to comprehend these features offers insights into how the respondents experienced the study, their managerial roles, and their organizational settings, which helps to increase the credibility of the study results.

Table 7: *Demographic Information*

Variable	Category	Frequency	Percent (%)
Designation	Directors	17	15.5
	Senior Managers	33	30.0
	Operations Managers	33	30.0
	Finance Managers	27	24.5
	Total	**110**	**100.0**
Years of Operation	Less than 5 Years	16	14.5
	5–10 Years	31	28.2
	10–20 Years	37	33.7
	More than 20	26	23.6
	Total Years	**110**	**100.0**
Length of Service	Less 3 Years	21	19.1
	3–5 Years than	27	24.5
	6–10 Years	34	30.9
	More than 10 Years	28	25.5
	Total	**110**	**100.0**
Size of Staff	Less than 25 Employees	18	16.4
	25–100 Employees	37	33.6
	101–299 Employees	32	29.1
	300–1000 Employees	23	20.9
	Total	**110**	**100.0**

Note: Field Data (2025)

Table 7 shows that the respondents held strategic management positions in their organizations, which make them good sources of information on organizational sustainability strategies and organizational performance. The majority of the respondents were Senior Managers and Operations Managers (30.0% each), followed by Finance Managers (24.5%) and Directors (15.5%). The cross-section of respondents in various managerial positions helped to ensure that the study captured a range of perspectives concerning strategic planning, implementation, and organizational performance. These respondents are directly engaged in the decision-making process, and so their answers will be informed and reliable.

Concerning the years of operation, the results reveal that the majority of the manufacturing companies was working for quite a long period. The largest percentage were those that had been in business for 10 to 20 years (33.7%) and 5 to 10 years (28.2%). Twenty-three percent of the firms was established for more than 20 years, and 14.5% were in operation for less than 5 years. The results indicate that the majority of the companies were very well established and had experience with implementing sustainability efforts and growth strategies, a prerequisite for analyzing the relationship between sustainability strategies and organizational performance.

A large majority had significant organizational experience, as shown by the results on length of service. The majority (30.9%) of the respondents were employed in their organizations for between 6 and 10 years, while 26.4% had served for over 10 years. 25.5% of respondents had served 3 to 5 years and 24.5% less than three years. The distribution shows that majority of respondents had sufficient knowledge about their organizations'

strategic practices, operational processes and performance trends. Hence, they were equipped to answer the questions regarding the study variables.

As far as size of the organization, the results show that the study involved companies with different capacities in terms of employees. 33.6% of the organizations having 25 to 100 employees, while 29.1% of the organizations had 101 to 299 employees. The 300- to 999-employee firms made up 20.9 percent and those with fewer than 25 employees made up 16.4 percent. Small and medium manufacturing companies were added to ensure the sample was representative and allow the results of this study to be generalized to various types of manufacturing organisations. The wide variety of firm size also allowed a wider picture of the impact of corporate sustainability policies on the performance of multinational manufacturing companies with varying scales.

4.5 Manufacturing Sector

The respondents were selected from various manufacturing subsectors found in Kenya in an attempt to consider a variety of views regarding corporate strategies and organizational performance. The industry composition of the sample was significant in determining the industry representation of the manufacturing sector and whether the study covered the major subsectors of the country's manufacturing industry. The cross-sectoral distribution of respondents (food and beverages, chemicals and allied products, paper and board, plastics, metals, textiles, energy and electricals, motor vehicles, and timber) gives good breadth to the industrial coverage and provides a generalizability and representativeness of the results of the study. The distribution of the respondents according to manufacturing sector is shown in Table 8.

Table 8: ***Manufacturing Sector***

		Frequency	Percent
Valid	Chemical & Allied	15	13.6
	Energy, Electricals	5	4.5
	Food and Beverages	30	27.3
	Metal	13	11.8
	Motor Vehicle	5	4.5
	Paper & Board	15	13.6
	Plastic	15	13.6
	Textiles	10	9.1
	Timber	2	1.8
	Total	**110**	**100.0**

Note: Field Data (2025)

The results show that the highest number of respondents (27.3%) was comprised of firms in the Food and Beverages manufacturing sector, which reveals the prevalence of Agro-processing operations in the multinational manufacturing industry of Kenya. Chemical and Allied, Paper and Board and Plastic companies were at 13.6 each, which was high participation in the materials-based and packaging-related industries. The light manufacturing was evident with 11.8 and 9.1 being the percentages of the metal manufacturing firms and Textiles respectively. Specialty manufacturing subsectors are rather represented in the energy and Electricals and Motor Vehicle manufacturing firms with 4.5 each. Timber manufacturing companies registered the lowest percentage of 1.8. In general, the sample distribution proves that the respondents were chosen in a wide spectrum of manufacturing subsectors, which increases the representativeness of the study results.

4.6 Descriptive Statistics of the Study Variables

The descriptive analysis of the study variables is presented in this section based on manager's responses to the questionnaires given to manufacturing firms in Kenya. Descriptive statistics were employed to summarize the respondents' perceptions on how

extent to which corporate sustainability strategies have been adopted by their firms, and the level of organizational performance achieved. The results are presented as mean scores and standard deviations for each of the statements that measured the three constructs of the study. The mean values reflect the mean level of agreement among the respondents, and the standard deviations show the degree of variation in respondents' opinions.

The responses were rated on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The mean scores from 4.00 to 5.00 were interpreted as high agreement, scores from 3.00 to 3.99 were interpreted as moderate agreement and the mean scores less than 3.00 were interpreted as low agreement. Standard deviations of less than one (1.0) indicated that there was relatively little variation in the answers given, indicating a fairly consistent opinion on the statements presented by respondents.

The descriptive analysis is presented according to the research objectives. The first subsection shows descriptive statistics for environmental sustainability, the second for social sustainability, and the third for governance sustainability, and the dependent variable (firm performance) is reported. Before examining the relationships among the variables with inferential statistical techniques, these findings offer initial evidence about the extent to which manufacturing firms have adopted different sustainability strategies.

4.6.1 Descriptive Statistics for Environmental Sustainability

The study aimed at finding the effect of environmental sustainability on the performance of manufacturing firms in Kenya. Participants were asked to rate their agreement with statements related to environmental sustainability. The results are given in Table 9.

The respondents indicated their opinion on a 5-point Likert scale from Strongly Disagree (1) to Strongly Agree (5). The responses were summarized using descriptive statistics such as mean scores and standard deviations to find out the level of agreement among the respondents on the different statements relating to environmental sustainability. The mean scores reflect the extent of agreement with each of the statements, and the standard deviations reflect the range of opinions expressed by respondents. The higher the mean scores, the more strongly respondents agreed that the respective environmental sustainability is carried out in the firms, and the lower the standard deviations, the more the respondents' perceptions of the environmental sustainability is similar. The results offer information on the level of environmental sustainability adopted by manufacturing companies and their possible effect on their performance.

Table 9: *Descriptive Statistics for Environmental Sustainability*

	N	MIN	MAX	Mean	Std. Deviation
The firm has implemented measures to improve energy efficiency in production and operations.	110	1.0	5.0	4.12	0.68
Energy-saving technologies are regularly adopted to reduce operational costs.	110	1.0	5.0	4.09	0.70
The organization actively minimizes waste through recycling and reuse initiatives.	110	1.0	5.0	4.04	0.71
Waste reduction practices are integrated into daily manufacturing operations.	110	1.0	5.0	4.07	0.69
Average	**110**	**1.0**	**5.0**	**4.08**	**0.69**

Note: Field Data (2025)

The results of Table 9 show the high level of agreement amongst the respondents about their reported environmental sustainability as reflected in the composite mean of 4.08 with a standard deviation of 0.69. The results indicate that within the sample of multinational manufacturing companies, most of the companies have taken steps to enhance their energy efficiency and minimize their environmental effects. The relative low standard deviation also explains that the perceptions of people about environmental sustainability implementation are relatively similar.

The highest mean score (SD = 0.68) was for the implementation of measures to improve energy efficiency in production and operations. This suggests a strong consensus that respondents' companies had taken steps to improve energy efficiency. Energy efficiency is important in the manufacturing sector, since efficient use of energy resources can help achieve efficient production processes and make better use of organisational resources.

The mean of energy-saving technologies was regularly adopted to reduce operational costs was found to be 4.09 (SD = 0.70). The results show that there is a high level of consensus among the respondents as to the use of energy-saving technologies in their companies' operations. This indicates that environmental actions are not considered only as protection of nature actions but might also be linked to improvement of cost management in the operations.

The mean value for waste minimization through recycling/reuse activities was 4.04 (SD = 0.71). The result shows that participants felt that their organizations were actively involved in recycling and reusing. These practices are indicative of the organization's actions taken to lower waste created from production processes and to maximize the use of existing

resources. Likewise, the implementation of waste reduction in the daily production process (WRP) had a mean score of 4.07 (SD = 0.69). The findings reveal that reduction of waste is seen as being a part of the firms' daily operations. The standard deviation is relatively low indicating that views were fairly comparable among the respondents.

The overall mean of 4.08 indicates good consensus on practices relating to environmental sustainability. The results are thus preliminary descriptive support for the assertion that the energy efficiency and waste management practices of the sample multinational manufacturing companies were reasonably developed. The findings serve as a basis for the subsequent inferential analysis, which tests whether environmental sustainability is significantly related to firm performance.

4.6.2 Descriptive Statistics for Social Sustainability

The second objective of the study was to examine the effect of social sustainability strategies on the performance of multinational manufacturing firms in Kenya. Social sustainability was measured through employee welfare, occupational safety, and community engagement. Respondents were asked to indicate their level of agreement with statements concerning social sustainability within their organizations. The results are presented in Table 10.

Table 10: *Descriptive Statistics for Social Sustainability*

	N	MIN	MAX	Mean	Std. Deviation
The organization prioritizes employee welfare through fair compensation and benefits.	110	1.0	5.0	4.03	0.72
Employees are provided with opportunities for training and skills development.	110	1.0	5.0	3.98	0.75
Workplace safety policies are clearly defined and consistently enforced.	110	1.0	5.0	4.06	0.73
The organization invests in measures to reduce workplace accidents and health risks.	110	1.0	5.0	3.97	0.76
Average	**110**	**1.0**	**5.0**	**4.01**	**0.74**

Note: Field Data (2025)

The respondents gave a high rating for social sustainability as indicated in Table 10 with a composite mean score of 4.01 and an SD of 0.74. The results showed that the respondents were generally positive with regards to their organizations having implemented measures to support workers and encourage occupational safety. The relatively small standard deviation indicates that there is a fairly consistent perception from the respondents.

The highest mean score (4.06, SD = 0.73) was for the workplace safety policies are clearly defined and consistently enforced. This means that in the sampled firms, occupational safety was considered as an important aspect of social sustainability. The effective implementation of safety policies, which are clear and consistently enforced, can help to improve safety in the workplace and allow employees to participate in various activities in the company.

The mean score for employee welfare through fair compensation and benefits was 4.03 (SD = 0.72). The finding shows a very high level of consensus on the importance of employee well-being by the firms under consideration with regard to salary and benefits. The result indicates that employees perceive employee welfare as an important organizational practice.

The mean for training and skills development opportunities (SD = 0.75) was 3.98. While this is slightly below four, it is still relatively high level of agreement that employees are given skills development opportunities. Training and Development can help employees develop the skills that are appropriate to their roles and meet evolving operational needs.

The mean score for the investment in measures to reduce workplace accidents and health risks was 3.97 (SD = 0.76). The findings indicate a level of consensus among the respondents around the efforts of the organization to reduce the risks associated with the job. The discovery indicates that companies take steps that they think will help keep their workers healthy and safe.

A high level of agreement (4.01) was found for social sustainability overall. The findings indicated that generally, employee welfare, training and development, and workplace safety and risk reduction were recognized as important practices in the sampled firms. Inferential analysis was used to examine the relationship between social sustainability and firm performance, and these descriptive findings offer a first basis for this analysis.

4.6.3 Descriptive Statistics for Governance Sustainability

The third objective of the study was to assess the effect of governance sustainability on the performance of multinational manufacturing firms in Kenya. Governance sustainability

was assessed through transparency, accountability, and ethical leadership. Respondents were asked to indicate their level of agreement with statements relating to governance practices within their organizations. The results are presented in Table 11.

Table 11: *Descriptive Statistics for Governance Sustainability*

	N	MIN	MAX	Mean	Std. Deviation
The organization maintains transparent reporting of its financial and operational activities.	110	1.0	5.0	3.81	0.79
Information disclosed to stakeholders is timely and reliable.	110	1.0	5.0	3.74	0.83
Managers are held accountable for strategic and operational decisions.	110	1.0	5.0	3.68	0.82
Internal Control systems effectively prevent mismanagement and fraud	110	1.0	5.0	3.79	0.80
Average	**110**	**1.0**	**5.0**	**3.76**	**0.81**

Note: Field Data (2025)

Table 11 shows that the level of agreement for governance sustainability was moderate, with a composite mean of 3.76 and a standard deviation of 0.81. The results indicate that there were some governance-related practices in the sampled multinational manufacturing companies, but at a lower level of implementation compared to environmental and social sustainability.

The statement with the highest mean score (3.81, SD = 0.79) was that the organization has clear reporting of its activities and finances. The results indicate that respondents are generally in agreement about their organizations' focus on transparency in reporting. Clear reporting can help to ensure the availability of accurate organisational data and promote transparency and accountability between various stakeholders.

The internal control systems to prevent mismanagement and fraud had a mean score of 3.79 (SD = 0.80). The finding is that the overall opinion of the respondents is that there are internal control mechanisms in place to manage risk from mismanagement and fraud. These are some of the ways that organisations are trying to improve accountability and protect organisational assets.

The mean (SD) score for information disclosed to stakeholders being timely and reliable was 3.74 (0.83). This means that the level of agreement on the accuracy and timeliness of the information that is provided to stakeholders is moderate. The finding indicates that although in general information disclosure was considered a good thing, there was more variation in respondents' views than for some of the other governance sustainability.

The lowest mean score (SD = 0.82) was obtained for the item, "Managers are accountable for strategic and operational decisions. This grade is the lowest of the governance practices but the mean is still in the “moderate agreement” range. The finding indicates managerial accountability existed, but may not have been carried out as fully as one of the other governance practices.

In general, the overall mean of these composite scores (3.76) indicates a moderate level of agreement on governance sustainability strategies. The findings indicate that there was some level of transparency, accountability and internal controls implemented in the sampled firms, albeit the mean scores of the governance sustainability were relatively lower than that of environmental and social sustainability. These descriptive results give a preliminary look at the impact of governance sustainability on firm performance.

4.6.4 Descriptive Statistics for Firm Performance

Firm performance was used as the dependent variable in this study. The respondents were asked to mark the degree of improvement of different financial and non-financial performance indicators in their organizations in the last few years. The performance indicators measured were profitability, return on assets, sales growth, customer retention and operational efficiency. These indicators were chosen because they offer a thorough evaluation of organizational performance on the financial results and on the effectiveness of the operations. Descriptive statistics in Table 12 provide a summary of the respondents' perceptions about their organizational performance.

Table 12: *Descriptive Statistics for Firm Performance*

	N	MIN	MAX	Mean	Std. Deviation
The firm has experienced consistent sales growth in recent years.	110	1.0	5.0	4.07	0.66
Customer retention levels have improved over time.	110	1.0	5.0	4.02	0.68
Operational efficiency has increased as a result of improved business practices.	110	1.0	5.0	4.06	0.65
Customer retention has improved	110	1.0	5.0	4.05	0.67
Employee productivity has improved across key operational areas.	110	1.0	5.0	4.05	0.69
Average	**110**	**1.0**	**5.0**	**4.05**	**0.65**

Note: Field Data (2025)

Based on the results presented in Table 12, the mean score of the composite of firm performance perceived by the sampled multinational manufacturing firms was 4.05 while the standard deviation was 0.65, which shows that the firms had high level of firm performance. The results showed that there was a general agreement that there were

positive results that their organizations had achieved in sales, retention of customers, operational efficiency and employee productivity. This reflects the relatively small range of variation among respondents' perceptions of their organizations' performance, as reflected in the relatively low standard deviation.

The sales growth indicator had the highest mean score of 4.07 (SD = 0.66). This suggests that, overall, respondents felt their businesses had been increasing in sales over the past few years. The results indicate that the sampled enterprises were believed to have experienced positive growth in sales, one of the important measures of organizational performance. The mean score for operational efficiency was 4.06 (SD = 0.65). It shows a high degree of consensus that there had been an improvement in business practices that led to operational efficiency. Better operational efficiency can be an indicator of better use of organizational resources and better production and operational processes.

The mean score for employee productivity was 4.05 (SD = 0.67). The result suggests that the respondents, believed that there was an improvement in their employees' productivity in major areas of operations. An important non-financial component of the firm's performance is the productivity of its employees, which is important because the effective use of employee contribution is a key part in achieving the firm's goals.

The mean score for the customer retention was 4.02 (SD = 0.68). This was the lowest mean of the performance indicators included in the table that are aligned with the questions of the questionnaire; however, it shows a high level of agreement. The finding suggests that over time the respondents felt that their organizations became more effective at retaining customers.

mean scores of the companies sampled in the multinational manufacturing industry were relatively high (composite mean = 4.05), meaning that the companies were seen as having a fairly high level of firm performance. The average scores on each of the performance indicators are consistently positive, indicating favorable perceptions of sales growth, customer retention, operational efficiency, and employee productivity. These descriptive results serve as a basis for the correlation and regression analyses that follow, which aim to identify the significance of environmental, social and governance sustainability on firm performance.

4.7 Diagnostic Test Results

Before conducting multiple regression analysis, it was necessary to assess whether the data satisfied the assumptions underlying linear regression. Diagnostic tests are important because they establish the validity, reliability, and robustness of the regression estimates. Violation of these assumptions may lead to biased parameter estimates, unreliable significance tests, and misleading conclusions regarding the relationships among the study variables. In this study, diagnostic tests were conducted to examine the assumptions of homoscedasticity, normality of residuals, multicollinearity, and linearity. Specifically, the Breusch-Pagan/Cook-Weisberg test was used to assess homoscedasticity, the Shapiro-Wilk test examined the normality of residuals, the Variance Inflation Factor (VIF) assessed multicollinearity among the predictor variables, while the Ramsey RESET test evaluated the linearity and specification of the regression model. The results are summarized in Table 13.

Table 13: *Summary of Regression Assumption Diagnostic Tests*

Test	Null Hypothesis (H_0)	Test Statistic	Value	p-value	Decision and Interpretation
Breusch-Pagan/Cook-Weisberg Test	Residuals have constant variance (Homoscedasticity)	χ^2 (1)	0.47	0.4926	Fail to reject H_0. Residuals are homoscedastic (no heteroscedasticity)
Shapiro-Wilk Test	Residuals are normally distributed	W	0.99382	0.2864	Fail to reject H_0. Residuals are normally distributed.
Variance Inflation Factor (Mean VIF)	No multicollinearity exists	Mean VIF	1.74	—	No multicollinearity concern
		VIF: Environmental sustainability	1.83	—	Low multicollinearity. Variable suitable for regression analysis.
		VIF: Social Sustainability	1.92	—	Low multicollinearity. Variable suitable for regression analysis.
		VIF: Governance Sustainability	1.47	—	Low multicollinearity. Variable suitable for regression analysis.
Ramsey RESET Test	Model is correctly specified (Linearity holds)	F (3,186)	0.56	0.6418	Fail to reject H_0. No omitted variable bias. Linearity assumption satisfied

Note: Field Data (2025)

The findings presented in Table 13 provide a comprehensive assessment of the assumptions underlying multiple linear regression analysis. Testing these assumptions before estimating the regression model is essential because it ensures that the estimated coefficients are unbiased, efficient, and statistically reliable. The diagnostic tests evaluated homoscedasticity, normality of residuals, multicollinearity, and model specification using the Breusch-Pagan/Cook-Weisberg test, Shapiro-Wilk test, Variance Inflation Factor (VIF), and Ramsey RESET test, respectively.

The assumption of homoscedasticity was examined using the Breusch-Pagan/Cook-Weisberg test. The null hypothesis of this test states that the residuals exhibit constant variance. The test produced a chi-square statistic of χ^2 (1) = 0.47 with a corresponding p-value of 0.4926. Since the p-value exceeded the conventional significance level of 0.05, the null hypothesis was not rejected. This finding indicates that the residuals exhibited constant variance and that the regression model did not suffer from heteroskedasticity. Consequently, the estimated regression coefficients are considered efficient, and the standard errors are reliable for hypothesis testing.

The normality of residuals was assessed using the Shapiro-Wilk test. The analysis produced a W statistic of 0.99382 with a p-value of 0.2864. Because the p-value was greater than 0.05, there was insufficient evidence to reject the null hypothesis that the residuals were normally distributed. This finding confirms that the normality assumption was satisfied. The normal distribution of residuals enhances the validity of the t-tests, F-tests, confidence intervals, and other inferential statistics generated from the regression model.

The presence of multicollinearity among the independent variables was assessed using the Variance Inflation Factor (VIF). The mean VIF was 1.74, while the individual VIF values ranged from 1.47 for governance sustainability to 1.92 for social sustainability. All VIF values were substantially below the indicate commonly accepted threshold of 5 and far below the critical value of 10. These findings that the predictor variables were not highly correlated with one another and that each variable contributed unique explanatory information to the regression model. Therefore, multicollinearity was not considered a threat to the validity of the regression estimates.

Finally, the assumption of linearity and correct model specification was evaluated using the Ramsey RESET test. The test yielded an F-statistic of 0.56 with a corresponding p-value of 0.6418. Since the p-value exceeded 0.05, the null hypothesis was not rejected, indicating that there was no statistical evidence of omitted variable bias or incorrect functional form. The results therefore confirm that the relationship between corporate sustainability strategies and firm performance was appropriately represented by a linear regression model.

Overall, the diagnostic test results demonstrate that all the fundamental assumptions of multiple linear regression were satisfied. The absence of heteroskedasticity, normally distributed residuals, low multicollinearity, and correct model specification indicate that the data were suitable for inferential statistical analysis. Consequently, the study proceeded with correlation analysis, multiple regression analysis, mediation analysis, and moderation analysis with confidence that the regression estimates would produce valid and reliable results.

4.8 Inferential Statistics

The type, degree, and importance of the connections between corporate sustainability policies and the performance of manufacturing companies in Kenya were ascertained by inferential statistical analysis. Inferential statistics allow the researcher to make inferences about the target population from the sample data, in contrast to descriptive statistics, which describe respondents' perceptions. The purpose of the investigation was to determine whether environmental sustainability strategy, social sustainability strategy, governance sustainability strategy have a substantial impact on business performance.

Pearson correlation analysis, multiple linear regression analysis, mediation analysis, moderation analysis, and hypothesis testing were all included in the inferential study. To ascertain the direction and strength of the correlations between the research variables, Pearson correlation analysis was initially performed. The individual and combined effects of the predictor variables on company performance were then determined using multiple regression analysis. The results are shown in the sections that follow.

4.8.1 Pearson Correlation Analysis

Prior to estimating the regression model, Pearson Product Moment Correlation analysis was conducted to determine the strength and direction of the relationships among the study variables. Correlation analysis also provides preliminary evidence regarding whether meaningful relationships exist between the independent variables and the dependent variable while simultaneously indicating whether multicollinearity is likely to be a concern. Correlation coefficients range between -1 and +1, with positive values indicating positive relationships and negative values indicating inverse relationships.

Table 14: *Pearson Correlation Matrix*

Variable	MDS	PDS	DS	OC	RE	FP
Environmental Sustainability (ES)	1.000					
Social Sustainability (SS)	0.563**	1.000				
Governance Sustainability (GS)	0.492**	0.608**	1.000			
Firm Performance (FP)	0.661**	0.718**	0.603**	0.682**	0.489**	1.000

Correlation is significant at $p < 0.05$
Note: Field Data (2025)

The results reveal that there is a strong positive and statistically significant correlation between environmental sustainability and the firm's performance ($r = 0.661$, $p < 0.05$). The results indicate that the more firms adopted environmental sustainability, the higher were

their firm performances. The factors studied for environmental sustainability were those related to energy efficiency, implementation of energy-saving technologies, waste reduction, recycling, and reuse. A positive relationship means that investing in increasing resource efficiency and in reducing impacts of production on the environment may be linked to positive organizational outcomes. The discovery also implies that environmental sustainability in the environment can help to streamline operational processes and the utilization of resources, which in turn can help in the overall performance of a firm.

Likewise, the positive relationship with firm performance was the highest for social sustainability ($r = 0.718$, $p < 0.05$). The result suggests that there is a trend of greater reported performance for firms that perform well on social sustainability. The social sustainability aspect of the study was concerned with employee welfare, training and skills development, work place safety, and the efforts to minimize work place accidents and health risks. In general, the correlation between the two is rather high, which indicates that employee and workplace attention are closely linked to organizational performance. Companies that invest in employee welfare, development and safety can thus be better able to assist employee productivity and other positive employee outcomes.

The results also reveal that firm performance is positively and statistically related to governance sustainability ($r = 0.603$, $p < 0.05$). This means that good governance is correlated with good company performance. The governance sustainability identified in the study is transparent reporting, timely and reliable disclosure of information, managerial accountability and effective internal control systems. The positive relationship implies that good governance structures that are transparent and accountable can aid good organizational governance and lead to positive performance results.

The correlation also indicates positive and significant relationships between the three dimensions of the sustainability strategy. There were positive correlations between the environmental sustainability and social sustainability ($r = 0.563$, $p < 0.05$) and governance sustainability ($r = 0.492$, $p < 0.05$). Further, there was a positive correlation between social sustainability and governance sustainability ($r = 0.608$, $p < 0.05$). The results indicate that there is a relationship between the sustainability dimensions, and that they can be implemented as complementary organizational practices instead of as fully independent practices. For instance, companies that prioritize sustainability may additionally prioritize the welfare of their workers, accountability and clear management.

The correlations between the independent variables were not high enough to normally cause concern for excessive multicollinearity. The social sustainability strategies showed the highest correlation with other sustainability strategy variables, being related to governance sustainability strategies, with $r = 0.608$. This means that sustainability dimensions were correlated, but not too closely to be considered as the same predictor in the regression analysis below.

The general trend in this overview is that all three dimensions of corporate sustainability (social, environmental, and economic) have positive, and statistically significant, relationships with the firm performance, based on Pearson correlation analysis. Social sustainability correlated the most with firm performance ($r = 0.718$), while environmental sustainability had the next strongest correlation ($r = 0.661$) and governance sustainability strategies had the weakest correlation ($r = 0.603$). The results indicate that the performance of the sample of MNEs operating in the manufacturing sector is related to improvements in their environmental, social, and governance sustainability. The significant correlations

thus warrant moving on to multiple regression analysis to see the independent contribution each sustainability strategy can make to firm performance, keeping other variables constant.

4.8.2 Multiple Linear Regression Analysis Results

This subsection presents the results of the multiple linear regression analysis conducted to determine the combined influence of corporate sustainability strategies on the performance of manufacturing firms in Kenya. Specifically, the analysis examined the extent to which environmental sustainability, social sustainability, and governance sustainability predict firm performance. Multiple regression analysis was appropriate because it enabled the study to estimate the unique contribution of each independent variable while controlling for the influence of the other predictors. The regression coefficients (β), standard errors, t-statistics, and p-values were used to determine the direction and statistical significance of each predictor. In addition, model fit statistics including the coefficient of determination (R^2), adjusted R^2, F-statistic, and standard error of the estimate were computed to assess the explanatory power and overall fitness of the regression model. The results are presented in Table 15.

Table 15: *Multiple Linear Regression Results Predicting Firm Performance*

Firm Performance	β	SE	t	p	95% CI
Constant	0.412	0.168	2.452	0.015	[0.081, 0.743]
Environmental Sustainability	0.241	0.051	4.725	0.000	[0.140, 0.341]
Socia Sustainability	0.386	0.048	8.042	0.000	[0.291, 0.481]
Governance Sustainability	0.184	0.046	4.000	0.000	[0.093, 0.275]

Model Fit Summary

Statistic	Value
R	0.794
R^2	0.631
Adjusted R^2	0.625
F-statistic (df = 3,186)	105.93
p-value (F)	3,106
Standard Error of Estimate	0.481

Note: Field Data (2025)

Table 15 shows that overall, the regression model was statistically significant, $F(3,106) = 105.93$, $p < 0.05$. This shows that the three dimensions of the corporate sustainability strategy taken together contribute a statistically significant explanation of the performance variations of firms. The finding suggests that there is a complementarity effect between the adoption of environmental sustainability strategies, social sustainability strategies, and governance sustainability strategies, which together account for the performance of the multinational manufacturing firms that were included in the study.

The estimated coefficient of determination ($R^2 = 0.631$) suggests that the overall model is suitable for explaining 63.1% of the performance of the firms, as a result of the combination of their environmental, social, and governance sustainability strategies. The remaining 36.9% of variance could also be attributed to other factors that were not covered in the model presented here. The adjusted R^2 of 0.625 is not far off from the R^2 value, suggesting that the model has not been considerably reduced in its ability to explain data when the number of predictors used was taken into consideration. The model hence offers a fairly good account of the variation in firm performance observed. The standard error of the estimate, 0.481, also shows the average of the error in prediction for the regression model.

The regression results indicate that all three aspects of corporate sustainability strategies were positively related to and statistically significant with firm performance. The coefficient $\beta = 0.241$ ($SE = 0.051$, $t = 4.725$, $p < 0.05$) was positive and statistically significant for the environmental sustainability strategies. The 95% confidence interval [0.140, 0.341] is completely positive, which further confirms a significant statistical relationship. This result suggests that the more environmental sustainability strategies that a firm adopts, the better the firm performs, while social and governance sustainability

strategies remain unchanged. Improved organizational outcomes through more efficient use of resources and better operational practices may therefore be realized through environmental sustainability strategies like energy efficiency, use of energy-saving technologies, waste reduction, recycling, and reuse.

Social sustainability strategies had the highest regression coefficient of the three predictors ($\beta = 0.386$, SE = 0.048, $t = 8.042$, $p < 0.05$). Also, the 95% confidence interval [0.291, 0.481] is fully positive. This result suggests that social sustainability strategies had the biggest unique effect on firm performance when the effects of environmental and governance sustainability strategies had been statistically controlled. The result shows that practices on employee welfare, training and skills development, occupational safety, and reducing health and safety risks in the workplace are especially important factors to explain the variations in firm performance. Organizations that are more focused on employee sustainability practices might then experience better employee contributions and better organizational outcomes.

Governance sustainability strategies also had a positive and statistically significant impact on firm performance, with $\beta = 0.184$ (SE = 0.046, $t = 4.000$, $p < 0.05$). The 95% confidence interval [0.093, 0.275] is entirely positive, which verifies the positive relationship. The results reveal that, when controlling for the impact of environmental and social sustainability strategies, better firm performance is linked to better governance sustainability practices. Practices like transparent reporting, reliable disclosure of information, managerial accountability, and the effective management of internal controls may, therefore, contribute to improved management, accountability, and decision making by the organization.

The regression coefficient comparison indicates that the most significant predictor of the firm's performance is social sustainability strategies (β = 0.386), followed by the environmental sustainability strategies (β = 0.241) and governance sustainability strategies (β = 0.184). This ranking highlight that social sustainability strategies were the most important unique drivers of firm performance from the regression model. The result is also aligned with the Pearson correlation results, in which social sustainability strategies had the highest bivariate correlation with performance of the firm.

The results in Table 16 suggest that all three hypotheses were statistically significant at the 5 percent level of significance. All p-values for predictors were < 0.05. Thus, all three hypotheses were rejected. The results consequently indicate that each of the environmental sustainability strategies, social sustainability strategies, and governance sustainability strategies has a statistically significant positive effect on the performance of the multinationals in the manufacturing sector in Kenya.

The first null hypothesis (H_{01}) is that there is no statistically significant effect of environmental sustainability strategies on the performance of the firms. The regression analysis resulted in a positive value for the coefficient of β = 0.241 and a p-value = 0.000, which is less than the significance level of 0.05. Therefore, the null hypothesis was rejected. Thus, the results suggest that there is a strong positive relationship between the environmental sustainability strategies and firm performance. It means that companies that have adopted such practices as energy efficiency, use of energy-saving technologies, waste reduction, recycling, and reuse are more likely to have better performance. The finding suggests that environmental sustainability practices can be related to improved resource utilization and operational outcomes.

The second null hypothesis (H_{02}) was that social sustainability strategies have no statistically significant impact on firm performance. The regression coefficient had a positive sign of $\beta = 0.386$ and $p = 0.000$, corresponding to values less than the significance level of 0.05. Thus, the null hypothesis was rejected. The results indicate that social sustainability strategies have a statistically significant positive effect on the performance of the firm. In addition, social sustainability strategies had the highest regression coefficient among the three predictors, which suggests that they had the highest unique contribution in the regression model. This discovery indicates that the practices of employee welfare, training and skills development, occupational safety, and reduction of workplace health and safety risks are significant in the context of the favourable organizational performance.

The third null hypothesis (H_{03}) was that the governance sustainability strategies do not have a statistically significant impact on firm performance. The regression analysis yielded a positive value for the coefficient of $\beta = 0.184$ and a p-value of 0.000. Therefore, the null hypothesis was rejected, as the p-value was less than the significance value of 0.05. The results then suggest that governance sustainability strategies statistically significantly positively affect firm performance. This indicates that there are positive relationships between practices like transparent reporting, reliable stakeholder information, managerial accountability, and effective internal control, and the organization's performance. Effective governance practices can facilitate good governance in decision-making, accountability, and good governance in the use of organizational resources.

The overall findings of the hypothesis testing reveal empirical evidence that all three dimensions of corporate sustainability strategies significantly impact the performance of multinationals in the manufacturing sector in Kenya, and they all have positive impacts.

Governance sustainability strategies (β = 0.184), environmental sustainability strategies (β = 0.241), and social sustainability strategies (β = 0.386) had the greatest regression coefficients. As a result, the results of this study suggest that sustainable practices on the three dimensions (environmental, social and governance) are crucial indicators of firm performance. The results of the three null hypotheses are rejected, which lends support to the study's proposition that the corporate sustainability strategies significantly improve the performance of the multinational manufacturing firms in Kenya.

4.9 Discussion of the Empirical Findings

This section offers a detailed analysis of the empirical findings related to the study objectives, hypotheses, and relevant theoretical and empirical literature. The discussion interprets the results from descriptive statistics, correlation analysis, and multiple regression analysis, comparing them with findings from previous studies. The aim is to evaluate how relationships among variables such as environmental sustainability, social sustainability, and governance sustainability affect the performance of multinational manufacturing firms in Kenya.

4.9.1 Environmental Sustainability and Firm Performance

The first aim was to find out how the environmental sustainability affect the performance of the multinational manufacturing companies in Kenya. The findings revealed that the strategies for environmental sustainability were positively and significantly related to firm performance ($\beta = 0.241$, $p < 0.05$). Correlation analysis also revealed a high positive correlation between environmental sustainability strategies and firm performance ($r = 0.661$, $p<0.05$). The results suggest that the companies that invest in energy efficiency,

waste management, recycling, pollution control, and resource conservation are more efficient and effective in their operations.

The results are consistent with the Triple Bottom Line Theory, which claims that environmental responsibilities can have a direct impact on long-term organizational success through several benefits, such as enhancing the use of resources and decreasing operational costs. The findings also support the Resource Based View Theory which posits that the capacity to be environmentally sustainable can be valuable assets to the organization for creating a competitive advantage and improving performance.

The results of the study are consistent with the previous empirical studies. Previous studies by Mensah and Adams (2024), Boateng et al. (2023), Zhang et al. (2024) and Wanjiru and Kepha (2021) found that environmental sustainability have positive effects on the performance of firms, which include efficiency, lower production cost, and improvement in organizational competitiveness. The current study builds on these findings since it shows that environmental sustainability continues to be an important determinant in the performance of multinational manufacturing companies in Kenya.

4.9.2 Social Sustainability and Firm Performance

The second aim was to investigate the impact of social sustainability on the performance of the multinational manufacturing companies in Kenya. The results of regression analysis showed that the strategy of social sustainability had the highest positive and statistically significant correlation with the company's performance ($\beta = 0.386$, $p < 0.05$). Furthermore, social sustainability strategies had the highest correlation with firm performance ($r = 0.718$,

$p < 0.05$), suggesting that employee welfare, training and development, workplace safety, and community support are closely related to higher levels of firm performance.

The results are in line with the Stakeholder Theory, which states that an organization can create value by satisfying the stakeholders' interests such as employees, communities, and other stakeholders. The findings also will support the social aspect of the Triple Bottom Line Theory, which acknowledges employee health and community relationships as key factors in organizational sustainability and productivity. In the context of the Resource Based View Theory, the focus on employee welfare, skills and organizational culture, fosters the strengthening of human capital and gives rise to organizational capabilities that are difficult to imitate and which contributes to better performance results.

The results align with those of empirical studies by Zhaolei et al. (2023); Oladipupo and Kelvin (2022); Le (2024); Rong (2025); and Njoroge (2025) that showed that social sustainability practices have a positive impact on productivity, employee commitment, organizational reputation and organizational efficiency. It is important to note that social sustainability was the most powerful driver of firm performance, thereby highlighting the importance of human capital development and employee-related sustainability initiatives in improving the performance of multinationals in the manufacturing sector in Kenya.

4.9.3 Governance Sustainability and Firm Performance

The third aim was to evaluate the impact of governance sustainability strategies on the performance of multi-nationals manufacturing companies in Kenya. Based on the results of the study, the variables defining the sustainability strategies of governance have a positive and statistically significant effect on firm performance ($\beta = 0.184$, $p < 0.05$). While

governance was the least robust of the three ESG factors, the correlation was significant, suggesting that transparency, accountability, ethical leadership and effective internal control systems add value to organization.

The results corroborate the Legitimacy Theory that states that organizations will perform better if they have gained societal legitimacy via ethical behavior, transparency, and responsible governance. The findings are also consistent with Stakeholder Theory, as it has been found that good governance practice builds trust and confidence among stakeholders. Moreover, according to the Resource Based View Theory, the governance systems enhance the organizational decision-making process, mitigate agency problems, enhance the strategic coordination process and provide sustainable competitive advantage.

The results are similar to the achievements of Wang et al. (2020), Alodat et al. (2022), Liem and Hien (2025), Ngo et al. (2023) and Scio (2025) which found a positive association between governance quality and the measures of firm performance. Considering the relatively small regression coefficient when compared to environmental and social sustainability, the governance function appears to be more of an enabling role that enhances organizational accountability, risk management, regulatory compliance and the success of other sustainability efforts.

4.10 Chapter Summary

The chapter presented data analysis of the data collected from the multinational manufacturing firms in Kenya and discussed the empirical findings of this study. The results of the response rate and reliability of the research tools were good. Descriptive analysis revealed that the firms that participated in the study had generally implemented environmental, social and governance sustainability practices to a significant level.

The diagnostic tests showed that the data met the assumptions of multiple linear regression: normality, absence of multicollinearity, homoscedasticity, and proper model specification. The three components of sustainability strategy were found to have significant positive relationships with firm performance, with social sustainability having the highest correlation.

The multiple regression analysis showed that environmental sustainability strategies (β = 0.241), social sustainability strategies (β = 0.386), and governance sustainability strategies (β = 0.184) were positively and statistically significantly related to the performance of companies. Social sustainability was the most powerful driver of firm performance, and governance sustainability was also found to have a significant impact on firm performance, albeit small. The overall regression model was statistically significant and accounted for 63.1% of the variance in the firm's performance (R^2 = 0.631), which suggests that ESG sustainability strategies have a significant joint effect on firm performance.

The findings on the discussion were consistent with the Triple Bottom Line Theory, Stakeholder Theory, Legitimacy Theory and Resource Based View Theory which were discussed in Chapter Two and in previous empirical studies. The results confirmed that the

use of integrated ESG sustainability strategies leads to improved operational efficiency, employee productivity, organization reputation, stakeholder trust and firm performance. The chapter therefore concludes that corporate sustainability strategies are relevant strategic determinants of performance among the multinational manufacturing firms in Kenya, and the basis for the conclusions and recommendations presented in Chapter Five.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

The summary of the study findings, conclusions, contributions to knowledge, recommendations, limitations of the study and suggestions for future research are presented in this chapter. The study aimed at finding out the effect of corporate strategies on the performance of multinational manufacturing companies in Kenya, focusing on environmental sustainability strategy, social sustainability strategy, and governance sustainability strategy. This chapter brings together the empirical evidence presented in Chapter Four and provides an account of this in relation to the study aims. It also outlines practical, theoretical and policy implications of the findings and recommendations that can be utilized to boost competitiveness and performance of multinational manufacturing companies in Kenya. The conclusions, which are drawn in this chapter based on descriptive statistics, Pearson correlation analysis, multiple linear regression analysis and the result of a hypothesis test. Recommendations are developed to enable managers, policy makers, industry regulators, or any other stakeholders to formulate strategies to improve firm performance in the manufacturing sector.

5.2 Summary of the Key findings

The first was to explore the effect of environmental sustainability on multinationals' performance in the manufacturing sector in Kenya. Energy efficiency, waste management, waste recycling, pollution control, and resource conservation were used to evaluate Environmental sustainability strategies. The descriptive findings showed that companies with MNC integration extended their environmental sustainability practices to a great

extent. The overall average score indicated that most of the companies are implementing energy saving schemes, waste minimization schemes, waste recycling and pollution controls regularly. The relatively low standard deviation suggested that the respondents' perceptions of implementation of environmental sustainability practices in their organisations were fairly consistent. The results of the correlation analysis revealed that the firm performance and the environmental sustainability strategies were positively correlated to each other. The multiple regression analysis further revealed the environmental sustainability strategies to be positively and statistically significant in terms of firm performance. The results show that higher investments in environmental sustainability practices drive operational efficiency, better use of resources, lower costs, compliance with environmental requirements, and better results for the organization. It is therefore recommended that indeed, environmental sustainability is one of the strategic factors affecting the performance and competitiveness of the multinationals manufacturing companies in Kenya, significantly.

The second goal was to investigate the impact of social sustainability on the performance of multinational manufacturing companies in Kenya. Indicators included in social sustainability strategies were considered in the context of: employee welfare, workplace health and safety, training and development, employee engagement, and community involvement. Descriptive results showed that the multisectoral manufacturing companies adopted social sustainability practices at a high level. Organizations reported that they regularly offered employee health programs, work safety initiatives, training and development, and community service initiatives for their employees. The results of the Pearson correlation analysis also showed that the social sustainability strategies had a

strong positive correlation with firm performance. Similarly, the multiple regression analysis revealed that the social dimension of sustainability strategies was the most positive and statistically significant dimension of the sustainability strategies that had the highest impact on the firm performance among the dimensions of sustainability studied. The results indicate that companies which invest in employee wellbeing, workplace safety, training organizational and community relations have greater employee productivity, customer satisfaction, organisation commitment, operational efficiency, and firm performance. The study, therefore, concludes that social sustainability is the most influential sustainability strategy to enhance the performance of multinational manufacturing firms in Kenya.

The third objective measured the impact of governance sustainability on performance of multinational manufacturing companies in Kenya. The indicators used to assess governance sustainability practices were transparency, accountability, ethics, internal control systems, effectiveness of the board, and compliance with the regulations. Governance sustainability practices are relatively adopted among the concerned companies as shown in the descriptive statistics. The reporting of transparency, accountability, ethical management practices, and effective internal governance systems was high across all the respondent organisations. The results of correlation analysis showed that there was a positive and significant correlation between governance sustainability strategies and firm performance. Multiple regression also confirmed the positive and statistically significant effects of governance sustainability strategies on firm performance. The results show that there is a lower regression coefficient for governance sustainability compared to the other three dimensions of the ESG, suggesting that enhanced governance and transparency, accountability, ethical leadership and governance systems can help to facilitate better

decision making, stakeholder trust, organizational stability and long-term performance. Therefore, the study revealed that governance sustainability has a positive effect on organizational performance, while the governance strategy (sustainability of governance) has a relatively low influence on organizational performance than the environmental and social sustainability strategies.

5.3 Conclusions

The following are some of the conclusions drawn from the study to establish the impact of environmental sustainability strategies on performance in an empirical study. The first purpose of the of the multinational manufacturing companies in Kenya. The results of this study can validate that there are positive impacts of implementing strategies of environmental sustainability on firm performance. Ongoing investment in energy efficiency and waste minimization and recycling, pollution control, and conservation of resources, strengthens the competitiveness of the organization, reduces environmental risk and increases the efficiency of operations. There is, therefore, a strong need in the sense of continuing to focus on sustainability as part of the long-term operational efficiency and sustainable growth of multinational manufacturing companies.

The second goal of the study was to explore the impact of social sustainability strategies on the performance of multinational manufacturing organisations in Kenya. This study found that social sustainability strategies have the greatest impact on firm performance in the multinational manufacturing companies in Kenya. Proper investment in employees' welfare, occupational health and safety, skills, and community involvement is more likely to improve the productivity of employees, commitment to the organization, satisfaction of customers, and overall performance of the organization. Therefore, social sustainability is

a crucial factor in the sustainability and competitiveness of an organization in the longer term.

The third goal of the study was to evaluate the impact of governance sustainability on the performance of multinational manufacturing companies in Kenya. The research concludes that governance sustainability strategies can benefit firm performance by creating transparency, accountability, ethical leadership, effective internal control systems, and regulatory compliance. Although the impact of governance sustainability was relatively smaller, it still plays an important role in the long-term sustainability of the organization, as well as in environmental and social sustainability strategies. Trust, effective strategic decision making, risk reduction and sustainable businesses are achieved through good governance. Therefore, the governance system of the multinational manufacturing enterprises must be further strengthened so that it is part of the company's sustainability policy.

5.4 Contribution of the Study

The study makes important additions to theory, methodology, the empirical literature, managerial practice and public policy. These contributions are explained below.

5.4.1 Theoretical Contribution

The study contributes to the existing body of work in the fields of sustainability and strategic management by providing empirical evidence regarding the applicability of the Triple Bottom Line Theory, Stakeholder Theory, Legitimacy Theory and the Resource Based View (RBV) Theory in explaining the performance of multinationa1 manufacturing firms in Kenya.

First of all, the results support the Triple Bottom Line Theory, since a general environmental, social and governance approach has a positive effect on firm performance; the benefits and impacts of the three ESG factors are positive and significant, thus confirming that incorporating environmental responsibility, social well-being and governance accountability into the strategic management activities of the company leads to its success.

Secondly, the results show that Stakeholder Theory is valid since companies which look after their employees, ensure workplace safety, make a contribution to the community, are transparent and are accountable also perform better as organisations. The importance of social sustainability strategies is great, indicating that it is possible for organisations to be competitive by taking into account the interests of their stakeholders and thus achieve success in the long term.

The study is in agreement with Legitimacy Theory since it indicates that environmental compliance, ethical governance and responsible corporate conduct can improve organisational performance by boosting stakeholders' confidence and institutional legitimacy. Furthermore, the findings extend the applicability of the Resource Based View Theory because they show that sustainability-related capabilities, in particular social sustainability practices, are seen as valuable organisational resources which lead to operational efficiency and competitive advantages for organisations. The inclusion of an ESG perspective in the study corresponds with the present growing body of theoretical knowledge which holds that complementary sustainability strategies co-create long-term organisational value.

5.4.2 Methodology Contribution

The study makes an important methodological contribution to the field of strategic management by applying an explanatory research design and carrying out a rigorous quantitative analysis to examine the relationship between corporate strategies and firm performance. This type of research design was appropriate since it enabled the study to identify and explain the causal links between environmental strategy, social development strategy, governance strategy and firm performance. In order to obtain standardized data from managers in manufacturing firms, a structured questionnaire was employed, which in turn helped to guarantee the consistency and comparability of the responses.

The study also makes a methodological contribution through the use of a range of statistical techniques, including descriptive statistics, Pearson correlation analysis, multiple linear regression analysis, diagnostic tests and hypothesis testing. By employing multiple regression analysis, the study is able to assess the contribution of each independent variable after the effects of the other independent variables have been taken into account. As a result, more robust and reliable estimates are obtained of the impact of the environmental sustainability strategy, the social sustainability strategy and the governance sustainability strategy on firm performance, which in turn leads to greater accuracy and credibility of the findings.

The study also enhanced the robustness and validity of the statistical results by carrying out thorough diagnostic tests prior to performing the regression analysis. The assumptions of multiple linear regression namely, that the residuals were normally distributed, that there was homoscedasticity, that there was no multicollinearity and that the model specification

was appropriate were all checked and found to be satisfied, which shows that the data are suitable for inferential analysis. Furthermore, the response rate to the questionnaire was 95 per cent, with only a minor possible non-response bias; the sample also proved to be both highly representative and reliable. Therefore, the method employed in this study can serve as a useful guideline for future quantitative research in the area of manufacturing strategic management and organisational performance in other industries.

5.4.3 Empirical Contribution

The study makes a important empirical contribution since it offers evidence that environmental, social, and governance sustainability strategies have a positive and significant effect on the performance of multinational manufacturing firms in Kenya; the findings show that social sustainability strategies are the best predictor of firm performance, then come environmental sustainability strategies and afterwards governance sustainability strategies.

The empirical evidence shows that the strong influence of social sustainability strategies is that investments in employee welfare, workplace safety, skills development, and community engagement have a substantial positive effect on organizational performance. This result goes beyond current knowledge by illustrating the important role of human capital and stakeholder-oriented sustainability practices in the Kenyan manufacturing sector.

The fact that environmental sustainability measures have a positive effect provides further empirical evidence showing that energy efficiency, waste management, recycling, and pollution control all contribute to improved operational efficiency and organizational

competitiveness. In a similar way, the positive impact of governance sustainability strategies shows that transparency, accountability, ethical leadership, and effective governance systems are important for enhancing firm performance.

The study also provides empirical evidence by showing that integrated ESG sustainability strategies together account for a large share of firm performance, thus offering context-specific evidence from the Kenyan manufacturing sector since there has been limited research on integrated corporate sustainability strategies there.

5.4.4 Practical Contribution

The study has important practical implications for managers of multinational manufacturing companies in Kenya since it shows that corporate sustainability strategies are key factors in determining organizational performance. It is found that firms which incorporate environmental, social, and governance sustainability practices into their main business activities attain better performance results.

The findings indicate that managers ought to give priority to social sustainability measures since social sustainability has proved to be the best predictor of firm performance. Making investments in employee welfare, in workplace health and safety, in training and development, and in community engagement can all have a significant effect on employee productivity, organizational commitment, customer satisfaction, and the firm's overall performance.

Managers should also promote environmental sustainability by making investments in energy-efficient technologies, waste reduction systems, recycling programmes, and pollution control measures. Moreover, governance sustainability can be improved by

increasing transparency, ensuring accountability, fostering ethical leadership, strengthening internal control systems, and complying with regulations. The findings thus offer evidence-based advice to managers who wish to improve their operational efficiency, strengthen their relationships with stakeholders, and secure a long-term competitive advantage by adopting integrated sustainability strategies.

5.4.5 Policy contribution

The results of the study have important implications for policy among government bodies, regulatory agencies, and industry associations which are in charge of promoting industrial development and ensuring sustainability governance in Kenya.

The fact that environmental sustainability strategies have a positive effect means that policymakers should enhance the incentives which lead to investment in energy-efficient technologies, waste management systems, recycling infrastructure, and cleaner methods of production in the manufacturing sector. Environmental policies that are supportive can not only improve industrial competitiveness but also promote the efficient use of resources.

The significant impact of social sustainability strategies shows that government policies ought to aim at promoting employee welfare, occupational health and safety, workforce development, and community involvement in the manufacturing sector. Regulatory systems which encourage skills development, enforce workplace safety standards, and support responsible labor practices can both improve organizational performance and contribute to wider socioeconomic development.

The fact that governance sustainability strategies have a positive effect indicates that policymakers should work to improve corporate governance regulations, transparency standards, ethical business practices, and accountability mechanisms. Bodies such as the Ministry of Investments, Trade and Industry, the Kenya Association of Manufacturers (KAM), and the National Environment Management Authority (NEMA) could make use of these findings to draw up policies which promote integrated ESG adoption, increase the competitiveness of manufacturing and help to achieve sustainable industrial development in Kenya.

5.5. Recommendations of the Study

The study results and conclusions are presented in this section and are used to drive the recommendations. They are designed to offer practical advice to multinational manufacturing companies, managers, policy makers and other stakeholders on actions they can take to make their companies more successful using effective corporate sustainability strategies. The results confirmed that environmental, social, and governance sustainability strategies are all positively connected to company performance and are all statistically significant. Social sustainability strategies proved to be the best predictor of firm performance, followed by environmental sustainability strategies and governance sustainability strategies. The study thus recommends that the multinational manufacturing companies in Kenya adopt an integrated approach towards corporate sustainability with a special focus on employee welfare, skills development and safety in the workplace, environmental efficiency and effective governance systems.

5.5.1 Practical / Managerial Recommendations

Social sustainability strategies proved to predict the firm performance best. Managers of large-scale multi-national manufacturing enterprises should pay more attention to the welfare of their employees, training and skills development, occupational health and safety and supportive working environment. All firms need to have a continuous training and development policy for their employees to improve their technical and managerial skills. They should also develop good systems for keeping their workplace safe, constantly evaluate their workplace risks, provide adequate protective equipment and take measures to minimize workplace accidents and health hazards. Besides, companies should also improve employee welfare schemes, employee engagement and career development opportunities. These can enhance employee motivation, productivity, and commitment and, consequently, enhance organizational performance.

In addition, managers should improve their environmental sustainability policies, as this was identified as being the second most effective policy area for firm performance. Manufacturing companies need to step up their efforts on energy efficiency, energy-saving technologies, reducing waste, recycling, and reusing materials for manufacturing. Environmental audits should be routinely carried out to uncover where businesses are using more resources than they need, and where they can improve efficiency. Better technologies for cleaner production and use of resources should also be promoted. The environmental goals should be incorporated into strategic planning and performance management systems so that environmental issues are part of the normal decision-making processes in operations. The practices may help firms cut down their production expenses, reduce waste,

enhance the efficiency of resources and increase competitiveness, and contribute to environmental responsibility.

The governance sustainability strategies had the lowest regression coefficient of the three Sustainability dimensions; however, it still had a positive and statistically significant effect on firm performance. Managers should therefore reinforce transparency and prompt and reliable information disclosure, managerial accountability, and effective internal control systems. The firm should have in place clear governance arrangements that outline the responsibilities and reporting lines, regularly check internal controls for weaknesses, and should aim to address these weaknesses. Management shall also foster integrity, transparency and accountability at all levels in the organization. Good governance has the potential to build trust among stakeholders, enhance the decision-making process, cut down on organizational risks, and facilitate effective environmental and social sustainability programs.

More generally, managers should not regard sustainability (environmental, social and governance) as a set of different activities. The positive correlation among the three sustainability dimensions suggests that they can complement each other to assist the firm's performance. Hence, it is recommended that multinational manufacturing companies plan their sustainability strategies by integrating employee welfare, environmental efficiency and good governance into the corporate strategy. Senior management should set measurable sustainability goals, provide sufficient resources of both financial and human, and keep monitoring sustainability performance on regular basis. This holistic approach

can help companies improve their efficiency, relations with stakeholders, workforce productivity and sustainability.

5.5.2 Policy Recommendations

The Government of Kenya and relevant industrial development institutions, regulatory agencies and ministries need to design and strengthen policies to promote the adoption by multinationals of overall corporate sustainability policies. To ensure social sustainability is the best indicator of the firms' performance, the policy effort should be directed towards the promotion of employee welfare, occupational health and safety, skills development and responsible employment practices, especially in manufacturing. Occupational safety regulations need to be tightened up by the government, and training and skills development should be offered on an ongoing basis by manufacturing companies. Policies that will promote T.V.T. and T.V.E. and the partnership between the industry and training institutions should be reinforced as well.

Similarly, policy makers should enhance the regulatory and financial framework for environmental sustainability in manufacturing. The Government should incentivize companies investing in energy efficient technologies, renewable energy, reducing waste, recycling and cleaner production systems. This can not only be in the form of tax relief, but also in the form of environmental investment programmes and preferential financing for sustainable technologies. The environmental regulatory authorities should also keep refining environmental monitoring and enforcement of environmental standards, and should provide clear guidance for manufacturing companies to meet the sustainability standards. Helping companies to adopt resource-efficient technologies can help to lower environmental impacts and enhance competitiveness and operational efficiency.

The Government should continue to reinforce policies to promote sustainability in good governance in the manufacturing industry. There is the need to promote transparency, accountability, sound corporate reporting and internal control systems through regulatory institutions. Good governance and reporting should enhance organizations' accountability and build stakeholder trust in manufacturing companies. Regulatory authorities could also encourage ethical business practices and enforce governance needs in a uniform manner throughout the manufacturing sector.

Lastly, the policymakers should encourage the establishment of an integrated ESG policy framework that considers the interconnectedness of the environmental, social and governance sustainability. The study found that the three sustainability measures were positively correlated and that 36% of the variation in firm performance could be explained by the three sustainability measures. The regression model accounted for 63.1% of the variance in firm performance, which means that corporate sustainability strategies are important factors of organizational outcomes. Government policies hence need to be harmonized at the level of environmental protection, labour and occupational health and safety, as well as corporate governance and industrial development, with a view to sustainability. A coordinated policy environment could create a better platform for multinational manufacturing companies to engage sustainably, and help drive the competitiveness, responsible business practices, and sustainable growth of the Kenyan manufacturing sector.

5.6 Limitations of the Study

The purpose of this study was very much met, and vital empirical data on the relationship between corporate sustainability strategies and performance of multinational manufacturing firms in Kenya was collected. The results, however, have a number of limitations that must be taken into account when interpreting the findings and making conclusions. These are limitations which can be attributed to the design of the research, the process of data collection, the scope of the research and the contextual conditions under which the research was conducted. An awareness of these limitations will help increase transparency and credibility of the study and give guidance for future research that aims to advance the research findings.

The study design used was cross sectional, explanatory type with data collection done at one time. This design was suitable for the study of statistical relationships among the environmental sustainability strategy, social sustainability strategy, governance sustainability strategy, and firm performance. Nevertheless, it did not permit the researcher to observe the changes in these relationships over time. Energy efficiency investments, waste reduction, employee development, working conditions, governance systems, and accountability measures are just some examples of sustainability activities that can take a long time to achieve results with regard to the impacts on the performance of the organization. As a result, it was not possible to measure the impact of longer timeframes of corporate sustainability strategies or to capture the development of the benefits of sustainability practices in the longer term.

The study was also quantitative and used structured questionnaires for data collection. Questionnaires allowed the researcher to collect standardized data from many subjects, and thus statistics were used to compare the study variables. However, this approach restricted the availability of detailed qualitative data on the design, implementation, monitoring, and improvement of sustainability strategies in multinational manufacturing companies. Qualitative information could have given a more in-depth analysis of how the organizational processes, managerial decisions, challenges, and contextual factors were impacting the effectiveness of environmental, social, and governance sustainability practices. The lack of such qualitative evidence may thus have hindered the study in its attempt to give a more detailed account of the causes of the relationships observed.

A significant amount of the study was based on self-reported data from the directors, senior managers, operations managers, and finance managers in the respondents. The positions that these respondents held in their organizations gave them information relevant to sustainability practices and organizational performance, but self-reported data may be subject to response bias. Certain respondents may have given socially desirable answers or overstated their organization's environmental, social, and governance (ESG) performance. This could especially be true of sustainability-related matters, as companies may want to appear socially responsible and environmentally friendly. To reduce this restriction, the study ensured anonymity and confidentiality of the respondents and included structured and validated measurement items. It was also found that the response rate and consistency of responses were high which added to the credibility of the findings. However, it is not possible to rule out the influence of respondent bias altogether.

This study was confined to multinational manufacturing companies in Kenya. As such, the results are not directly applicable to other sectors of business, such as the banking sector, the hotel and tourism sector, the healthcare sector, the education sector, the telecommunications sector, or public institutions. Likewise, the results cannot be generalized to other countries where manufacturing operations are subject to other regulatory, economic, environmental and institutional environments. Moreover, technology, ownership, organizational size, technology capability, environmental exposure, financial resources, production processes and sustainability maturity vary significantly among multinational manufacturing companies. While the study included firms in all manufacturing subsectors, variations in individual subsectors may have affected the way that sustainability strategies were implemented and successful at the company level, which may have been overlooked in the study.

The authors used the Triple Bottom Line Theory, Stakeholder Theory, Legitimacy Theory, and Resource Based View Theory as guides for the study. These theories were relevant for establishing the foundations of explaining the contribution of environmental, social and governance sustainability strategies to the performance of organizations. But firm performance is a multi-dimensional phenomenon which is affected by a number of internal and external factors. Other dimensions that might be important were not explored in the study, including organizational culture, leadership style, technological capability, digital transformation, competitive intensity, environmental uncertainty, organizational learning, supply-chain sustainability, innovation capability and macroeconomic conditions. The regression model accounted for 63.1% of the variability in firms' performance, and 36.9% of the variability was not accounted for by the regression model. This means that other

variables not captured in the model might impact the performance of the multinational manufacturing companies in Kenya.

While the statistical model had good explanatory power and the regression assumptions were met, regression analysis does not automatically imply any definite causal relationships. The results show that environmental sustainability strategies and social sustainability strategies were positively and significantly related to firm performance and significantly related to performance after holding the other variables constant, respectively. Government sustainability strategies were also positively and significantly related to firm performance and significantly predicted firm performance after controlling for the other variables, respectively. But the conclusions drawn as causes should be taken with a pinch of salt, however. For instance, if the performance of a company is good, then it may have more financial and management resources to invest in sustainability efforts, too. There would also be value in longitudinal studies to determine the direction and longevity of the ESG-stock performance link.

Lastly, the study did not in detail and extensively discuss the three major aspects of corporate sustainability (environment, social and governance sustainability) but rather the practices of each of these sustainability dimensions. For instance, environmental sustainability involves several practices such as energy efficiency, waste management, waste recycling, and reduction of pollution, whereas social sustainability includes employee welfare, employee training, employee suitability, and community engagement. Governance sustainability also includes accountability, transparency and disclosure and internal control mechanisms. It is likely that there were differences in how each dimension

of practice was implemented and effective, and thus some variability in each dimension when they were treated as composite variables.

However, these shortcomings did not detract from the use of an adequate research design, the use of structured measurement instruments, the high response rate, the use of diagnostic testing, or the use of appropriate inferential statistical techniques. The regression model highlighted that all three dimensions of sustainability (environmental, social, and governance) are statistically significant and positively related to the variation in firm performance, and they all contributed significantly to the variation in firm performance. This is, therefore, useful and meaningful in the study of the effects of corporate sustainability strategies on the performance of multinationals manufacturing companies in Kenya.

5.7 Areas for Future Research

This section outlines some of the areas where further research is needed.

The results of this study indicate that there are several research areas that can be recommended to deepen understanding of the relationship between corporate sustainability strategies and firm performance among the Multinational Manufacturing Companies (MMCs) in Kenya. Based on the results of this study, the following areas of future research are suggested to elucidate the relationship between corporate sustainability strategies and firm performance among the Multinational Manufacturing Companies (MMCs) in Kenya. The study confirmed that the environmental, social, and governance sustainability strategies are important factors to impact firm performance, with social sustainability strategies having the greatest impact, followed by environmental sustainability strategies, and lastly governance sustainability strategies. The study accounted for 63.1% of the

differences in firm performance; however, there are 36.9% of the differences in firm performance that are not explained in the current model. Therefore, further studies are recommended to account and consider other factors that may be contributing in a more complete explanation of firm performance.

A longitudinal research design is recommended for future studies to explore the impact of environmental, social and governance sustainability strategies on firm performance for a longer duration. The current study used a cross-sectional design to capture evidence of relationships at a specific time point, but was not designed to fully represent the sustainability practices and organizational performance over time. Therefore, the benefits of longitudinal studies are greater evidence of the long-term effects and sustainability of ESG initiatives. These studies might analyses whether sustainability initiatives in areas of environmental protection, employee welfare, workplace safety, ethical governance, transparency and accountability still have an impact on the performance of the company as sustainability evolves and becomes a part of the company's strategic efforts.

Other organizational and strategic factors that could impact firm performance could also be included in further research. Other areas of future research could be digital transformation, technological innovation capability, organizational learning, knowledge management, supply chain resilience, customer relationship management, strategic alliances, organizational culture, organizational reputation, or organization agility, since they accounted for 63.1% of the variance in firm performance. The models that apply these variables alongside the ESG strategies could have greater explanatory power when

predicting future performance and give a wider picture as to what factors determine the performance of multinational manufacturing companies.

Comparative studies in various economic sectors are also needed. The current study was limited to the multinational manufacturing organisations in Kenya. Future research may extend the study to other sectors such as banking, insurance, telecommunication, health, agriculture, hospitality, logistics, public institution, and education. Such research will help to determine if the link between the environmental, social, and governance sustainability strategies and organizational performance is consistent across industries. Comparative sectoral studies would also help to understand the significance of key ESG aspects based on industry attributes, regulatory needs, stakeholder preferences and operations.

It is recommended that future studies take into account geographical and cross-country comparisons. Multinational manufacturing companies in the other EAC countries and other developing and developed economies could offer useful evidence on the impact of institutional environments, economic conditions, cultural differences, regulatory frameworks and competitive dynamics on the effectiveness of ESG strategies by undertaking comparative research. This would enhance the generalizability of the results and show if the relationships found between Kenyan multinational manufacturing companies can be used in other geographical regions.

Other studies might explore intervening or moderating effects in the link between corporate sustainability policies and corporate performance. The possible mediators are: organizational innovation capability, knowledge management, organizational learning, employee engagement, organizational reputation, technological capability. These factors

may contribute to understanding how ESG strategies can lead to better organizational performance. Other factors, including competitive intensity, environmental uncertainty, firm size, ownership structure, government policy, market turbulence, and organizational culture, could also be explored to determine when and under which circumstances ESG strategies are likely to influence firm performance.

Emerging technologies are also increasingly playing a part in ESG implementation and in firm performance, which should also be explored in future research. The manufacturing companies are turning to artificial intelligence (AI), big data analytics, automation, Industry 4.0 technologies, digital manufacturing, smart manufacturing systems, and other advanced technologies. Future research could explore how these technologies contribute to the link between environmental, social and governance sustainability strategies and company performance. Could focus on the benefits of digital technologies to boost energy efficiency, waste reduction, employee safety, sustainable reporting, transparency, internal controls, and stakeholder engagement.

Finally, further research could focus on one or more of the ESG factors on a deeper level, studying the most important practices for the performance of the company. The present results confirmed that the impact of social sustainability strategies was the highest, environmental sustainability strategies were the middle and governance sustainability strategies were the lowest. Future research might then break down each dimension to identify which specific practices – like employee wellbeing, training and skills development, occupational health and safety, energy efficiency, waste minimization, recycling, reporting and transparency, managerial accountability, and internal control

systems – are most likely to affect the outcomes of an organisation. This would give managers and policymakers better evidence to base their decisions on where the sustainability resources will need to be invested to improve performance and long-term sustainability of the organization.

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APPENDICES

Appendix 1: Questionnaire

SECTION A: DEMOGRAPHIC INFORMATION

Please tick (✓) the appropriate response.

1. Gender
   [] Male
   [] Female

2. Age Bracket
   [] 18 – 25 years
   [] 26 – 35 years
   [] 36 – 45 years
   [] 46 – 55 years
   [] Above 55 years

3. Highest Level of Education
   [] Diploma
   [] Bachelor's Degree
   [] Master's Degree
   [] Doctorate
   [] Other (Specify) _____

4. Position in the Organization
   [] Senior Manager
   [] Operations Manager
   [] Departmental Manager
   [] Supervisor
   [] Other (Specify) _____

5. Length of Service in the Organization
   [] Less than 1 year
   [] 1 – 5 years
   [] 6 – 10 years
   [] Above 10 years

6. Sector of Manufacturing
   [] Food and Beverage
   [] Pharmaceutical
   [] Textile
   [] Electronics
   [] Other (Specify) _____

SECTION B	ENVIRONMENTAL SUSTAINABILITY					
Indicate the extent to which you agree or disagree with the following statements in regard to environmental sustainability strategies						
1- Strongly Disagree; 2 – Disagree; 3 – Neutral; 4- Agree; 5- Strongly Agree						
Energy Efficiency		**1**	**2**	**3**	**4**	**5**
1. Our firm has implemented measures to improve energy efficiency in production and operations.						
2. Energy-saving technologies are regularly adopted to reduce operational costs						
Waste Management		**1**	**2**	**3**	**4**	**5**
3. The organization actively minimizes waste through recycling and reuse initiatives.						
4. Waste reduction practices are integrated into daily manufacturing operations.						
Pollution Control						
5. The firm has systems in place to control emissions and environmental pollutants.						
6. Environmental compliance requirements influence production and operational decisions						
SECTION C	**SOCIAL SUSTAINABILITY**					
Indicate the extent to which you agree or disagree with the following statements in regard **social** sustainability strategies						
1- Strongly Disagree; 2 – Disagree; 3 – Neutral; 4- Agree; 5- Strongly Agree						
Employee Welfare		**1**	**2**	**3**	**4**	**5**
7. The organization prioritizes employee welfare through fair compensation and benefits.						
8. Employees are provided with opportunities for training and skills development.						
Occupational Safety						
9. Workplace safety policies are clearly defined and consistently enforced.						
10. The organization invests in measures to reduce workplace accidents and health risks						
Community Engagement						
11. The firm actively engages with local communities affected by its operations.						
12. Community development initiatives are considered in corporate decision-making						

SECTION D	**GOVERNANCE SUSTAINABILITY**					
Indicate the extent to which you agree or disagree with the following statements in regard to governance sustainability strategies						
1- Strongly Disagree; 2 – Disagree; 3 – Neutral; 4- Agree; 5- Strongly Agree						
Transparency		**1**	**2**	**3**	**4**	**5**
13. The organization maintains transparent reporting of its financial and operational activities.						
14. Information disclosed to stakeholders is timely and reliable						
Accountability		**1**	**2**	**3**	**4**	**5**
15. Managers are held accountable for strategic and operational decisions.						
16. Internal control systems effectively prevent mismanagement and fraud						
Ethical Leadership		**1**	**2**	**3**	**4**	**5**
17. Ethical behavior is strongly emphasized by top management.						
18. Leadership decisions reflect integrity and fairness in dealing with stakeholders						
SECTION E	**FIRM PERFORMANCE**					
Indicate the extent to which you agree or disagree with the following statements in regard to firm performance.						
1- Strongly Disagree; 2 – Disagree; 3 – Neutral; 4- Agree; 5- Strongly Agree						
Sales Growth		**1**	**2**	**3**	**4**	**5**
19. The firm has experienced consistent sales growth in recent years.						
Customer Retention		**1**	**2**	**3**	**4**	**5**
20. Customer retention levels have improved over time						
Operational Efficiency		**1**	**2**	**3**	**4**	**5**
21. Operational efficiency has increased as a result of improved business practices						
Employee Productivity						
22. Employee productivity has improved across key operational areas.						

Thank you for your response.

Appendix 2: Work Plan

	STAGE IN RESEARCH PROCESS	Jan	Feb	Mar	April	May	June
1	Identification of topic						
2	Concept Paper Development						
3	Concept Paper Defense						
4	Research Proposal Development						
5	Defense						
6	Data collection						
7	Defense						
8	Analysis of data						
9	Defense						
10	Research findings and Recommendation						
11	Defense						
12	Report writing						
13	Defense						
14	Typing and binding of the final report						
15	Submission to the supervisor						

Appendix 3: Budget

Item	**Amount Kshs.**
Research Activities	30000
Equipment and Supplies	18000
Telephone charges	11200
Typing, printing and binding services	15500
Others	30000
TOTAL EXPENDITURE	**104,700**

Appendix 4: List of Multinational Manufacturing Firms in Kenya

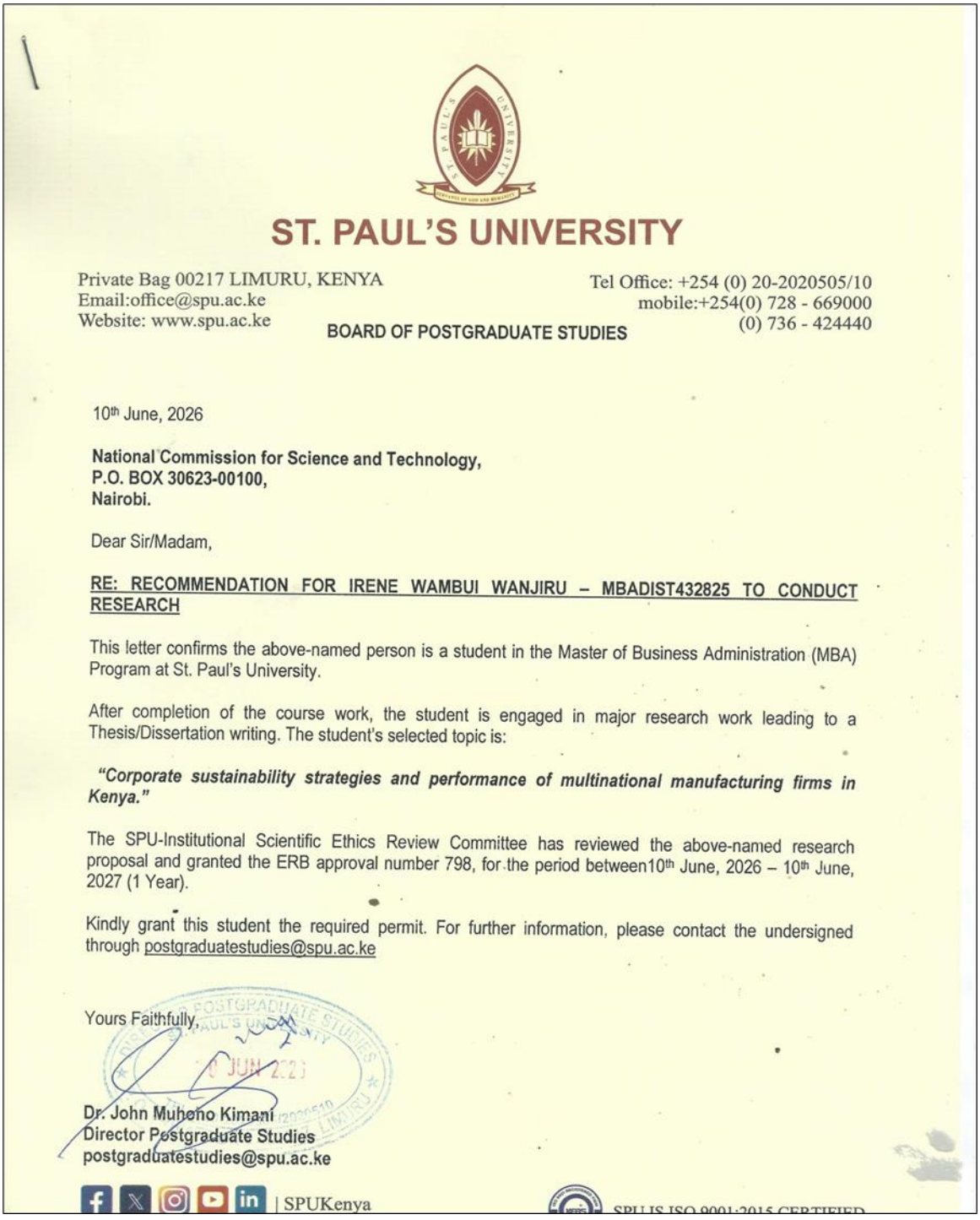
No.	Firm Name	Sector
1	East African Breweries PLC	Food & Beverage
2	British American Tobacco Kenya	Tobacco Manufacturing
3	Unilever Kenya Limited	Consumer Goods
4	Bamburi Cement PLC	Cement Manufacturing
5	Coca-Cola Beverages Africa Kenya	Beverage Manufacturing
6	Brookside Dairy Limited	Dairy Processing
7	Unga Group PLC	Food Processing
8	Bidco Africa Limited	Consumer Manufacturing
9	General Motors East Africa	Automotive Assembly
10	Carbacid Investments PLC	Industrial Manufacturing
11	Nestlé Kenya Limited	Food Processing
12	Kenya Breweries Limited	Beverage Manufacturing
13	Del Monte Kenya Limited	Food Processing
14	Eveready East Africa PLC	Battery Manufacturing
15	PZ Cussons East Africa	Consumer Products
16	Procter & Gamble Kenya	Consumer Goods
17	Colgate Palmolive East Africa	Consumer Products
18	BOC Kenya PLC	Industrial Gases
19	Mabati Rolling Mills	Steel Manufacturing
20	Devki Steel Mills Limited	Steel Manufacturing
21	Mombasa Cement Limited	Cement Manufacturing
22	Savannah Cement Limited	Cement Manufacturing
23	Crown Paints Kenya PLC	Paint Manufacturing
24	Basco Paints Limited	Paint Manufacturing
25	Orbit Chemical Industries	Chemical Manufacturing
26	Kapa Oil Refineries	Edible Oils
27	Menengai Oil Refineries	Consumer Products
28	Kenblest Group	Food Processing
29	Kevian Kenya Limited	Beverage Manufacturing
30	Highlands Drinks Limited	Beverage Manufacturing
31	Trufoods Limited	Food Manufacturing
32	Haco Industries Kenya	Consumer Products
33	Chandaria Industries Limited	Tissue Manufacturing
34	Rai Cement Limited	Cement Manufacturing
35	ARM Cement PLC	Cement Manufacturing
36	Tetra Pak Kenya	Packaging Manufacturing
37	Avery East Africa	Industrial Manufacturing
38	Sameer Africa PLC	Tyre Manufacturing
39	Firestone East Africa	Tyre Manufacturing
40	Kenya Orchards Limited	Food Processing
41	Capwell Industries Limited	Food Manufacturing
42	Rafiki Flour Mills	Food Processing
43	Mjengo Limited	Building Materials
44	Doshi Group	Steel Manufacturing
45	Tononoka Group	Steel Manufacturing

46	Kenya Tea Packers Limited	Tea Processing
47	Ketepa Limited	Tea Manufacturing
48	Nzoia Sugar Company	Sugar Manufacturing
49	Mumias Sugar Company	Sugar Manufacturing
50	West Kenya Sugar Company	Sugar Manufacturing
51	Sony Sugar Company	Sugar Manufacturing
52	Butali Sugar Mills	Sugar Manufacturing
53	Osho Chemical Industries	Agrochemical Manufacturing
54	Twiga Chemical Industries	Chemical Manufacturing
55	Aarti Kenya Limited	Chemical Manufacturing
56	Agro-Chemical and Food Company	Chemical Manufacturing
57	Kenafric Industries Limited	Food Manufacturing
58	Ken Knit Kenya	Textile Manufacturing
59	Thika Cloth Mills	Textile Manufacturing
60	Rivatex East Africa	Textile Manufacturing
61	Hela Intimates EPZ	Textile Manufacturing
62	United Aryan EPZ	Textile Manufacturing
63	Ashton Apparel EPZ	Textile Manufacturing
64	New Wide Garments Kenya	Textile Manufacturing
65	Tata Chemicals Magadi	Chemical Manufacturing
66	Chloride Exide Kenya	Battery Manufacturing
67	Tile & Carpet Centre	Building Materials
68	Prime Steel Mills	Steel Manufacturing
69	Accurate Steel Mills	Steel Manufacturing
70	Blue Triangle Cement	Cement Manufacturing
71	MRM Building Solutions	Steel Manufacturing
72	Kaluworks Limited	Aluminum Manufacturing
73	Compact Freight Systems	Packaging Manufacturing
74	Blowplast Limited	Plastic Manufacturing
75	Kenpoly Manufacturers	Plastic Manufacturing
76	Plastics and Rubber Industries	Plastic Manufacturing
77	Nampak Kenya Limited	Packaging Manufacturing
78	Allpack Industries	Packaging Manufacturing
79	Statpack Industries	Packaging Manufacturing
80	Silafrica Kenya	Plastic Manufacturing
81	Techpak Industries	Packaging Manufacturing
82	Timsales Limited	Wood Manufacturing
83	Comply Industries	Wood Manufacturing
84	Raiply Woods Limited	Wood Manufacturing
85	Medisel Kenya	Pharmaceutical Manufacturing
86	Universal Corporation Limited	Pharmaceutical Manufacturing
87	Laboratory & Allied Limited	Pharmaceutical Manufacturing
88	Cosmos Pharmaceuticals	Pharmaceutical Manufacturing
89	Beta Healthcare International	Pharmaceutical Manufacturing
90	Dawa Limited	Pharmaceutical Manufacturing
91	GlaxoSmithKline Kenya	Pharmaceutical Manufacturing
92	Sanofi Kenya	Pharmaceutical Manufacturing
93	Bayer East Africa	Pharmaceutical Manufacturing
94	Phillips Pharmaceuticals	Pharmaceutical Manufacturing

95	Surgipharm Limited	Pharmaceutical Manufacturing
96	Revital Healthcare EPZ	Medical Manufacturing
97	KEMSA Industrial Unit	Medical Supplies Manufacturing
98	Farmer's Choice Limited	Food Processing
99	Alpha Fine Foods	Food Manufacturing
100	Tropical Heat Limited	Food Processing
101	Nairobi Bottlers Limited	Beverage Manufacturing
102	Highlands Mineral Water	Beverage Manufacturing
103	Kevita International	Beverage Manufacturing
104	House of Manji Foods	Food Manufacturing
105	Trufoods Kenya Limited	Food Manufacturing
106	Peptang Kenya Limited	Food Processing
107	Bio Foods Limited	Dairy Processing
108	Spin Knit Dairy	Dairy Processing
109	New Kenya Cooperative Creameries	Dairy Processing
110	Githunguri Dairy Farmers Cooperative	Dairy Processing
111	Highlands Mineral Water Company	Beverage Manufacturing
112	Kenchic Limited	Food Processing
113	Pembe Flour Mills	Food Manufacturing
114	Mombasa Maize Millers	Food Manufacturing
115	United Millers Limited	Food Manufacturing
116	Premier Food Industries Limited	Food Manufacturing

Note: Kenya Association of Manufacturers (KAM) Directory; Ministry of Investments, Trade and Industry Reports.

Appendix 5: Recommendation Letter



ST. PAUL'S UNIVERSITY

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BOARD OF POSTGRADUATE STUDIES

10th June, 2026

National Commission for Science and Technology,
P.O. BOX 30623-00100,
Nairobi.

Dear Sir/Madam,

RE: RECOMMENDATION FOR IRENE WAMBUI WANJIRU – MBADIST432825 TO CONDUCT RESEARCH

This letter confirms the above-named person is a student in the Master of Business Administration (MBA) Program at St. Paul's University.

After completion of the course work, the student is engaged in major research work leading to a Thesis/Dissertation writing. The student's selected topic is:

"Corporate sustainability strategies and performance of multinational manufacturing firms in Kenya."

The SPU-Institutional Scientific Ethics Review Committee has reviewed the above-named research proposal and granted the ERB approval number 798, for the period between10th June, 2026 – 10th June, 2027 (1 Year).

Kindly grant this student the required permit. For further information, please contact the undersigned through postgraduatestudies@spu.ac.ke

Yours Faithfully,

Dr. John Muhoho Kimani
Director Postgraduate Studies
postgraduatestudies@spu.ac.ke

| SPUKenya

SPU IS ISO 9001:2015 CERTIFIED

Appendix 6: ISERC Approval

ST. PAUL'S UNIVERSITY

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(0) 736-424440

REF: SPU/788/2026 **Date: 10th June 2026**

TO: Irene Wanjiru
St. Paul's University

Dear Irene,

==========

REF: Corporate Sustainability Strategies and Performance of Multinational Manufacturing Firms in Kenya

==========

Greetings,

This is to inform you that SPU- Institutional Scientific Ethics Review Committee has reviewed the above-named research proposal. **Your ERB approval number is 798, for the period between 10th June 2026 – 10th June 2027 (1 year).**

This approval is subject to compliance with the following requirements;

i. Only approved documents including (informed consents, study instruments) will be used.
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by SPU- Institutional Scientific Ethics Review Committee.
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 SPU- Institutional Scientific Ethics Review Committee 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 *SPU- Institutional Scientific Ethics Review Committee* within 72 hours.
v. Clearance for 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 expiry of the approval period. Attach a comprehensive progress report to support the renewal.
vii. Submission of an executive summary report within 90 days upon completion of the study to SPU-Institutional Scientific Ethics Review Committee.
viii. Should there be any publications from your research, note that you are supposed to anonymize the particulars of the respondents, the identifiers and the name of institution (s) where you collected data.
ix. Please note that it is within the ISERC's mandate to monitor your research and to do random visits to the site. All research is subject to post approval monitoring. Kindly provide a closure report after the research.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) if you are collecting data in the country - https://research-portal.nacosti.go.ke **or obtain other clearances needed in the country where you will collect your data from.**

Yours sincerely,

Dr. Daniel Nzengya, PhD
Chairperson
SPU- Institutional Scientific & Ethics Review Committee

ST. PAUL'S UNIVERSITY
INSTITUTIONAL SCIENTIFIC ETHICS REVIEW COMMITTEE
(ISERC)
APPROVAL WITH
CONTIGENCIES
RESEARCH
DIRECTORATE

Appendix 7: Research Permit from Nacosti

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

Ref No: **703528**

Date of Issue: **18/June/2026**

RESEARCH LICENSE



This is to Certify that Ms.. IRENE WAMBUI WANJIRU of St. Paul's University, Kenya, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Baringo, Bomet, Bungoma, Busia, Elgeyo-Marakwet, Embu, Garissa, Homabay, Isiolo, Kajiado, Kakamega, Kericho, Kiambu, Kilifi, Kirinyaga, Kisii, Kisumu, Kitui, Kwale, Laikipia, Lamu, Machakos, Makueni, Mandera, Marsabit, Meru, Migori, Mombasa, Muranga, Nairobi, Nakuru, Nandi, Narok, Nyamira, Nyandarua, Nyeri, Samburu, Siaya, Taita-Taveta, Tanariver, Tharaka-Nithi, Transnzoia, Turkana, Uasin-Gishu, Vihiga, Wajir, Westpokot on the topic: CORPORATE SUSTAINABILITY STRATEGIES AND PERFORMANCE OF MULTINATIONAL MANUFACTURING FIRMS IN KENYA for the period ending : 18/June/2027.

License No: **NACOSTI/P/26/4191161**

703528

Applicant Identification Number

Ag. Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

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See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)

Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was the established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to.
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
    i. Endanger national security
    ii. Adversely affect the lives of Kenyans
    iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
    iv. Result in exploitation of intellectual property rights of communities in Kenya
    v. Adversely affect the environment
    vi. Adversely affect the rights of communities
    vii. Endanger public safety and national cohesion
    viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. Neither the license nor any rights thereunder are transferable.
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

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