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# ENVIRONMENTAL SUSTAINABILITY, SOCIAL SUSTAINABILITY AND FINANCIAL PERFORMANCE OF SELECTED TELECOMMUNICATION COMPANIES IN KENYA

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## ABSTRACT:

This study looked at the connection between the financial results of large corporations like Safaricom, Airtel, and Telkom and sustainability measures related to the environment, society, economy, and governance. The study examines how sustainability practices in the domains of the economy, society, and governance impact significant financial metrics like market share, profitability, and liquidity, guided by theoretical perspectives such as the Natural-Resource-Based View, Stakeholder Theory, Resource-Based View, and Agency Theory. According to the study findings, environmental sustainability focused on energy efficiency, waste management, and carbon reduction. Regression results (B = 0.18, t = 4.056, p = 0.000) showed a significant positive impact on financial performance. This suggests that eco-friendly practices like renewable energy use and waste reduction enhance profitability and corporate reputation. Social sustainability, covering community engagement, employee welfare, and customer satisfaction, showed the strongest positive effect on financial performance (B = 0.53, t = 5.49, p < 0.001). In conclusion, environmental sustainability initiatives such as carbon emission reduction, e-waste management, and adoption of energy-efficient infrastructure enhance the financial performance of Kenyan telecommunication companies by lowering operational costs, ensuring regulatory compliance, and improving brand reputation. Social sustainability programs that focus on community development, education, healthcare, and employee welfare strengthen corporate goodwill, customer loyalty, and employee commitment. It is recommended that telecommunication companies invest in green technologies such as solar-powered base stations, eco-friendly network equipment, and digital billing systems to minimize their environmental footprint and boost efficiency. Establishing sustainable e-waste management systems will enhance regulatory compliance and attract environmentally conscious investors and customers.

Key words: Environmental sustainability, Financial Performance, Social Sustainability, Telecommunication Companies.

## 1.1Introduction and Background of the Study

The telecommunications industry is a major driver of global economic growth, connectivity, and digital transformation, underpinning sectors such as ecommerce, e-learning, e-governance, and financial technology systems (Oladele, 2024; UNCTAD, 2024). The global demand for advanced communication services has spurred the expansion of mobile networks, broadband, and digital platforms, however, sustaining profitability while adopting socially and environmentally responsible practices remains a major challenge for telecom firms (Ahmad, 2024). Globally, companies are increasingly integrating sustainability strategies, to enhance operational efficiency, reduce costs, and strengthen brand reputation (Lee et al., 2023). For instance, leading firms like AT&T, Vodafone, and Orange have invested heavily in green infrastructure and ethical supply chain management, demonstrating that sustainability is not only a moral obligation but also a strategic imperative that drives innovation and financial resilience (Deloitte, 2023).

Despite its opportunities, the industry also faces substantial environmental challenges. The global telecom sector accounts for approximately 3% of total carbon emissions, largely due to energy-intensive data centers and network operations (ITU, 2024). Investors and consumers are increasingly prioritizing companies with strong ESG credentials, compelling telecom operators worldwide to embed sustainability into their core business strategies. Studies by Al Frijat et al. (2024) and Moisescu & Gică (2020) indicate that ESG practices enhance stakeholder trust, customer loyalty, and overall profitability.

On the regional perspective, in Africa, the integration of sustainability in telecommunications is gradually gaining traction. African telecom operators are increasingly recognizing the dual benefits of sustainability: environmental protection and financial performance improvement. Yet, the level of integration varies across firms, with some treating sustainability as a strategic priority while others view it merely as a regulatory requirement (Ezeigweneme et al., 2024)

In Nigeria, a similar trend is evident in the operations of MTN Nigeria and Airtel Nigeria, where sustainability initiatives have been linked to improved financial and operational outcomes. Oladipo and Eze (2023) found that MTN Nigeria's investment in solar-powered base stations, e-waste recycling programs, and community education initiatives not only reduced operational costs but also strengthened the company's corporate reputation and customer trust. Their study highlighted that firms embedding sustainability into their core operations are better positioned to that enhances their profitability. These findings provide a regional perspective that Kenyan telecom companies can draw upon to strengthen their sustainability strategies and performance outcomes.

In Kenya, telecommunications sector contributes substantially to GDP and the country's digital transformation agenda (Communications Authority of Kenya, 2024). Companies like Safaricom PLC have implemented sustainability initiatives encompassing corporate social responsibility (CSR), renewable energy solutions, financial inclusion programs, and solar-powered base stations (Okello et al., 2019; Nyakundi, 2020; Kibera, 2018). However, integration levels vary, with some firms perceiving sustainability as a formality rather than a strategic tool (Gachenge, 2020). For instance, despite being the market leader, Safaricom's net profit declined from KES 62.74 billion to KES 35.38 billion, reflecting the pressures of rising competition, macroeconomic challenges, and operational costs (Mbote, 2024).

According to Wanjiku and Otieno (2022), Safaricom's integration of renewable energy, community digital literacy programs, and CSR initiatives has contributed to enhanced operational efficiency and improved stakeholder engagement. Their study showed that firms that proactively adopt environmental and social strategies tend to experience higher better customer loyalty which increases the company market. Despite these efforts, challenges such as high energy costs, regulatory pressures, and market competition persist, indicating the need for a more systematic integration of sustainability into strategic planning.

#### 1.1.2 Environmental Sustainability

The term environmental sustainability describes the intentional steps businesses take to reduce their ecological footprint and guarantee the prudent use of natural resources. It encompasses strategies aimed at reducing environmental harm (Gajdzik & Grebski, 2023). In the telecommunications industry, environmental sustainability is particularly critical due to the growing demand for energy-intensive digital infrastructure and the increasing generation of electronic waste associated with network equipment and mobile devices (Lee et al., 2024).

In Kenya, telecommunication companies have embraced environmental sustainability to comply with regulatory frameworks and meet the rising expectations of environmentally conscious consumers. Many firms are investing in renewable energy solutions, particularly solar-powered base stations, which are vital for expanding network coverage in off-grid and remote regions. Furthermore, the adoption of energy-efficient technologies, such as low-power base stations and optimized network systems, enhances both environmental performance and cost efficiency (Ezzeddine et al., 2024).

Given the short lifespan of electronic devices, firms have established e-waste collection and recycling programs to ensure the responsible disposal of obsolete equipment. Companies are increasingly implementing sustainable sourcing practices by ensuring that materials used in telecommunications equipment and infrastructure adhere to ethical and environmental standards. Such initiatives enhance corporate reputation, reduce long-term ecological risks, and contribute to improved financial performance by promoting operational efficiency and resource optimization (Bansal & Roth, 2020).

## 1.1.3 Social Sustainability Practices

Social sustainability focuses on the well-being of individuals and communities affected by corporate activities, addressing aspects such as labor standards, community development, diversity and inclusion, and ethical business practices (Bashir et al., 2024). For telecommunication companies, social sustainability is particularly important, given the industry's potential to drive social inclusion and improve quality of life through access to technology. In Kenya, telecommunication firms are actively involved in programs aimed at promoting digital inclusion and improving connectivity in underserved areas. By expanding network coverage to rural regions, companies are enabling access to mobile services and the internet, which in turn facilitates access to essential services like mobile banking, healthcare, and education (Telecom Review Africa, 2023). Additionally, telecommunication companies in Kenya are heavily invested in digital literacy initiatives to empower individuals, particularly in rural communities, by providing training on how to use mobile technologies and access online resources. These efforts are aimed at fostering social equity by ensuring that all members of society have equal opportunities to participate in the digital economy (Telecom Review Africa, 2023).

Telecommunication companies in Kenya also support various community development programs, including education and health. For instance, mobile platforms have been launched to deliver educational content and facilitate remote learning, addressing gaps in education access for students in remote areas (Otieno & Taddese, 2020). In the healthcare sector, telecommunication firms offer mobile health services, such as telemedicine and mobile health consultations, which are particularly important in regions with limited access to medical professionals (Onsongo et al., 2023). These social sustainability practices not only benefit society but also help companies strengthen customer loyalty and improve brand image, which ultimately contributes to their financial success.

## 1.1.6 Financial Performance

This refers to the numerical metrics that assess how well and efficiently a company uses its resources to make a profit. Profitability, revenue growth, ROI, and market share are examples of common financial performance metrics (Pham et al., 2021). These indicators shed light on the business's capacity to make money, manage expenses, and add value for all parties involved. There is growing evidence that corporate sustainability initiatives that address environmental, social, and governance issues have a favourable effect on a company's financial success. Numerous studies have examined the relationship between sustainability and financial performance across a range of sectors, including telecommunications, emphasizing how sustainability can boost customer loyalty, encourage innovation, increase operational efficiency, and ultimately produce better financial results (Pham et al., 2021; Li, Tang & Li, 2024). The connection between corporate sustainability and financial performance is critical for understanding how telecommunication companies, particularly in Kenya, can leverage sustainability initiatives to boost profitability and long-term success.

A range of techniques have been used in earlier research on financial performance to gauge financial results. Quantitative indicators that evaluate a business's profitability, revenue creation, and operational efficiency are frequently included in these measurements. Eccles et al. (2014) and Li et al. (2024), for example, looked at how ESG systems affected the financial performance of businesses in China's ecologically sensitive industries. ESG adoption and firm financial performance, as determined by ROE and ROA, were shown to be significantly positively correlated by the study. This study highlights the crucial role of ESG systems in driving financial success for companies in high-impact industries. By improving resource efficiency, fostering employee and customer engagement, and strengthening governance structures, ESG implementation enhances overall corporate performance. Another study by Matuszewska & Pierzynka (2024) examined how corporate sustainability strategies could affect profitability and financial stability of Polish firms. The study utilized financial ratios such as ROA, earnings before interest and taxes (EBIT) to measure financial outcomes of sustainability

practices. They concluded that telecommunication firms that invested in CSR initiatives, such as community development programs and digital inclusion efforts, experienced improved financial outcomes, including increased ROA and ROS, which in turn drove higher revenues and profitability.

In order to evaluate the effect of corporate sustainability policies on the financial performance of Kenyan telecommunications businesses, we will concentrate on a few of these financial performance metrics for the current study. In particular, the study will look at market share, liquidity, and profitability (as determined by net profit margin and return on assets) as the main markers of financial success. These measurements will offer a thorough grasp of how Kenyan telecom businesses' adoption of environmental, social, economic, and governance sustainability policies affects their overall financial performance and long-term survival.

## 1.1.7 Telecommunication Companies in Kenya

Internet connectivity, mobile adoption, and technological innovation have all contributed to the rapid growth of Kenya's telecommunications industry. Key players, Safaricom, Airtel Kenya, and Telkom Kenya have transformed communication and financial services (Harrison et al., 2020). Safaricom leads the market with extensive retail outlets and a robust M-Pesa network. Airtel Kenya has expanded its Airtel Money network and 5G coverage, while Telkom Kenya continues to offer mobile and internet services despite facing market share challenges. Telecom companies are implementing corporate sustainability strategies as a result of mounting regulatory pressure and increased investor and consumer interest in sustainability. These include the utilization of renewable energy, the development of digital literacy, the defence of consumer rights, and moral leadership. It aims to assess how market competitiveness, profitability, and revenue growth are impacted by governance, economic, social, and environmental actions (Gachenge, 2020).

## 1.2 Statement of the Problem

Kenya's telecommunications sector has experienced remarkable growth, with mobile subscriptions reaching 66.4 million by June 2023, translating to a penetration rate of 131.3%. Sector revenue also grew by 7.7% to Kshs 339.4 billion during the same period. Despite this growth, nothing is known empirically about the relationship between corporate sustainability measures and Kenyan telecom businesses' financial performance.

Globally, studies indicate that sustainability practices can enhance financial performance by improving operational efficiency, customer loyalty, and market share. In Africa, interest in corporate sustainability is increasing, yet research directly linking sustainability practices to financial outcomes in telecommunication firms remains sparse. For example, Ezeigweneme et al. (2024) examined sustainable strategies for telecommunication networks, focusing on energy optimization, renewable energy integration, and the use of technologies such as AI, SDN, and NFV. While the study concluded that a holistic approach to energy efficiency reduces environmental impact and enhances cost-effectiveness, brand reputation, and regulatory compliance, it did not investigate how these initiatives affect financial performance in the telecommunication sector.

In Kenya, sustainability is gradually gaining traction in the telecommunications industry. Okello et al. (2019) found that initiatives such as renewable energy adoption and CSR programs positively impacted both community welfare and corporate financial performance. However, despite the implementation of various sustainability initiatives by Kenyan telecom firms including Safaricom, Airtel, and Telkom Kenya, there is a lack of empirical data on how these programs influence key financial metrics such as profitability, revenue growth, and market share. This gap suggests that companies may not fully understand or strategically leverage the financial benefits of sustainability practices.

A substantial knowledge gap is created by the paucity of research in Kenya's telecommunications industry, especially in light of the increased emphasis on sustainable business practices around the world. Therefore, the purpose of this study is to investigate how financial performance is impacted by sustainability practices at Safaricom, Airtel, and Telkom Kenya. By concentrating on important financial metrics including market share, liquidity, and profitability, the study seeks to offer practical advice that can help Kenyan telecom firms maximize sustainability efforts in order to produce better financial results.

## **General Objective**

The general objective of this study was to investigate the effect of corporate sustainability practices on the financial performance of selected telecommunication companies in Kenya, a case study of Safaricon, Airtel and Telkom Kenya in Mombasa, Kilifi, and Kwale Counties

## LITERATURE REVIEW

## 2.1 Theoretical Literature Review

For businesses worldwide, particularly those in the telecom sector, sustainability is becoming an increasingly important consideration. Theoretical frameworks such as the natural-resource-based view (NRBV), agency theory, resource-based view (RBV), and stakeholder theory can be used to analyse financial performance and environmental, social, economic, and governance sustainability strategies. This theoretical analysis looks at these perspectives in light of the financial performance of Kenyan telecom companies. These details might help Kenyan telecom companies enhance their sustainability strategies, which would improve their reputation and financial results.

## 2.1.1 Resource-Based View (RBV)

This theory provides an important theoretical foundation for understanding how economic sustainability contributes to firm competitiveness and financial performance. Barney (1991) posited that economic sustainability practices, such as fair pricing, local supplier development, and financial inclusivity, align with the RBV's emphasis on resource optimization and long-term value creation (Wernerfelt, 1984). By leveraging internal capabilities to implement cost-efficient and innovative production systems, firms enhance profitability while maintaining responsible business operations. Investments in digital transformation, process innovation, and sustainable infrastructure allow firms to reduce production costs and increase operational efficiency, thereby improving financial performance (Rosário & Figueiredo, 2024).

Furthermore, RBV highlights the importance of resource integration and strategic capability development for sustainable economic growth. Firms that invest in research and development (R&D), automation, and digital financial systems can enhance productivity, optimize resource allocation, and strengthen market positioning. In the telecommunication sector, for instance, investments in mobile money platforms, broadband expansion, and digital inclusion initiatives generate new revenue streams while improving customer retention and loyalty (Nandamuri et al., 2020). Economic sustainability also entails resilience against external shocks, such as market volatility and regulatory changes, by diversifying income sources and maintaining sound financial management. For Kenya's telecommunication companies, adopting RBV-oriented strategies such as innovation-driven efficiency and resource optimization ensures long-term competitiveness and financial stability. Thus, this theory supports the study by demonstrating how the strategic use of internal resources contributes to sustainable economic practices that enhance financial outcomes.

This is the anchored theory of this research study because it provides the most comprehensive framework linking sustainability practices (independent variables) to financial performance (dependent variable). RBV asserts that a company's distinctive internal resources and capabilities, when they are valuable, rare, difficult to imitate, and cannot be substituted, serve as the basis for achieving and maintaining a sustained competitive advantage and superior performance (Barney, 1991).

Under the RBV, environmental sustainability practices such as energy efficiency, waste reduction, and green technology adoption represent valuable and inimitable resources that lower operational costs and enhance firm reputation (Hart, 1995; Barney et al., 2011). Firms that build strong environmental management capabilities gain a competitive edge through cost savings, risk reduction, and improved market positioning, leading to higher profitability and return on investment. Thus, environmental initiatives contribute to financial performance by strengthening the firm's operational efficiency and market appeal.

## 2.1.2 Natural Resource-Based View (NRBV)

This theory provides a foundation for understanding the relationship between environmental sustainability and financial performance. Hart (1995) first introduced NRBV as an extension of the traditional Resource-Based View (RBV), emphasizing the role of natural resources and environmental capabilities in creating sustainable competitive advantage. The theory argues that a firm's ability to develop unique, inimitable and valuable environmental management competencies such as pollution prevention, product stewardship, and sustainable development can significantly influence its performance (Hart & Dowell, 2011). In this view, organizations that invest in clean technologies, waste minimization, and energy efficiency not only achieve regulatory compliance but also reduce operational costs and environmental risks. These environmentally proactive strategies increase firm competitiveness while appealing to environmentally conscious stakeholders, leading to improved reputation and financial outcomes (Dharmayanti et al., 2023).

NRBV suggests that environmental sustainability practices strengthen a company's strategic position by ensuring resource efficiency and innovation. Firms that embed sustainability into their core operations develop dynamic capabilities that allow them to anticipate and adapt to environmental challenges (Hart & Dowell, 2011). For example, telecommunication companies that invest in renewable energy and e-waste management can reduce energy costs, minimize carbon footprints, and enhance their brand image in competitive markets. In Kenya's context, where environmental regulations and green consumer preferences are gaining prominence, NRBV supports the argument that sustainable environmental initiatives can directly improve profitability through cost savings and market differentiation. Hence, this theory underpins the current study by explaining how environmental sustainability practices act as strategic assets that drive financial performance in the telecommunication industry.

## 2.1.2 Stakeholder Theory

A framework for comprehending how social sustainability initiatives affect financial performance is offered by stakeholder theory. Businesses function within a network of relationships with a variety of stakeholders, including employees, clients, suppliers, investors, regulators, and the community, all of whose wants and expectations must be taken into account when making strategic decisions, according to Freeman (1984). Instead of concentrating only on shareholder wealth, this theory highlights that a company's capacity to balance and satisfy stakeholder interests is what determines long-term business performance (Freeman et al., 2018). By increasing stakeholder trust, commitment, and satisfaction, social sustainability initiatives like corporate social responsibility, gender inclusion, employee welfare, and community engagement generate value for all parties involved (Donaldson & Preston, 1995). Businesses that put these efforts first frequently see improvements in staff productivity, customer loyalty, and corporate reputation, all of which boost financial performance (Pfajfar et al., 2022).

Additionally, stakeholder theory underscores the financial benefits of maintaining strong social relationships and ethical conduct. When companies invest in social well-being such as providing fair wages, safe working environments, and equal opportunities they strengthen internal cohesion and reduce turnover rates, leading to lower recruitment and training costs (Harrison et al., 2019). Moreover, firms that engage in community development initiatives or inclusive digital programs create goodwill and legitimacy, which can result in increased customer base and market access. Companies in the Kenyan telecom industry, such as Safaricom, have shown that CSR programs that promote environmental preservation, health care, and education not only enhance public opinion but also result in long-term financial success. Stakeholder theory thus lends support to this study by showing that social sustainability practices are strategic drivers that improve financial performance through stakeholder satisfaction and brand equity, rather than just being moral requirements.

## 2.1.4 Agency Theory

The conflict of interest between managers (agents) and shareholders (principals) is the main focus of this theory, which explains the connection between corporate governance and financial success. According to Jensen and Meckling (1976), corporate performance may suffer when managers pursue personal interests that deviate from the objectives of shareholders. Aligning managerial behavior with shareholder interests is facilitated by efficient governance procedures, including independent boards of directors, performance-based incentives, transparent audits, and stringent accountability frameworks (Eisenhardt, 1989). These governance controls ensure transparency, reduce managerial opportunism, and enhance investor confidence, which collectively improve organizational efficiency and profitability (Mwanga, 2024). By promoting ethical decision-making and oversight, governance systems mitigate risks of fraud, mismanagement, and corruption, thus safeguarding financial resources and ensuring sustainability.

Additionally, agency theory highlights that well-governed firms enjoy improved access to capital markets, lower cost of financing, and stronger stakeholder relationships (Hossain et al., 2024). Governance practices such as board independence, whistleblower protections, and public financial reporting build corporate credibility and foster long-term trust among investors and regulators. In Kenya's telecommunication sector, governance mechanisms that ensure compliance with data privacy, cyber security, and regulatory standards are increasingly critical for financial sustainability. Strong governance frameworks not only protect firm assets but also enhance adaptability in dynamic regulatory environments. Therefore, agency theory underpins this study by explaining how governance initiatives through improved accountability, transparency, and risk management contribute to the financial performance of telecommunication firms committed to sustainable business practices.

## 2.2 Empirical Literature Review

## 2.2.1 Environmental Sustainability and Financial Performance

Telecommunication companies are increasingly investing in green technologies, energy efficiency, and waste management to enhance their competitiveness and comply with global environmental standards. The growing trend of companies aiming to be "nature positive", committed to halting and reversing biodiversity loss, reflects a broader recognition of the interconnectedness between environmental sustainability and financial viability (Savage, 2024). This shift underscores the importance of clear metrics and accountability in measuring progress, as stakeholders increasingly demand robust frameworks to ensure that corporate actions align with environmental commitments. Empirical research indicates that such initiatives lead to cost savings, regulatory advantages, and improved corporate reputation, ultimately influencing financial outcomes.

Klusak et al. (2021) utilized artificial intelligence to assess climate impacts on sovereign credit ratings, influencing the financial models of major banks and financial institutions. The research underscores the economic benefits of investing in climate finance, highlighting how proactive measures in climate adaptation and mitigation can enhance a country's creditworthiness and economic stability. By integrating climate-related risks into sovereign credit ratings, the study suggests that financial markets can better account for long-term environmental challenges, ultimately influencing lending rates, investment decisions, and economic policies. The findings advocate for a paradigm shift in how developed countries perceive climate finance, not merely as aid to vulnerable nations but as a strategic investment that yields economic and financial returns. This viewpoint is consistent with the expanding understanding that environmental sustainability policies support long-term economic development, enhanced investor confidence, and financial resilience. In order to protect financial stability, the study also highlights the necessity for governments and financial institutions to include climate risk assessments in their economic planning.

Issa (2023) offers a thorough examination of the connection between financial success and carbon reduction efforts, providing insightful information about the moderating effects of corporate governance. The results show that attempts to reduce carbon emissions and financial success are substantially positively correlated. This shows that businesses who participate in sustainability programs not only benefit the environment but also get better financial results. The paper also emphasizes how effective CSR tactics and superior corporate governance amplify these advantages, supporting the commercial case for sustainability. These observations highlight the necessity of deliberate investment in carbon reduction programs and supporting legislative frameworks to ensure long-term company sustainability and profitability, with significant practical ramifications for managers and legislators.

Iqbal et al. (2021) study highlighted that companies adopting environmentally sustainable practices experienced enhanced financial outcomes. Specifically, these practices led to reduced operational costs, improved energy efficiency, and strengthened customer loyalty, all of which contributed to profitability. The research concluded that environmental investments offer long-term value by positioning companies as responsible brands and appealing to sustainability-conscious stakeholders. While this study provides strong evidence of the positive financial implications of environmental practices, its focus on South Asia limits its applicability to the African context. The regulatory environment, market behavior, and sustainability challenges differ significantly in Kenya. The current study addresses this gap by exploring the specific environmental practices used in Kenyan telecom companies and evaluating their impact on financial performance within Kenya's unique economic and regulatory setting.

Nguyen and Nguyen (2020) study findings showed that companies with formal environmental policies such as compliance with ISO 14001 standards, pollution control, and responsible waste management recorded better financial indicators, including higher returns on assets. The study emphasized that environmental accountability not only reduces legal risks but also boosts corporate reputation and stakeholder trust, resulting in improved financial performance. Although this research offers valuable insights into how environmental management boosts financial metrics, its Vietnamese focus limits relevance to Kenyan firms, where environmental regulations, enforcement mechanisms, and resource availability differ. The current Kenyan study bridges this gap by investigating how locally relevant environmental practices such as renewable energy use and e-waste disposal affect financial performance in Kenya's leading telecommunication companies.

Mujahid and Abdullah (2019) conducted a study on sustainability reporting and its effect on firm performance among Malaysian telecommunication companies. The study argued that firms engaging in detailed sustainability reporting were more likely to gain competitive advantage and long-term investment, translating into improved financial outcomes. While the study sheds light on how sustainability disclosures can enhance financial value, it is limited to the Malaysian capital market environment, which is more mature and investor-driven compared to Kenya's. Furthermore, little is known about how environmental disclosures are perceived by Kenyan stakeholders or how these disclosures influence financial performance in local telecom firms. By examining how much environmental sustainability reporting and practices impact telecom companies' financial results within Kenya's unique socioeconomic and regulatory framework, the current study closes this gap.

Nandini, Sudharani, and Suresh (2022) study found a significant positive relationship between environmental protection costs and several profitability metrics, including return on capital used and net profit margin. According to the research, businesses that make significant investments in environmental protection programs, such waste management, sustainable resource use, and pollution control techniques, may eventually see financial returns. This positive impact may stem from improved operational efficiency, cost savings from regulatory compliance, enhanced brand reputation, and increased consumer and investor confidence. Furthermore, firms that prioritize environmental responsibility may gain a competitive edge, attracting environmentally conscious stakeholders and securing long-term sustainability. The study highlights how sustainability efforts can contribute not only to corporate social responsibility but also to financial success.

Malakwen et al. (2024) study found a positive and significant correlation between environmental cost disclosures and financial performance, with business size serving as a moderating influence. Since their disclosures were linked to better financial results, more investor confidence, and improved corporate reputation, larger companies seemed to gain more from open reporting of environmental expenses. This implies that in addition to meeting sustainability reporting requirements, businesses who publicly reveal their environmental expenses gain a competitive edge in the marketplace. The study also highlights the increasing significance of environmental and corporate social responsibility in evaluating businesses' financial success in capital markets.

Mwangi and Ouma (2024) looked into how Kenyan telecom businesses' financial performance was affected by environmental corporate social responsibility initiatives. According to their research, financial success and environmental CSR actions are strongly and favorably correlated. According to the research, these initiatives help businesses allocate funds to environmental preservation initiatives, which eventually have positive effects on the environment and the economy. Investments in renewable energy projects, the use of waste reduction techniques, and biodiversity conservation are just a few examples of environmental corporate social responsibility (CSR) activities. By integrating sustainability into their business plans, companies can protect the environment, improve their market position, raise regulatory compliance, and strengthen stakeholder relationships. By reducing garbage disposal expenses, boosting consumer confidence, and promoting energy efficiency, these initiatives could enhance financial performance.

Together, the evaluated research confirm that environmental sustainability measures are essential for improving financial performance in a variety of sectors, including telecommunications companies. Results indicate that CSR programs, environmental cost disclosures, green initiatives, and climate financing investments have a favorable effect on stakeholder trust, corporate reputation, and financial stability. Businesses that prioritize sustainability gain cost savings, operational efficiency, regulatory compliance, and increased customer loyalty. Proactive environmental responsibility also creates competitive advantages, market differentiation, and access to government incentives. These insights align with the current study's objective by demonstrating that environmental sustainability practices are integral to the financial success of telecommunication companies in Kenya.

## 2.2.2 Social Sustainability Initiatives and Financial Performance

Social sustainability has become a critical factor influencing financial performance, as firms increasingly recognize the value of CSR, employee welfare programs, and community development initiatives. Actively participating in social activities helps telecommunications firms achieve financial success by increasing employee productivity, customer satisfaction, and brand loyalty. These companies enhance their corporate image and establish enduring connections with important stakeholders by funding initiatives that promote education, digital inclusiveness, and local community development (Opoku Marfo, 2024). Additionally, establishing a friendly and supportive work environment through fair compensation, diversity initiatives, and employee welfare programs will boost job satisfaction and reduce attrition, both of which will improve operational efficiency (Okatta et al., 2024; Liu et al., 2024). Investors and consumers are more likely to support companies that demonstrate a commitment to ethical and socially responsible business practices, giving socially conscious companies a competitive edge in the marketplace (Wekesa, 2024). As societal expectations shift, companies that proactively integrate social sustainability into their core strategy stand a better chance of long-term success and sustainable financial development (Alkhodary, 2023). Khan et al. (2020) investigated the impact of corporate social responsibility (CSR) on the financial performance of companies in South Asia's information technology and telecommunications industries from a global standpoint. According to their research, businesses that actively participated in social responsibility programs like employee welfare programs, community development efforts, and education sponsorships saw an increase in stakeholder trust and customer happiness. These elements helped boost customer retention and brand loyalty, which in turn boosted revenue growth and profitability. While this study effectively links CSR initiatives with financial performance, it is limited by its regional focus on South Asia. Social and economic dynamics in South Asia differ significantly from those in Kenya. For example, community needs, consumer expectations, and regulatory frameworks are context-specific. The current study addresses this gap by examining how CSR activities, tailored to the Kenyan socio-economic environment influence financial performance in local telecommunication companies like Safaricom and Airtel Kenya.

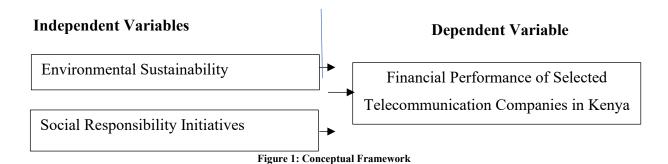
Similarly, Fatima and Elbanna (2020) assessed the effect of CSR on firm performance in the MENA region's telecom industry. Their research revealed that companies engaging in transparent and well-communicated CSR efforts, particularly those focused on employee well-being, gender equality, and digital inclusion, saw improved internal morale, brand equity, and stakeholder confidence. These intangible benefits translated into long-term financial performance through sustained consumer loyalty and investor interest. This study, while thorough, reflects the corporate governance and cultural context of the Middle East and North Africa (MENA), where social dynamics, consumer behavior, and CSR expectations differ from Kenya's. The current study addresses this gap by analyzing CSR practices relevant to Kenyan society such as supporting education, health, and digital access and assessing how these influence financial performance in Kenya's telecommunication sector, thereby offering country-specific insights for local managers and policymakers.

In another global study, Kumar and Asmare (2024) revealed that social performance enhances financial sustainability, while financially sound MFIs, in turn, improve their social performance. This reciprocal relationship indicates that MFIs do not have to choose between financial viability and social impact, as both objectives can be achieved simultaneously. Additionally, the research underscores the importance of strategic management in ensuring that social missions are integrated with financial planning, enabling MFIs to expand their reach without compromising long-term sustainability. These findings reinforce the argument that microfinance institutions can play a crucial role in poverty alleviation while maintaining financial health, provided they adopt well-balanced operational strategies. Moreover, the study suggests that policymakers and industry stakeholders should support policies that foster both financial and social objectives, ensuring that MFIs continue to serve as effective tools for economic development and financial inclusion.

From a local (Kenyan) perspective, Toyya, Guyo, and Odhiambo (2024), who focused on a number of CSR dimensions, such as consumer protection and environmental responsibility, indicated that economic expectations duty had the most influence, followed by charitable and environmental obligations, according to the data, which showed substantial positive connections between CSR actions and corporate success. Furthermore, the study suggests that government policies, such as tax incentives for CSR-compliant firms, could encourage responsible corporate behavior within the industry. Practitioners are advised to enhance stakeholder engagement in CSR planning and execution to ensure long-term sustainability and alignment with organizational goals. These findings reinforce the growing recognition that CSR is not merely a corporate obligation but a strategic tool for enhancing brand reputation, regulatory compliance, and overall business success.

#### 2.4 Conceptual Framework

The study's conceptual framework shows how financial performance and sustainability practices are related. Sustainability practices are divided into four main categories, as the figure illustrates: governance practices, economic practices, social responsibility programs, and environmental sustainability practices. These aspects cover a range of strategic initiatives that together support an organization's overall sustainability, including energy efficiency, community involvement, equitable pricing, and corporate transparency. Businesses may promote ethical, social, and environmental responsibility while improving long-term financial stability by incorporating sustainability into their operations.



## 2.5 Operationalization of Variables

The operationalization of variables includes defining and quantifying key study ideas to provide consistency and clarity in data gathering and analysis. While environmental sustainability practices, social responsibility initiatives, economic practices, and governance practices are the independent components in this study, financial performance is the dependent variable. Each variable is broken down into specific indicators that can be measured to assess their impact on financial outcomes. The table presents operationalization of variables, detailing their respective indicators, measurement criteria, and data sources.

Variable Indicators Measurement Criteria **Data Source** Environmental Energy efficiency; Waste Employee perceptions of energy-saving initiatives, Employee surveys waste management efforts, and carbon reduction Sustainability management: Carbon footprint reduction policies Social Sustainability Community engagement; Employee Employee perceptions of community initiatives, Employee surveys welfare; Customer relations workplace welfare programs, and customer management Financial Profitability; Liquidity; Market Employee perceptions of profitability, financial Employee surveys Performance share stability, and market share growth

Table 1: Operationalization of the Variables

## RESEARCH DESIGN AND METHODOLOGY

## 3.2 Research Design, Target population, Sample design and sample size

The research design used in this study was a descriptive survey. Kothari and Garg (2019) state that, descriptive studies aim to accurately depict certain occurrences circumstances or phenomena. This architecture is suitable as it enables a thorough analysis of business sustainability initiatives and their financial effects. Employees from the three main telecom firms who operate in different departments make up the target population. These employees were chosen on the basis of their participation in financial decision-making and sustainability projects. Diverse viewpoints on how company sustainability initiatives affect financial performance are ensured by including personnel at all levels. This research study specifically focused on employees working in the Mombasa County, Kilifi County and Kwale County branches of these companies, as they constitute the accessible population due to their proximity to the researcher, facilitating easier data collection.

**Table 2: Target Populations** 

Company	<b>Estimated Number of Employees (N)</b>	Proportion (%)	
Safaricom PLC	360	60%	
Airtel Kenya	180	30%	
Telkom Kenya	60	10%	
Total	600	100%	

## Source; Hr Department, Safaricom PLC, Airtel Kenya, Telkom Kenya in Mombasa, Kilifi, and Kwale Counties (2025)

Based on the expected worker size of each organization, proportional allocation was used to guarantee equitable representation. The Cochran (1977) formula,  $n_i = N_i/N_i \times n$ . was used to calculate the sample size for this investigation. Table 4 displays the distribution of the 384 responders who made up the overall sample size. A stratified random sample approach was used in the study to provide equitable representation across departments and organizational levels. There were two phases to the stratification process.

Table 3: Sample Size

Company	Target Population	Proportion (%)	Sample Size	
Safaricom PLC	360	60%	230	
Airtel Kenya	180	30%	115	
Telkom Kenya	60	10%	39	
Total	600	100%	384	

#### **Data Collection Instruments**

An introduction letter from the institutions helped the researcher obtain a data collection permit from the National Commission for Science, Technology, and Innovation, allowing for better data collection from the respondents. To aid in collecting data from the assigned stations in Mombasa, Kilifi, and Kwale, the researcher employed four research assistants. The research assistants used random sampling techniques to choose the respondents.

#### Pilot Study

A pilot study was conducted to assess the research instruments before the main data collection process. Forty people, or 10% of the study population, participated in the pilot study. Employees of the telecommunications providers' Taita Taveta County branches were chosen to participate in the pilot research. This phase helped refine the survey questions, ensuring clarity and reliability before the full-scale study.

## 3.5.2 Validity and Reliability of Research Instruments

The degree to which research tools effectively assess the desired variables is known as validity (Kothari & Gaurav, 2019). Professionals from academia and business were consulted to evaluate the research tools' content validity. Construct validity was further established using a pilot study, which verified that the research concepts were adequately captured by the questions. Research equipment' consistency throughout time is measured by reliability (Kothari & Gaurav, 2019). Cronbach's alpha was used to examine the questionnaire for internal consistency in order to determine its reliability; a threshold of 0.70 or higher indicates satisfactory reliability. Two capable research assistants were independently code interview transcripts for qualitative data in order to verify inter-coder reliability and guarantee consistency in theme identification.

## 3.6 Data Collection Procedure

To guarantee accuracy, the data collection procedure was carried out methodically. In order to provide respondents with flexibility, research assistants were trained to administer questionnaires both in-person and via secure online platforms. Prior to starting data collecting, the appropriate firm management and ethical review organizations were consulted for approval. The questionnaires were distributed via both online and physical means, allowing respondents to choose their preferred mode of participation. Regular follow-ups and reminders were sent to participants to improve response rates. Research assistants also provided clarification where necessary to ensure comprehensive and accurate data collection.

## 3.7 Data Analysis

To find and fix mistakes, eliminate discrepancies, and deal with missing data, data cleaning was done. SPSS software was used to handle quantitative data, and both descriptive and inferential statistics were used to assess the results. The association between a business's sustainability policies and financial success was ascertained using a multiple regression analysis. The following are the specifications for the regression model:

 $Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\epsilon$  Where:

Y = Financial Performance

 $X_1$  = Environmental Sustainability Practices

 $X_2 = Social Sustainability Initiatives$ 

 $X_3$  = Economic Sustainability Practices

 $X_3$  = Governance Sustainability Initiatives

 $\beta_0 = Constant$ 

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$  = Regression Coefficients

 $\varepsilon = Error Term$ 

A 95% confidence level was applied to ensure statistical significance.

## 3.8 Ethical Considerations

Ethical concerns are the moral precepts and professional norms that direct researchers to carry out their investigations in a way that ensures honesty, integrity, and respect for the rights and welfare of study participants. They support the credibility of study findings, guarantee voluntary involvement, safeguard participants from harm, and preserve confidentiality. Principles like honesty, objectivity, integrity and respect for intellectual property, confidentiality, and responsible publication practices are all part of ethical considerations in research, according to Resnik (2020). These principles ensure that the research process upholds both scientific and human values.

## RESEARCH FINDINGS AND DISCUSSION

## 4.1 Presentation of Research Findings

The section gave the discussion of the analyzed output of the data and their respective interpretation

#### 4.1.1 Response Rate

**Table 4: Response Rate** 

Status	Frequency	Percentage
Questionnaires Returned	376	97.9
Questionnaires Not Returned	8	2.1
Total Distribution	384	100

Of the 384 surveys distributed, 376 were correctly filled and returned. In survey-based research, a high response rate is necessary to ensure the validity and representativeness of the data. In survey research, an excellent response rate is 97.9%. For analysis and reporting, a response rate of 70% or more is considered highly satisfactory (Mugenda & Mugenda, 2003). The high return rate suggests that the data gathered is accurate and representative of the intended audience. The study's results are reliable and applicable to the entire community under investigation since it also lessens the possibility of non-response bias.

## 4.1.5 Environmental Sustainability Practices

Table 10: Descriptive Analysis of Environmental Sustainability Practices

Statement	Mean	Std. Deviation	Variance
The company has effective energy efficiency policies.	3.75	1.302	1.696
Waste management programs are well implemented.	3.79	1.389	1.928
Carbon footprint reduction is a key focus.	3.89	1.197	1.433
Employees are encouraged to participate in sustainability initiatives.	3.87	1.379	1.900
The company uses renewable energy sources where possible.	3.78	1.251	1.566
Environmental impact assessments are regularly conducted.	3.97	1.249	1.559
Sustainability training is provided to employees.	3.93	1.251	1.566

The analysis of the responses on environmental sustainability practices within the telecommunications sector in Kenya reveals a generally positive perception among employees. The mean scores for all the surveyed items ranged from 3.75 to 3.97, suggesting a strong level of agreement that sustainability practices are present and active in these organizations. Notably, the highest-rated statement was that environmental impact assessments are regularly conducted (mean = 3.97), indicating a consistent commitment to monitoring environmental effects. This is in line with findings by Mwangi and Ouma (2024), who emphasized the role of such assessments in enhancing regulatory compliance and stakeholder trust, which in turn supports improved operational performance.

Another highly rated aspect was the provision of sustainability training to employees (mean = 3.93). This suggests that firms are not only implementing green initiatives but also building internal capacity to support them. Ijaz et al. (2025) argued that such training is crucial for ensuring that sustainability policies are effectively translated into daily operations. Carbon footprint reduction also featured prominently (mean = 3.89), indicating that climate-related goals are prioritized, which supports Issa's (2023) view that reducing carbon emissions contributes both to environmental stewardship and cost efficiency.

Though still positively rated, the item on energy efficiency policies scored the lowest (mean = 3.75). This may suggest either underinvestment in energy-saving technologies or limited awareness among employees about such initiatives. Yet, studies like those by Deloitte (2022) and Lee et al. (2023) highlight that energy efficiency remains one of the most impactful and financially rewarding sustainability strategies, pointing to an area where improvement could yield significant benefits. The standard deviation across the responses ranged between 1.197 and 1.389, indicating moderate variability, which implies that while opinions are generally aligned, there may be differences in implementation or communication of these practices across departments. Variance values further support this, showing that the spread in responses is not wide enough to indicate major inconsistencies.

#### 4.1.6 Social Sustainability Initiatives

Table 5: Descriptive Analysis on Social Sustainability Initiatives

Statement	Mean	Std. Deviation	Variance
The company actively engages with local communities.	4.02	1.233	1.520
Employee welfare programs are well-implemented.	3.93	1.234	1.523
The organization prioritizes customer satisfaction.	4.11	1.233	1.520
There are policies promoting diversity and inclusion.	3.89	1.260	1.587
Employees receive fair remuneration and benefits.	3.97	1.362	1.855
The company supports employee development through training.	4.00	1.179	1.389
The company donates or supports community projects.	3.95	1.319	1.739

The analysis of social sustainability practices in the telecom sector provides intriguing insights into how companies are integrating social initiatives into their overall business goals, according to survey data. The item "The organization prioritizes customer satisfaction" had the highest mean score of 4.11, indicating a strong institutional focus on meeting customers' wants and expectations. This is in line with study by Al-Ma'ani et al. (2019), which shown that external CSR actions, including prioritizing consumers, enhance corporate reputation and brand loyalty.

"The Company actively engages with local communities" was the second-highest ranked item (mean of 4.02), closely followed by "The Company supports employee development through training" (mean of 4.00). These findings are consistent with a research by Mwangi and Ouma (2024) that found a high positive link between financial performance and education-focused CSR. Their findings indicate that community engagement and staff training programs help an organization grow and establish itself. Significant although somewhat varying levels of satisfaction with internal CSR activities are indicated by the mean scores of 3.93 and 3.97 for the phrases "Employee welfare programs are well-implemented" and "Employees receive fair remuneration and benefits," respectively. According to Bana Al-Ma'ani et al. (2019), internal corporate social responsibility (CSR), which encompasses moral workplace conduct and employee welfare, directly improves both financial and non-financial performance. This bolsters the idea that happier employees result in increased output and financial success.

The mean score for "There are policies promoting diversity and inclusion" was 3.89, indicating a recognized effort by the companies in creating inclusive environments, though slightly lower than other indicators. Okatta et al. (2024) emphasize that diversity and inclusion initiatives foster better employee engagement and reduce turnover, positively influencing firm performance. Lastly, the statement "The company donates or supports community projects" scored a mean of 3.95, affirming the companies' commitment to social development through philanthropy. This supports the perspective that socially responsible firms earn greater stakeholder trust and competitive advantages (Opoku Marfo, 2024).

## 4.1.9 Financial Performance

**Table 6: Descriptive Analysis of Finance Performance** 

Statement	Mean	Std. Deviation	Variance
The company has experienced increased profitability.	4.10	1.203	1.447
Liquidity levels have remained stable.	4.16	1.225	1.502
Market share has improved.	4.17	1.170	1.370
Return on assets has increased.	4.11	1.239	1.536
Return on investment has improved.	4.13	1.175	1.381
Revenue growth has been consistent.	4.14	1.253	1.570
Cost management has improved overall efficiency.	4.06	1.235	1.524

The analysis of the financial performance indicators within the telecommunications sector presents a positive assessment of how firms are managing and benefiting from sustainable business practices. Among the seven indicators measured, market share has improved received the highest mean score of 4.17, suggesting that respondents perceive their organizations as having gained competitive advantage over time. This aligns with the empirical findings of Okatta et al. (2024), who established that organizations engaging in sustainability and ethical governance practices are better positioned to increase their market presence through enhanced brand loyalty and stakeholder trust.

The statement liquidity levels have remained stable follows closely, with a mean score of 4.16. This suggests that the firms maintain adequate cash flow to meet short-term obligations, reflecting good financial health. According to Al-Ma'ani et al. (2019), liquidity stability is one of the key indicators of operational efficiency and risk management in firms that integrate sustainability into their financial systems.

Other highly rated items include revenue growth has been consistent (mean = 4.14), return on investment has improved (mean = 4.13), and return on assets has increased (mean = 4.11). These figures show a strong belief among employees that sustainability practices are translating into measurable financial gains. Mwangi and Ouma (2024) argue that sustainable practices not only boost operational performance but also improve investor confidence, which directly contributes to improved returns and revenue growth.

The item the company has experienced increased profitability received a mean score of 4.10, which still represents a positive assessment. Profitability, while marginally lower in rating compared to market share and liquidity, remains a critical performance metric. According to Opoku Marfo (2024), profitability gains in sustainability-oriented firms stem from improved efficiency, stronger stakeholder relationships, and long-term value creation.

#### 4.1.10 Model Summary

**Table 14: Model Summary** 

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.687ª	0.472	0.467	4.16523	0.000

a. Predictors: (Constant), Environmental Sustainability Practices, Social Sustainability Initiatives, Economic Sustainability Practices, Governance Practices,

Table 14 provides an examination of the relationship between organizational performance in the telecom sector and sustainability practices, or environmental, social, economic, and governance practices.

The correlation value (R) of 0.687 indicates that the model showed a significant positive association between the dependent variable in this example, which may represent the organization's overall performance, and the combined predictors. The R Square (R<sup>2</sup>) value of 0.472 indicates that the sustainability practices in the model explain approximately 47.2% of the variation in organizational performance. This is a significant amount considering that an organization's performance can be impacted by a number of internal and external factors. Even after correction, the model is still robust and dependable, as seen by the significantly lower Adjusted R Square of 0.467, which takes sample size and variable count into account.

The standard error of the estimate, 4.16523, shows the average distance between the regression line and the actual data. Given the complexity of organizational performance as a concept, the number is realistic in this instance. A smaller standard error is a sign of a stronger model fit. Most significantly, at the p < 0.05 level, the F-change's significance is 0.000, indicating statistical significance. This shows how well the regression model predicts the outcome variable overall and how adding the independent factors (environmental, social, economic, and governance practices) has improved the prediction of organizational performance.

These results concur with earlier empirical research that was emphasized in the literature study. For instance, Al-Ma'ani et al. (2019) reported that both internal and external corporate social responsibility (CSR) practices, including governance and employee-centered programs, contribute significantly to organizational performance by improving employee morale, operational transparency, and stakeholder trust. Similarly, Mwangi and Ouma (2024) found that sustainable investments in environmental and economic initiatives lead to improved financial and reputational performance.

Their conclusion that sustainability is not just a moral need but also a strategic asset that favourably affects performance results is supported by the model's high R value. Additionally, the contribution of governance practices as part of the predictors aligns with Opoku Marfo (2024), who emphasized that effective corporate governance fosters accountability and regulatory compliance, which in turn enhances operational efficiency and long-term sustainability.

## 4.1.10: ANOVAa Analysis

Table 7: ANOVAa Analysis

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5761.338	4	1440.335	83.02	.000b
	Residual	6436.534	371	17.349		
	Total	12197.872	375			

a Dependent Variable: Financial Performance

The regression model used to evaluate how sustainability policies affect financial performance is statistically significant, as demonstrated by the ANOVA table. The total sum of squares (12197.872) indicates the entire variation in financial performance, which is composed of the regression sum of squares (5761.338), which reflects the variation described by the model, and the residual sum of squares (6436.534), which accounts for the variation that cannot be explained.

The F-statistic value of 83.02 and the p-value of 0.000 show that there is a non-random link between the predictors, environmental sustainability practices, social sustainability initiatives, economic sustainability practices, and governance practices and financial success. The significance of this result (p < 0.05) affirms that the model provides a strong fit and that at least one, if not all, of the sustainability factors significantly influence financial performance. This interpretation is consistent with findings from empirical literature. For example, Mwangi and Ouma (2024) found that sustainability practices such as fair pricing, financial inclusion, and employee development directly contribute to improved profitability and financial health in organizations. Additionally, Al-Ma'ani et al. (2019) observed that both internal and external CSR activities enhance corporate performance by promoting trust among employees and stakeholders, which ultimately leads to greater efficiency and financial returns. Similarly, Opoku Marfo (2024) highlighted that governance and environmental sustainability initiatives are critical in reducing operational costs, attracting investment, and ensuring compliance, factors that collectively boost financial outcomes.

b Predictors: (Constant), Environmental Sustainability Practices, Social Sustainability Initiatives, Economic Sustainability Practices, Governance Practices.

#### 4.1.11 Regression Model Analysis

**Table 8: Regression Model Analysis** 

	<b>Unstandardized Coefficients</b>		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
(Constant)	3.784	1.996		1.896	0.059
Environmental Sustainability Practices	0.18	0.044	0.196	4.056	0.000
Social Sustainability Initiatives	0.53	0.097	0.607	5.49	0.000

The table's regression coefficients provide comprehensive details on how each sustainability metric and the telecom industry's financial performance are related. Assuming that all other variables stay constant, the unstandardized coefficients (B) show how a unit change in each predictor variable affects the financial performance. The model's constant (intercept), which is 3.784, indicates that if all sustainability practices were maintained at zero, the baseline level of financial performance would be 3.784. However, because the constant's p-value of 0.059 is just slightly higher than the conventional significance criterion of 0.05, it is not statistically significant.

With a B coefficient of 0.53, a t-value of 5.49, and a p-value of less than 0.001, Social Sustainability Initiatives had the greatest and most significant impact on financial performance among the predictors. According to this research, financial results are significantly enhanced by advancements in social practices including community involvement, employee welfare, and fair labor laws. These findings corroborate the findings of Al-Ma'ani et al. (2019), who highlighted how internal CSR initiatives increase employee loyalty and lower attrition, both of which boost profitability. It also supports the findings of Mwangi and Ouma (2024), who found that socially conscious and employee-centered tactics improve business success by fostering goodwill both within and externally.

Environmental Sustainability Practices also had a significant and favourable effect, as shown by the B coefficient of 0.18, the t-value of 4.056, and the p-value of 0.000. This illustrates how energy efficiency, carbon reduction, and the use of renewable resources lead to financial gains. This is consistent with earlier research by Okatta et al. (2024) and Ijaz et al. (2025), which discovered that by drawing in environmentally concerned stakeholders and reducing operating costs, environmentally conscious companies enhance profitability and brand image.

## CONCLUSION AND RECOMMENDATIONS

### 5.2 Conclusion

This study sought to examine how corporate sustainability practices, environmental, social, economic, and governance affect the financial performance of Kenyan telecommunications companies, with a specific focus on Safaricom PLC, Airtel Kenya, and Telkom Kenya. Using both descriptive and inferential statistics, the study established that sustainability practices are not merely peripheral corporate concerns but are indeed central to financial outcomes such as profitability, liquidity, and market share. The high response rate of 97.9% (376 out of 384 respondents) ensured the data was representative and reliable for generalizing findings across the sector.

The regression study provided compelling evidence of a statistically significant relationship between financial performance and sustainable behaviours. The analysis suggests that approximately 47.2% of the variation in financial performance might be explained by the four sustainability measures. Based on the substantial correlation coefficient of R = 0.687 and the model's R = 0.687 an

With a regression coefficient of B = 0.530, t = 5.49, and p < 0.001, Social Sustainability Initiatives had the strongest positive effect among the four sustainability characteristics examined. These findings demonstrate how important community involvement, customer happiness, and employee wellbeing are to improving business performance. High mean scores on topics like emphasizing customer satisfaction (Mean = 4.11) and actively participating in the community (Mean = 4.02) were used by employees to validate this.

Governance Practices also showed a strong and statistically significant positive relationship with financial performance, having a coefficient of B = 0.294, t = 4.943, and p < 0.001. This underscores the importance of ethical conduct, regulatory compliance, and effective board oversight in fostering investor confidence and reducing operational risks. High ratings in governance indicators such as qualified board members (Mean = 4.61) and whistle-blower protection (Mean = 4.60) reinforce this conclusion.

Financial performance was also shown to be positively and significantly impacted by environmental sustainability practices (B = 0.18, t = 4.056, and p = 0.000). Improved financial metrics were shown by companies that routinely do environmental impact assessments (Mean = 3.97) and teach staff members on sustainability (Mean = 3.93). These results are consistent with the Natural Resource-Based View paradigm, which holds that cost savings and increased stakeholder trust provide businesses a competitive edge through sustainable environmental practices.

In contrast, Economic Sustainability Practices showed a negative and statistically insignificant effect on financial performance (B = -0.129, t = -1.107, p = 0.269). While descriptive scores such as strategic partnerships for financial sustainability received high mean ratings (Mean = 4.63), the overall impact on financial outcomes was not immediately evident in the regression analysis. This suggests that economic practices may require a longer time horizon to yield tangible financial returns or might exert their influence indirectly through other organizational processes.

Overall, the study concludes that sustainable business practices particularly social, environmental, and governance-related are critical drivers of financial success in the Kenyan telecommunications sector. Telecommunication firms that proactively integrate such practices into their strategies are more likely to experience enhanced financial resilience, stronger stakeholder relationships, and long-term growth.

## REFERENCES

- Abang'a, A.O., Tauringana, V., Wang'ombe, D., & Achiro, L.O. (2022). Corporate governance and financial performance of state-owned enterprises in Kenya. Corporate Governance. 22(4), 798-820.
- Abeydeera, S., Khin, A. A., & Hewa Kuruppuge, R. (2019). Corporate economic responsibility and firm performance: Evidence from the telecommunications sector in Asia. Sustainability Accounting, Management and Policy Journal, 10(3), 45–47.
- Abd-Mutalib, H., Shafai, N. A., Nor, S. N. H. J. N., Jamil, C. Z. M., & Mohamed, R. (2025). Exploring the Influence of Internal and External Factors on E-Waste Management Practices in Malaysia: Examining the Significance of Eco-Efficiency Strategy. PaperASIA, 41(1b), 58-69.
- Ahmad, H., Yaqub, M., & Lee, S. H. (2024). Environmental-, social-, and governance-related factors for business investment and sustainability: A scientometric review of global trends. Environment, Development and Sustainability, 26, 2965–2987.
- Akinsola, K. (2025). The role of corporate governance in strengthening compliance frameworks. SSRN.
- Al Frijat, Y. S., Albawwat, I. E., & Elamer, A. A. (2024). Exploring the mediating role of corporate social responsibility in the connection between board competence and corporate financial performance amidst global uncertainties. *Corporate Social Responsibility and Environmental Management*, 31(2), 1079–1095.
- Alkhodary, D. (2023). Integrating Sustainability into Strategic Management: a Path Towards Long-Term Business Success. *International Journal of Professional Business Review*, 8(4), e01627.
- Al-Ma'ani, B., Al-Qudah, S., & Shrouf, H. (2019). The impact of corporate social responsibility on organizational performance in the telecommunication sector in Jordan. *Modern Applied Science*, 13(4), 1–13.
- Al-Matari, Y. A., Al-Swidi, A. K., & Fadzil, F. H. (2020). The impact of corporate governance mechanisms on firm performance in GCC telecom companies. *Corporate Governance: The International Journal of Business in Society, 20*(2), 263–280.
- Ashar, L. C. (2024, August 27). What is corporate sustainability? Why it matters to business. Business Administration and Management Blog | American Military University.
- Awadzie, D. M., Garr, D. K., Attah-Botchwey, E., Koduah Sarpong, K., & Marfo, M. (2023). Does corporate social responsibility promote the financial performance of the telecom industry in Ghana? *Cogent Business & Management*, 10(1).
- Asamoah, D., Yeboah, M. A., & Bonsu, S. (2021). Corporate governance and financial performance: Evidence from the telecommunication industry in Ghana. *Journal of African Business*, 22(3), 389–405.
- Badawi, A., & AlQudah, A. (2019). The impact of anti-corruption policies on the profitability and growth of firms listed in the stock market: Application on Singapore with a panel data analysis. *The Journal of Developing Areas*, 53(1), 179–189.
- Bansal, N., & Sharma, A. K. (2019). Corporate governance and firm performance in an emerging economy context: New evidence from India. International Journal of Comparative Management, 2(2), 123–147.
- Barney, J. (1991) Firm Resources and Sustained Competitive Advantage. Journal of Management, 17, 99-120.
- Barney, J. B., Ketchen, D. J., Wright, M., Hart, S. L., & Dowell, G. (2011). Invited Editorial: A Natural-Resource-Based View of the Firm: Fifteen Years After. *Journal of Management*, 37(5), 1464-1479.
- Bashir, H., Musa, R., Al Zarooni, H. A., Ojiako, U., Haridy, S., & Shamsuzzaman, M. (2024). Social sustainability in action: An explorative study of practices in construction project management. *Project Leadership and Society*, 5, 100148.
- Cantiqka, N. P., & Candradewi, M. R. (2023). How the Financial Performance Works? A Comparative Study in State-Owned and Private-owned Telecommunication Companies. *Research Journal of Finance and Accounting*, 14(13), 31–40.
- Carroll, S., Verbin, I., Jhanji, A., Williams, M., & Wilson, S. (2021, October 22). Creating competitive advantage through sustainability. Grant Thornton. Centre for Corporate Governance. (2024, November 16). Ethics and integrity in corporate governance (Role and best practices!).
- Chepkorir, D., Wanza, L., & Eng'airo, P. (2024). Strategic resource management and organizational performance of telecommunication companies in Kenya. The Strategic Journal of Business & Change Management, 11(3), 493–512.
- Chepkwony, G. K., & Omwenga, J. Q. (2021). Influence of disclosure of corporate governance principles on financial performance of Kenyan Commercial Banks listed on Nairobi Securities Exchange. *The Strategic Journal of Business & Change Management*, 8 (3), 550 561.
- Chubaka, M. N., Kanyurhi, E. B., Akonkwa, D. B. M., & Cubaka, P. M. (2022). Measuring price fairness and its impact on consumers' trust and switching intentions in microfinance institutions. *Journal of Financial Services Marketing*, 27(2), 111–135.
- Dharmayanti, N., Ismail, T., Hanifah, I. A., & Taqi, M. (2023). Exploring sustainability management control system and eco-innovation matter sustainable financial performance: The role of supply chain management and digital adaptability in Indonesian context. *Journal of Open Innovation: Technology, Market, and Complexity, 9*(3), 100119.
- Ezeigweneme, C. A., Umoh, A. A., Ilojianya, V. I., & Adegbite, A. O. (2024). Telecommunication energy efficiency: Optimizing network infrastructure for sustainability. Computer Science & IT Research Journal, 5(1), 26-40.
- Ezzeddine, Z., Khalil, A., Zeddini, B., & Ouslimani, H. H. (2024). A Survey on Green Enablers: A Study on the Energy Efficiency of AI-Based 5G Networks. Sensors, 24(14), 4609.
- Fatima, T., & Elbanna, S. (2020). Corporate social responsibility and firm performance: The mediating role of reputation & stakeholder satisfaction in MENA telecommunication firms. *Corporate Social Responsibility and Environmental Management*, 27(6), 3031–3044.
- Freeman, R. E. (2010). Stakeholder theory: the state of the art. In Stakeholder theory. (1. publ). Cambridge: Cambridge Univ. Press.
- Freeman, R. E., Harrison, J. S., & Zyglidopoulos, S. C. (2018). Stakeholder theory: concepts and strategies. Cambridge: Cambridge University Press.
- Gerged, A., Albitar, K., & Al-Haddad, L. (2021). Corporate environmental disclosure and earnings management—The moderating role of corporate governance structures. *International Journal of Finance & Economics*, 1–22.
- Harvey, M. H., Pate, D., Penteriani, G., Williams, M., Wamola, A., Mbugua, C., & Melly, L. (2024, October). Driving digital transformation of the economy in Kenya: Opportunities, policy reforms, and the role of mobile. GSMA.
- Hossain, M., Hasan, L., & Hasan, M. (2024). Corporate governance as a global phenomenon: Evolution, theoretical foundations, and practical implications. *Journal of Financial Risk Management*, 13(2), 342-375.
- Ijaz, M., Naz, F., & Sadiq, N. (2025). Sustainable synergy: exploring the nexus of green initiatives and digitalization in gulf countries—a comprehensive study on environmental, social, and governance (ESG) indicators. *Journal of Science and Technology Policy Management*.
- Iqbal, M., Ahmad, N., & Riaz, Z. (2021). Impact of green innovation on environmental and organizational performance: Evidence from the South Asian telecommunication sector. Environmental Science and Pollution Research, 28(19), 24007–24017.
- Jabar, A. A., & Ogungbade, O. I. (2022). Whistleblowing Policy and Performance of Listed Deposit Money Banks in Nigeria. The International Journal of Business & Management, 10(7).
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jerab, D. (2025, January 8). Balancing profitability and sustainability in business. SSRN.
- Karthikeyan, K. (2023). Analyzing the Financial Performance of India's Telecommunication Companies for One Decade (2013-2022). Asian Journal of Economics, Finance and Management, 5(1), 193–207.

- Khan, A., Muttakin, M. B., & Siddiqui, J. (2020). Corporate social responsibility and financial performance: Evidence from South Asian telecommunication firms. Social Responsibility Journal, 16(4), 535–553.
- Kimanzi, M. B., & Ngugi, E. (2017). Effects of supplier development practices on performance of pharmaceutical suppliers for hospitals in Nairobi City County. *International Journal of Supply Chain Management*, 2(1), 32–56.
- Klusak, P., Agarwala, M., Burke, M., Kraemer, M., & Mohaddes, K. (2021). Rising temperatures, falling ratings: The effect of climate change on sovereign creditworthiness. *Management Science* (Forthcoming), CAMA Working Paper 34/2021.
- Kothari, C. R., & Garg, G. (2019). Research methodology: methods and techniques (Fourth multi colour edition). New Age International (P) Limited, Publishers.
- Kumar, N., & Asmare, A. S. (2024). Social versus financial performance: Evidence from microfinance institutions in Ethiopia. Social Responsibility Journal, 20(6), 1122–1137. https://doi.org/10.1108/SRJ-07-2023-0407
- Le, C., Le, A., & Vo, D. (2025). Valuing ESG: How financial markets respond to corporate sustainability. *International Business Review*.
- Lee, Y.-C., & Elyakova, I. D. (2023). Sustainable Development Adoption in the High-Tech Sector: Focus on ecosystem players and their influence. *Sustainability*, 15(18), 13674.
- Li, Q., Tang, W., & Li, Z. (2024). ESG systems and financial performance in industries with significant environmental impact: A comprehensive analysis. Frontiers in Sustainability, 5.
- Liu, Y., Fang, Y., Hu, L., Chen, N., Li, X., & Cai, Y. (2024). Inclusive leadership and employee workplace well-being: The role of vigor and supervisor developmental feedback. *BMC Psychology*, 12, 540.
- Malakwen, R. J., Tarus, J. K., & Otuya, R. (2024). Relationship Between Environmental Cost Disclosure and Financial Performance of Manufacturing and Construction Firms Listed in Nairobi Securities Exchange; The Moderating Effect of Firm Size. *Journal of Business, Economics and Management Research Studies*, 2(3), 46–57.
- Masila, C. K., Nyamute, W., Okiro, K., & Irungu, M. (2024). Does Corporate Sustainability Reporting Influence Financial Performance? Evidence from Kenyan Listed Companies. European Journal of Business and Management Research, 9(1), 79–84.
- Matuszewska-Pierzynka, A. (2024). Relationship between corporate sustainability performance and corporate financial performance: The case of companies from the WIG-ESG Index. *Economics and Business Review*, 10(4), 165–188.
- Mbote, M. D. (2024). Competitive Strategies and Financial Performance of Telecommunication Firms in Kenya: A Case of Safaricom PLC. *Daystar University Repository*.
- McDougall, N., Wagner, B., & MacBryde, J. (2019). An empirical explanation of the natural-resource-based view of the firm. *Production Planning & Control*, 30(16), 1366–1382.
- Moisescu, O. I., & Gică, O. A. (2020). The Impact of Environmental and Social Responsibility on Customer Loyalty: A Multigroup Analysis among Generations X and Y. *International journal of environmental research and public health*, 17(18), 6466.
- Muchiri, M. K., Erdei-Gally, S., & Fekete-Farkas, M. (2022). Effect of CSR on the Financial Performance of Financial Institutions in Kenya. *Economies*, 10(7), 174.
- Munyi, D. M., & Waruguru, M. (2020). Effect of environmental corporate social responsibility on financial performance of mobile telecommunication companies in Kenya. *IOSR Journal of Economics and Finance*, 11(5), 1–8.
- Mwanga, P. (2024). Impact of corporate governance mechanisms on firm performance in Uganda. American Journal of Finance, 9(1), 27–39.
- Mwangi, C., & Ouma, C. (2024). Education Corporate Social Responsibility and Financial Performance of Telecommunication Companies in Kenya. *Journal of Finance and Accounting*, 8(1), 60–78.
- Mwangi, C., & Ouma, C. (2024). Environmental corporate social responsibility and financial performance of telecommunication companies in Kenya. *African Journal of Emerging Issues*, 6(1), 1–24.
- Mujahid, M., & Abdullah, A. (2019). Impact of sustainability reporting on firm performance: Evidence from telecommunication companies in Malaysia. *International Journal of Ethics and Systems*, 35(4), 632–648.
- Nandamuri, P. P., Rao, K. S., & Mishra, M. K. (2020). Sustainable Competitive Advantage Through Business Model Innovation: The Indian Perspective. In I. Management Association (Ed.), Disruptive Technology: Concepts, Methodologies, Tools, and Applications (pp. 191-213). IGI Global Scientific Publishing.
- Nandini, E. S., Sudharani, R., & Suresh, N. (2022). A study on impact of environmental accounting on profitability of companies listed in Bombay Stock Exchange. *Bulletin Monumental*, 21(8), 46–51.
- Njiru, J. N. K., Thoronjo, E., & Njeru, P. (2023). Influence of corporate cost leadership strategies on organizational performance among mobile service providers: A comparative analysis of Safaricom Plc and Airtel (K) Ltd in Kenya. International Journal of Business Management, Entrepreneurship and Innovation, 5(3), 163-179.
- Nguyen, T. H., & Nguyen, L. H. (2020). Environmental management systems and financial performance: A case study of the telecommunication industry in Vietnam. *Journal of Cleaner Production*, 251, 119659.
- Obeng, F. S., & Boachie, M. K. (2021). Inclusive economic practices and financial performance: Evidence from the telecommunications sector in Ghana. *Journal of Afri*
- performance: Evidence from the telecommunications sector in Ghana. *Journal of African Business*, 22(4), 480–497. Odundo, O. K., Mwanzia, M., & Chepkemoi, J. (2024). *Strategic management practices and*
- performance of telecommunication companies in Kenya. International Journal of Social Sciences Management and Entrepreneurship, 8(4), 380-391.
- OECD. (2025). Recommendation of the Council on Principles of Corporate Governance (OECD/LEGAL/0413). Organization for Economic Cooperation and Development.
- Okatta, C. G., Ajayi, F. A., & Olawale, O. (2024). Enhancing organizational performance through diversity and inclusion initiatives: A meta-analysis. *International Journal of Applied Research in Social Sciences*, 6(4), 734–758.
- Oladele, Oluwaseyi. (2024). Impact of Telecommunication on Global Economic Development.
- Onsongo, S., Kamotho, C., Rinke de Wit, T. F., & Lowrie, K. (2023). Experiences on the Utility and Barriers of Telemedicine in Healthcare Delivery in Kenya. *International journal of telemedicine and applications*, 2023, 1487245.
- Opoku Marfo, E. (2024). Mechanisms and initiatives of corporate social responsibility behaviors in Ghana: A co-integration approach. *Cogent Business & Management*, 11(1).
- Otieno, J., & Taddese, A. (2020). EdTech in Kenya: A rapid scan (EdTech Hub Country Scan).
- Owusu-Antwi, G., & Antwi, S. (2021). Corporate social responsibility and financial performance: A case study of the telecommunication industry in Ghana. *Journal of African Business*, 22(3), 345–363.
- Pérez Estébanez, R., & Sevillano Martín, F. J. (2025). Business Sustainability and Its Effect on Performance Measures: A Comprehensive Analysis. Sustainability, 17(1), 297.
- Pfajfar, G., Shoham, A., Małecka, A., & Zalaznik, M. (2022). Value of corporate social responsibility for multiple stakeholders and social impact Relationship marketing perspective. *Journal of Business Research*, 140, 645–654.
- Pham, D. C., & Pham, T. K. (2021). Impact of sustainability practices on financial performance: empirical evidence from Sweden. *Cogent Business & Management*, 8(1)
- PwC. (2024). Localising supply chains and its impact on performance. Retrieved from

https://www.pwc.com/m1/en/publications/documents/2024/localising-supply-chains-and-its-impact-on-performance.pdf

PwC. (2025, February 28). A new recipe for growth: Perspectives from the Global Telecom Outlook 2024-2028.

Roffé, M. A., & González, F. A. I. (2024). The impact of sustainable practices on the financial performance of companies: A review of the literature. Revista Científica "Visión de Futuro", 28(1), 221-240.

Rosário, A. T., & Figueiredo, J. (2024). Sustainable entrepreneurship and corporate social responsibility: Analysing the state of research. *Sustainable Environment*, 10(1).

Rosário, A. T., & Figueiredo, J. (2024). Sustainable entrepreneurship and corporate social responsibility: Analysing the state of research. *Sustainable Environment*, 10(1).

Saunders, R. J., Warford, J. J., & Wellenius, B. (n.d.). Telecommunication and economic development. The World Bank.

Savage, S. (2024, October 21). The new corporate green goal: being 'nature positive'. Financial Times.

Singh, A. (2024). Sustainability practices in business operations. International Journal for Research Publication and Seminar, 15(3), 18-34.

Syekei, J. (2022, June 22). Kenya: Delving into telecommunication – Dealing with clients in the telecommunication sector. Bowmans Law.

TechAfrica News. (2024, November 12). Airtel Kenya Expands Airtel Money Network with 60+ New Branches Nationwide.

Telecom Review Africa. (2023, May 18). Kenya's digital future: A journey of connectivity, innovation and prosperity.

Telecom Review Africa. (2024). East Africa telecom: Growth, challenges, and future prospects.

Tiony, O. (2023). The impact of digital financial services on financial inclusion in Kenya. American Journal of Industrial and Business Management, 13(6), 593-628.

Tiony, O. K., & Yin, Y. K. (2024). Financial technology and its role in promoting financial inclusion and economic growth in Kenya. American Journal of Industrial and Business Management, 14(7), 943-968.

Toyya, S. M., Guyo, W., & Odhiambo, R. (2024). Corporate Social Responsibility and Performance of Telecommunication Firms in Kenya. *Journal of Finance and Accounting*, 8(6), 77–103.

Ugwu, N. A. (2023). Corporate governance and leadership: A framework for accountability and ethical behavior. Global Scientific Journal, 11(11).

Wandeto, P. (2023). The effect of digitalization on the operational efficiency of telecommunication firms in Kenya [Strathmore University].

Wekesa, J. (2024). Impact of CSR (Corporate Social Responsibility) on consumer behavior. *International Journal of Marketing Strategies*, 6(2), 35–45. Wikipedia contributors. (2024). *Telkom Kenya*. In Wikipedia, the Free Encyclopaedia.

Wikipedia contributors. (2024, March 15). Safaricom. In Wikipedia, the Free Encyclopaedia.

Wolniak, R., Gajdzik, B., & Grebski, W. (2023). Environmental sustainability in business. Scientific Papers of Silesian University of Technology, Organization and Management Series, 175.

Wu, W., Liu, Y., & Wu, C. (2019). Corporate governance and financial performance of telecom firms: Evidence from Asia. *Telecommunications Policy*, 43(5), 415–425.

Yahaya, O. A. (2025). Remapping the connections between board independence and financial performance. SSRN Electronic Journal. Available at Mugenda, O. M., & Mugenda, A. G. (2003). Research Methods: Quantitative and Qualitative Approaches. Nairobi: ACTS Press.

Yussuf, M. A., & Kilei, P. (2024). Pricing strategies on brand performance: A case study of Safaricom Limited Kenya. *African Journal of Social Issues*, 7(1).

Zhao, J., Wang, C., Ibrahim, H., & Chen, Y. (2024). The impact of digital financial inclusion on bank performance: An exploration of mechanisms of action and heterogeneity.