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Assessing the drivers of sustainable growth in Medium-Sized Agribusinesses in Nairobi County.

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ASSESSING THE DRIVERS OF SUSTAINABLE GROWTH IN MEDIUM-SIZED AGRIBUSINESSES IN NAIROBI COUNTY

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DECLARATION

Student Declaration:

I declare that this is my original work and has not been presented to any other University for the award of a degree. Any works done by other scholars have been recognised. This dissertation does not contain any material published by any other researcher

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Supervisor's Approval:

This dissertation has been submitted for examination with my approval as the student's university supervisor.

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ABSTRACT

The sustainable growth of agribusinesses is crucial to Kenya's economic development, particularly for medium-sized entities that significantly contribute to employment and food security. However, many enterprises struggle to achieve long-term sustainability due to various internal and external constraints. This study aims to identify the determinants of sustainable growth among medium-sized agribusinesses in Nairobi County, focusing on three key factors: entrepreneurial experience, access to finance, and technology. The study also used firm size and firm duration as control factors. It was anchored on the Resource-Based View (RBV) theory, Dynamic Capabilities Theory, and Institutional Theory. A correlational research design was adopted. Primary data was collected through structured questionnaires administered to business owners and senior executives, with a pilot test conducted to ensure reliability and validity. Data analysis involved descriptive statistics, correlation, and a multiple regression model to establish the relationship between the independent variables and sustainable growth. From the results, the study concluded that entrepreneurial experience is a significant determinant of the sustainable growth of medium-sized agribusinesses. Access to finance is a significant determinant of the sustainable growth of medium-sized agribusinesses. Technology adoption is a significant determinant of the sustainable growth of medium-sized agribusinesses. Firm size is a significant determinant of the sustainable growth of medium-sized agribusinesses. Firm duration is a significant determinant of sustainable growth of the medium sized agribusiness. The study recommended that medium-sized agribusinesses should strengthen entrepreneurial experience through targeted capacity building, mentorship programs, and exposure to best practices in agribusiness management. It is also essential for the medium-sized agribusinesses to improve access to finance by developing tailored financial products, flexible credit facilities, and risk-sharing mechanisms. The medium-sized agribusinesses should be encouraged and supported to adopt modern technologies through targeted incentives, training programs, and accessible digital infrastructure and should strategically build on their existing scale by expanding market reach, strengthening supply chains, and investing in capacity development. With regards limitations of the study, there are a number of research philosophies. However, the study was limited to a positivism research philosophy and a correlational research design. There are several agribusinesses operating within Nairobi County. However, the study was also limited to 100 medium sized agribusinesses operating within Nairobi City County, Kenya and hence the researcher administered 100 questionnaires to the respondents. The respondents were limited to the CEO, CFO, COO, or senior management officer. Thus, a census study of the 100 respondents and primary data that was gathered using a structured questionnaire.

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LIST OF ABBREVIATIONS AND ACRONYMS

ASTGS	Agricultural Sector Transformation and Growth Strategy
CBK	Central Bank of Kenya
EU	European Union
GDP	Gross Domestic Product
MSMEs	Micro, Small, and Medium Sized Enterprises
OECD	Organisation for Economic Co-operation and Development
PACCI	Pan African Chamber of Commerce and Industry
PPPs	Public Private Partnerships
SMEs	Small and Medium-Sized Enterprises
RBV	Resource-Based View
DCT	Dynamic Capability Theory
NACOSTI	National Commission for Science, Technology and Innovation
NPL	Non-Performing Loan

DEFINITION OF TERMS

Access to finance refers to the availability, affordability, and ease of obtaining financial resources necessary for business expansion and sustainability (Teka, 2022).

Entrepreneurial experience refers to the knowledge, skills, and competencies that business owners and senior executives have acquired over time through their involvement in agribusiness and related industries (Roomi, 2023).

Firm duration is defined as the number of years a business has been in operation since its inception (Erdogan, 2023).

Firm size is measured by annual sales, profitability, total assets, and the number of employees in a business (Fajarika et al., 2024).

Sustainable growth refers to the long-term expansion and financial stability of medium-sized agribusinesses achieved without compromising future resources or business viability (Ginting, 2020).

Technology refers to practices, ideas, and mechanisms; the application of scientific knowledge, tools, and techniques; and innovation to bring out an outcome, change or efficiency (Triwahyono et al., 2023).

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Business growth is one of the fundamental constraints of all organizations as it is a crucial indicator of the "health" of an organization and is the measure of a successful organization. The dynamism of SME growth is a consequence of a dynamic and competitive environment (Runtuk et al., 2023). This situation requires stakeholders to consider sustainable business growth and its determinants seriously. Sustained growth for medium-sized enterprises involves achieving consistent and long-term expansion without sacrificing profitability or stability. This requires more than just short-term gains; it's about building a resilient and adaptable business model that can withstand market changes and economic fluctuations. Key strategies include focusing on innovation, developing strong customer relationships, and implementing effective financial management practices (Iwu, 2018).

Small and Medium Enterprises (SMEs) play a significant role in global, regional, and local economies, contributing to employment, innovation, and economic sustainability (Anderson, 2017). According to the World Bank (2021), SMEs account for over 90% of businesses worldwide and employ more than 50% of the workforce. Across Organisation for Economic Co-operation and Development (OECD) countries, SMEs represent 99% of all businesses, employing two out of every three workers and contributing between 50% and 60% of the value added (OECD, 2023). Similarly, SMEs in Asia and the Pacific account for an average of 96% of all enterprises, 62% of the national labour force, and 42% of the GDP. In Latin America and the Caribbean, SMEs constitute 99.5% of businesses and contribute to approximately 60% of formal employment.

SMEs are equally vital to Africa's economic landscape, where they form the backbone of many economies (Chen et al., 2022). The Pan African Chamber of Commerce and Industry (PACCI, 2024) reports that small and medium-sized enterprises (SMEs) in Africa represent over 90% of businesses, contribute more than 50% to the continent's GDP, and account for approximately 63% of employment. In Kenya, Small and Medium-Sized Enterprises (SMEs) play a crucial role in driving economic growth,

creating jobs, and supporting livelihoods. They employ over 15 million people and contribute approximately 33.8% to the national GDP (Central Bank of Kenya, 2023). These enterprises are crucial for fostering economic prosperity and enhancing social well-being, making their sustainable growth a key priority.

Despite their economic significance, SMEs worldwide struggle with survival and expansion. The World Economic Forum (2022) estimates that 67% of SMEs globally face survival challenges, citing financial constraints, regulatory barriers, and market uncertainties. Research by Carter (2021) highlights the high failure rate of SMEs, with 20% failing in the first year, 30% within two years, 50% within five years, and 70% within ten years. This trend is particularly severe in Africa, where small and medium-sized enterprises (SMEs) experience high failure rates, often within their first few years of operation. For instance, over 70% of SMEs in South Africa fail within the first 5-7 years, while in Uganda, a third of new businesses do not survive beyond one year.

Kenya also grapples with a high SME failure rate, with 70% of businesses collapsing within the first three years of operation (Douglas et al., 2017). Such failures result in substantial job losses, increased unemployment rates, and reduced household income. SME failure also dampens investor confidence, leading to reduced investments and slower economic development (Onyango et al., 2023). Additionally, frequent SME exits weaken market competition, increasing the risk of monopolies and oligopolies, which negatively impact consumer choices and pricing structures. The collapse of these businesses not only disrupts employment but also affects business owners economically and socially. The failure of agribusinesses in Kenya is estimated to be significantly higher than other SMEs categories as, according to CBK (2024), agribusiness accounted for 17.4% of non-performing loans, while lending to the agriculture sector was only 3.0% of all total loans issued by the banking sector.

Sustainable growth is essential for ensuring that businesses thrive in the long term without compromising the needs of future generations (Klarin, 2018). It involves balancing economic, social, and environmental priorities to maintain business continuity. Ginting (2020) defines sustainable growth as development that meets present needs while ensuring future sustainability. Klarin (2018) emphasizes that sustainable growth requires protecting natural resources, maintaining high living

standards, and promoting equitable development. Miller (2018) further explains that sustainable growth must be repeatable, ethical, and responsible, as these elements are fundamental to long-term business success.

The concept of sustainability in business has evolved beyond profit maximization to incorporate social and environmental considerations (Martins et al., 2022). Modern businesses are expected to integrate sustainability into their core strategies to achieve long-term competitiveness. Masfer (2023) asserts that firms can no longer focus solely on increasing shareholder value; instead, they must consider their environmental and social impact. Murphy (2013) argues that sustainable development in SMEs is not just about short-term profits but about maintaining a balance between economic viability, environmental stewardship, and social responsibility.

However, the concept of sustainable growth has faced criticism, particularly regarding its ambiguity and measurement challenges (Liying, 2019). Some scholars argue that sustainable growth is inherently paradoxical, as it relies on the same economic growth paradigm that contributes to environmental degradation (Lippert, 2004). Others contend that the notion of sustainability is illusory and that the focus should shift to business resilience and survival (Cheever & Dernbach, 2015). These critiques highlight the need for a more practical and adaptable approach to sustainable business practices.

The drivers of sustainable growth have gained interest in the most recent years, and several empirical studies have identified the key drivers of sustainable growth. Roomi (2023), Abdul (2018) and Anderson (2017) found that entrepreneurial skills and prior business experience help enterprises to sustain growth. Erdogan (2023) highlighted that experienced entrepreneurs may tend to exhibit higher growth rates. Munyori and Ngugi (2018), Beck and Demirguc-Kunt (2006) and Diabate et al. (2019) identified access to finance as one of the drivers of sustainable of growth. According to Roomi (2023), entrepreneurial experience is the driver of sustainable growth. Awa et al. (2015) and Triwahyono et al. (2023) highlight that technology adoption enhances operational efficiency and market access. Whereas Kimura (2018) found that digital transformation reduces costs and enhances the scalability of businesses.

Therefore, the study adopted entrepreneurial experience, access to finance, and adoption of technology as key drivers of sustainable growth, as affirmed by existing literature.

1.1.1 Determinants of Sustainable Growth of Agribusinesses

The sustainable growth of agribusinesses is influenced by several factors, including entrepreneurial experience, access to finance, adoption of technology, firm duration and firm size. Each of these variables plays a crucial role in determining the long-term viability and success of medium-sized agribusinesses. Sustainable growth refers to a business's ability to expand while maintaining long-term economic, social, and environmental stability. It ensures that current business operations do not compromise the ability of future generations to meet their needs (Ginting, 2020). Sustainable growth involves protecting natural resources, maintaining high living standards, and ensuring equitable development (Klarin, 2018). In agribusiness, sustainability includes financial resilience, environmental responsibility, and social impact, which contribute to the sector's ability to meet present and future demands.

Entrepreneurial experience refers to the knowledge, skills, and competencies that business owners acquire through previous business ownership, employment, or industry exposure (Abdul, 2018). It is a critical factor in business success, as experienced entrepreneurs are better equipped to navigate market challenges, make informed decisions, and implement strategic initiatives (Roomi, 2023). Entrepreneurial experience shapes business structure, management practices, and innovation capabilities, directly impacting a firm's ability to sustain growth (Munyori & Ngugi, 2018). Entrepreneurs with prior business experience are more effective in financial planning, product development, and risk management, fostering resilience and adaptability, which are essential for sustaining business growth in a dynamic agribusiness sector (Teka, 2022).

Access to finance is one of the most critical determinants of business growth, particularly for SMEs. It refers to the ability of a business to secure funds for operations, expansion, and investment (Munyori & Ngugi, 2018). Financial constraints are among the primary reasons for SME failure, with high interest rates, lack of collateral, and

limited financing options acting as significant barriers (Anderson, 2017). Research shows that institutional support, business environment, and access to credit significantly influence business expansion (Kimuru, 2018). In agribusiness, access to finance is crucial for acquiring equipment, expanding operations, and investing in sustainable agricultural practices, enabling firms to maintain long-term stability and resilience (Teka, 2022).

The relationship between technology and the sustainable growth of businesses has been studied widely with differing perspectives on whether adopting technology accelerates the growth of businesses or presents challenges. According to Kannan & Gambetta (2025), technology is a key enabler of sustainable growth, and its adoption enhances operational efficiency and resilience. Authors such as Kimura (2018) and Teka (2022) conclude that the relationship between technology and the sustainable growth of medium-sized businesses is positive and reinforcing.

Awa et al. (2015) argues that the integration of technology in medium-sized enterprises through the adoption of cloud computing, Artificial Intelligence (AI) and automation helps businesses reduce operational costs and streamline processes. Abidemi (2024) assessed the role of technology and automation in streamlining business processes, finding that automation improves productivity in SMEs by 30% and reduces manual errors by 25%. (Triwahyono et al., 2023) also found that SMEs' adoption of digital tools enabled optimum resource utilisation, reduced operational costs, and enhanced competitiveness.

Firm duration refers to the number of years a business has been in operation and is often used as an indicator of business stability and market positioning (Ilaboya & Ohiokha, 2016). Older firms tend to have more established customer bases, operational experience, and financial stability, giving them a competitive advantage (Ipinnaiye et al., 2016). However, younger firms often grow faster due to their ability to adapt quickly to market changes and implement innovative solutions (Erdogan, 2023). The age of a firm influences business credibility, access to finance, and the ability to secure long-term investments (Teka, 2022). In the agribusiness sector, younger firms may struggle with market entry challenges, whereas older firms may face difficulties in

adopting modern technologies and practices, affecting their sustainability (Fajarika et al., 2024).

Firm size is typically measured by the number of employees, revenue, or total assets of a business (Yadav et al., 2021). It influences a company's access to resources, economies of scale, and competitive positioning (Erdogan, 2023). Smaller firms may have limited access to finance, whereas larger firms benefit from better economies of scale and market reach (Fajarika et al., 2024). While larger firms enjoy stability and greater market control, smaller firms often demonstrate higher flexibility and growth potential (Ipinnaiye et al., 2016). In developing countries, firm size plays a crucial role in overcoming business growth barriers, as larger firms can invest in human capital, technology, and infrastructure to sustain long-term growth (Teka, 2022).

Studies in Kenya have identified four key factors influencing SME growth: entrepreneurial characteristics, access to finance, competition, and marketing strategies (Wanjau, 2020; Ogutu, 2021; Amadasun, & Mutezo, 2022; Awuor, & Makhamara, 2024; and Okwaro, et al. 2025). Among these, access to finance has been found to have the most significant impact, followed by entrepreneurial skills. Entrepreneurial skills such as planning, product development, and risk-taking are critical for SME success (Munyori & Ngugi, 2018). Entrepreneurial characteristics such as education, work experience, innovativeness, and risk-taking have also been found to moderate business growth outcomes (Roomi, 2023). A comparative study of SME growth factors in developed and developing countries found that developed economies emphasize innovation and marketing capabilities, whereas developing economies focus on human capital development and entrepreneurial competencies to overcome barriers to business growth (Fajarika et al., 2024).

In Kenya, SME growth is shaped by individual entrepreneur attributes, institutional support, business environment, and access to finance (Anderson, 2017). However, high collateral requirements, complex bureaucratic processes, and inadequate infrastructure hinder SME progress (Munyori & Ngugi, 2018). Addressing financial constraints, regulatory challenges, and capacity-building efforts is crucial to enhancing SME sustainability and growth. This study builds on previous research by focusing on

medium-sized agribusinesses in Kenya and examining how entrepreneurial experience, firm size, firm duration, and access to finance influence sustainable growth. The findings would provide valuable insights for policymakers, business owners, and financial institutions, offering evidence-based recommendations to promote the long-term success of agribusinesses.

1.1.2 Agribusinesses in Kenya

The agricultural sector in Kenya presents significant opportunities for SME growth and transformation. The Food and Agriculture Organization (FAO, 2021) emphasises that agribusiness SMEs play a key role in improving food security, creating jobs, and fostering rural development. The Ministry of Agriculture, Livestock, Fisheries, and Irrigation (2019) developed the Agricultural Sector Transformation and Growth Strategy (ASTGS), which identifies SMEs as drivers of increased smallholder farmer incomes and agricultural modernisation. These enterprises provide farmer-facing services, enabling over one million farmers across Kenya to enhance productivity and access markets. As agribusiness SMEs continue to shape the country's food systems, understanding the key drivers of their sustainable growth would provide policymakers, business owners, and investors with critical insights to strengthen the sector's resilience and economic contribution.

The definitions of SMEs vary from country to country, but they are typically based on turnover, number of employees, and asset value. In the Kenya context, the Central Bank of Kenya (2023) classifies as shown in Table 1.1.

Table 1.1: SME Categories CBK

Category	Sector	Annual Turnover (KES)	No. of employees	Assets/Investment (KES)
Micro	All	< 500,000	<10	N/A
Small	All	500,000 < x < 5,000,000	10 < x < 49	N/A
Medium	Manufacturing	5,000,000 < x < 100,000,000	50 < x < 250	125,000,000
	Service/Farming	5,000,000 < x < 100,000,000	50 < x < 250	250,000,000
	Other	5,000,000 < x < 100,000,000	50 < x < 250	As determined by the cabinet secretary

1.1.3 Medium-Sized Enterprises

Medium-sized enterprises are major contributors to employment and GDP but face high mortality rates in developing countries (Ilaboya & Ohiokha, 2016). They differ significantly from small enterprises that operate informally, as well as larger enterprises that have financial stability. Medium-sized enterprises often struggle to sustain growth beyond their initial expansion phase (Erdogan, 2023). Additionally, medium-sized agribusinesses are more vulnerable to the effects of climate change, market volatility, and policy shifts as compared to micro and small, which are nimbler due to their informal operations (Kimura, 2018). On the other hand, large agribusinesses often benefit from economies of scale and well as government incentives and subsidies whereas medium sized enterprises struggle to compete (Reardon et al., 2024).

Medium sized enterprises face different growth barriers as they typically require larger capital investment than small enterprises and face challenges related to market access, compliance with regulations and technology adoption (Munyori & Ngugi, 2018). Whereas small enterprises may rely on personal networks and informal credit, medium sized enterprises must formalise their operations to grow (Freeman et al., 2016). (OECD, 2023) indicates that medium-sized enterprises operate at a pivotal growth stage; unlike small businesses, they possess operational stability and significant growth potential, but unlike larger enterprises, they face financing gaps and organizational inefficiencies.

Medium-sized enterprises form a critical segment of the local economy, acting as a bridge between small businesses and large corporations, yet they often face unique challenges that are underexplored (Omidvar et al., 2025). These enterprises contribute significantly to employment, innovation, and value addition, but struggle with issues such as limited access to finance, regulatory pressures, and market competition, particularly in an urban setting like Nairobi. Understanding their dynamics can help policymakers, investors, and support organizations develop targeted interventions to enhance their growth, resilience, and competitiveness, ultimately boosting economic development in the region (Gachara & Munjuri, 2018).

1.2 Statement of the Problem

Medium-sized enterprises are major contributors to employment and GDP but face high mortality rates in developing countries (Ilaboya & Ohiokha, 2016). Medium-sized enterprises often struggle to sustain growth beyond their initial expansion phase (Erdogan, 2023). Additionally, medium-sized agribusinesses are more vulnerable to the effects of climate change, market volatility, and policy shifts as compared to micro and small, which are nimbler due to their informal operations (Kimura, 2018). Medium sized enterprises face different growth barriers as they typically require larger capital investment than small enterprises and face challenges related to market access, compliance with regulations and technology adoption (Munyori & Ngugi, 2018).. (OECD, 2023) indicates that medium-sized enterprises operate at a pivotal growth stage; unlike small businesses, they possess operational stability and significant growth potential, but unlike larger enterprises, they face financing gaps and organizational inefficiencies.

Small and medium-sized enterprises (SMEs) account for the majority of businesses worldwide, playing a crucial role in economic development (World Bank, 2021). In Kenya, they significantly contribute to the economy, employing over 15 million people and contributing approximately 30% of the national value-added (KBA & JICA, 2021). However, despite their importance, achieving profitable and sustainable growth remains a challenge with the World Economic Forum (2022) reporting that 67% of SMEs globally struggle with survival and expansion.

In Kenya, failure rates of medium sized enterprises remain high, with 70% failing within the first three years of operation, according to the Kenya Institute of Management (2017). The Kenyan National Bureau of Statistics report (2016) states that 30% of medium sized enterprises fail within the first year of operation. There is limited industry-specific data on the failure of agribusiness; however, this is estimated to be significantly higher than other typical SMEs, as according to CBK (2024), agribusiness accounted for 17.4% of non-performing loans, while lending to the agriculture sector was only 3.0% of all total loans issued by the banking sector.

Existing literature has explored various factors influencing SME growth however many studies fail to account for industry-specific factors that influence sustainable growth

(Ahmad, et al. 2022; Hussain, & Quddus, 2023; and Travaglini, et al. 2022). Abdul (2018) identifies a conceptual gap, noting that most studies treat entrepreneurial experience as a static factor rather than a dynamic process that evolves through learning. This results in a simplified understanding of its impact on sustainable growth. Munyori (2014) highlights a contextual gap, arguing that external factors such as access to finance and market conditions are often overlooked as moderating variables influencing entrepreneurial experience and SME sustainability.

Additionally, Wanjau (2020) emphasizes that while experienced entrepreneurs may possess the knowledge to navigate business challenges, their success is often constrained by macroeconomic factors, including high taxation, policy uncertainty, and limited access to credit. Erdogan (2023) and Abdul (2018) call for longitudinal studies that track entrepreneurs over time to better understand how business experience impacts SME sustainability. Kimura (2018) and Teka (2022) generalise the impact of technology without differentiating sector-specific challenges.

While most research has focused on micro and small enterprises, medium sized agribusiness remain underexplored Munyori & Ngugi (2018), Diabate et al. (2019) and FAO (2021). Additionally prior studies have mainly aggregated analysis of SMEs as a broad category including both small and medium sized enterprises which lead to generalised conclusions that do not address the unique challenges of medium sized enterprises Beck & Demirguc-Kunt (2006) and Erdogan (2023). Thus, the study sought to assess the key drivers contributing to the sustainable growth of medium-sized agribusinesses with a focus on Nairobi City County by examining factors such as entrepreneurial experience, access to finance, adoption of technology, firm duration, and firm size. The findings would provide valuable insights for agribusiness owners, policymakers, and financial institutions, offering evidence-based recommendations to support the long-term sustainability of medium-sized agribusiness enterprises in Kenya.

1.3 Objectives of the Study

This section provides the objectives of the current study, that is, both the general and specific objectives.

1.3.1 General Objective

To establish the determinants of sustainable growth of medium-sized agribusiness in Kenya.

1.3.2 Specific Objectives

The specific objectives of this study are:

I. To establish the effect of entrepreneur experience on sustainable growth among medium sized agribusiness enterprises in Kenya.

II. To establish the effect of access to finance on sustainable growth among medium sized agribusiness enterprises in Kenya.

III. To examine the effect of technology on sustainable growth among medium sized agribusiness enterprises in Kenya.

1.4 Research Questions

The study addressed the following research questions:

I. What is the effect of entrepreneur experience on the sustainable growth of medium-sized agribusiness in Kenya?

II. What is the effect of access to finance on the sustainable growth of medium-sized agribusiness in Kenya?

III. What is the effect of technology on sustainable growth among medium sized agribusiness enterprises in Kenya?

1.5 Significance of the Study

This study holds significant implications for practitioners, policy makers and scholars and academicians.

1.5.1 Agribusiness Firms in Nairobi City County

This study is significant to medium-sized agribusiness firms in Nairobi City County as it provides insights into the key factors that drive their sustainable growth. By

examining the role of entrepreneurial experience, access to finance, technology, firm size and firm duration the findings would help business owners and executives make informed strategic decisions to enhance their competitiveness and long-term viability. Understanding these determinants would enable agribusiness firms to optimize resource allocation, improve financial planning, and adopt growth-oriented strategies. Additionally, the study would offer practical recommendations on how firms can leverage their internal capabilities and external opportunities to navigate challenges in the agribusiness sector.

1.5.2 Policy Makers

For policymakers, this study provides valuable evidence to support the formulation of policies and initiatives aimed at fostering the growth and sustainability of medium-sized agribusinesses in Kenya. The findings would highlight critical barriers to growth, such as financing constraints and regulatory challenges, enabling government agencies and financial institutions to design targeted interventions that promote agribusiness development. Insights from the study can inform policies on agricultural financing, business incentives, and capacity-building programs that enhance the resilience and expansion of medium-sized agribusinesses.

1.5.3 Scholars and Academicians

This study contributes to the academic discourse on agribusiness sustainability by expanding existing knowledge on the determinants of sustainable growth in the Kenyan context. It builds upon Resource-Based View Theory, Dynamic Capabilities Theory, and Institutional Theory, offering empirical evidence on how internal firm resources and external institutional factors influence business growth. The study's findings would serve as a valuable reference for future research, providing a foundation for scholars exploring agribusiness growth, sustainability, and entrepreneurship. Additionally, it would be useful for academicians developing curricula in business and agricultural economics, as it provides contemporary insights that align with real-world industry dynamics.

1.6 Scope of the Study

This study focuses on assessing the drivers of sustainable growth among medium-sized agribusinesses in Nairobi County, Kenya. Conceptually, it examines three key determinants entrepreneurial experience, access to finance and technology with firm and their influence on sustainable growth. The study incorporates firm size and firm duration as control variables. Contextually, the study targets medium-sized agribusinesses across various subsectors within Nairobi City County's agricultural industry, specifically those with annual revenues between KES 50 million and 500 million and a workforce of over 10 employees. Methodologically, the study adopts a descriptive and explanatory research design, utilizing structured questionnaires to collect primary data from business owners and senior executives. The study was conducted over one month from in April 2025, to allow for comprehensive data collection, analysis, and reporting of findings. The target population that meets the research criteria is estimated to be 321, which is sourced from Nairobi City County's business registration of medium-sized agribusinesses for FY 2024. The study adopted purposive sampling in selecting 100 firms that participated in the survey. The study targeted senior executives from each firm.

1.7 Chapter Summary

Chapter One provides an overview of the study on the determinants of sustainable growth of medium-sized agribusinesses in Kenya, outlining the background, problem statement, research objectives, research questions, significance, and scope. The background highlights the critical role of agribusiness SMEs in Kenya's economy, yet many struggle with sustainability and long-term growth due to financial constraints, market challenges, and operational inefficiencies. The problem statement identifies the high failure rate of SMEs and the gaps in existing research, emphasizing the need to examine the impact of entrepreneurial experience, access to finance, and technology on sustainable growth with firm duration and firm size as control factors. The study's objectives and research questions focus on understanding these relationships. The significance section explains how the findings would benefit agribusiness owners, policymakers, and scholars, while the scope defines the conceptual, geographical, and

methodological boundaries, covering medium-sized agribusinesses in Nairobi County over a one-month period using a cross-sectional research design.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Sustainable growth and development of agribusiness is a critical concern. The literature review section analyses existing research, studies, and publications on the sustainable growth of medium-sized agribusinesses. The section reviewed the study's theoretical framework, conceptualise sustainable growth in agribusiness, review the variables influencing sustainable growth, and identify research gaps and opportunities.

2.2 Theoretical Foundation

Examined in this segment are theories underpinning the research. The study reviews the resource-based view theory, dynamic capabilities theory and institutional theory.

2.2.1 Resource-Based View Theory

The resource-based view (RBV) of the firm by Barney (1991) provides a valuable lens through which to understand the drivers of sustainable growth in medium-sized agribusinesses. The RBV suggests that firms can achieve sustainable competitive advantage by developing unique, valuable, and difficult-to-imitate resources and capabilities (Akuriba et al., 2021). According to this theory, the key to sustainable growth is a firm's ability to leverage its internal resources and capabilities to adapt to changing market conditions (Onyango et al., 2023). In the context of medium-sized agribusinesses in Kenya, sustainable growth is heavily influenced by resource availability, including physical capital such as land, infrastructure, and technology; human capital resources such as skills and knowledge; and organizational resources such as efficient business systems and processes (Adam et al., 2022).

The theory directly links to the variables in this study. Entrepreneurial experience, as an internal resource, contributes to the strategic management of agribusinesses by enhancing decision-making, risk assessment, and innovation (El Nemar et al., 2022). Experienced entrepreneurs are better equipped to utilize resources effectively, navigate market fluctuations, and develop growth-oriented strategies, which align with the RBV's emphasis on leveraging internal capabilities (Onyango et al., 2023). Firm size also aligns with the RBV, as larger firms may have accumulated unique resources such

as economies of scale, well-established supply chains, and strong customer relationships that contribute to their sustainable growth. Conversely, smaller firms may struggle due to limited access to capital and operational inefficiencies, further emphasizing the role of resource availability in determining business success (Nemar et al., 2022).

Access to finance is another critical resource within the RBV framework that influences the sustainable growth of medium-sized agribusinesses in Kenya. Mwaura et al. (2024) highlight that finance provides a competitive advantage by enabling businesses to invest in productivity-enhancing technologies, expand operational capacity, and withstand economic shocks. In Kenya, where agricultural businesses often face financial constraints due to limited access to credit, high interest rates, and stringent collateral requirements, firms that secure financial resources are better positioned for Sustainable growth. Similarly, firm duration plays a role in resource accumulation, as older firms may have developed strong market networks, financial reserves, and industry expertise that give them a competitive edge (Akuriba et al., 2021). This study provided insights into how resource utilization impacts the sustainable growth of medium-sized agribusinesses in Nairobi County, Kenya, offering practical recommendations for entrepreneurs, policymakers, and financial institutions.

2.2.2 Dynamic Capability Theory

The Dynamic Capability Theory (DCT) defines a firm's ability to integrate, build, and reconfigure internal and external capabilities to address rapidly changing environments (Ariga, 2022). This theory provides a framework for understanding how businesses develop resilience and adaptability by continuously sensing market changes, seizing new opportunities, and transforming their business models to sustain growth (Onyango et al., 2023). Given the increasingly dynamic and competitive nature of today's business environment, firms must continuously adapt to technological advancements, shifting consumer preferences, and evolving regulatory frameworks (Radley, 2017). The ability to dynamically reconfigure resources and capabilities is crucial for ensuring long-term business success and sustainability (Bett & Anene, 2023).

DCT directly aligns with the variables in this study, particularly entrepreneurial experience, access to finance, and firm size. Entrepreneurs with extensive experience

are better equipped to sense and seize opportunities while transforming their business strategies in response to changing market dynamics (Mishra & Kiran, 2024). Experienced entrepreneurs in medium-sized agribusinesses in Kenya can leverage their industry knowledge, networks, and adaptive strategies to navigate challenges such as price volatility, climate change, and shifting government policies (Namonyo, 2019). Additionally, access to finance enhances a firm's dynamic capabilities by enabling investment in new technologies, process improvements, and market expansion, thus allowing agribusinesses to scale and remain competitive (Ariga, 2022).

The theory is particularly relevant in the Kenyan context, where agribusinesses face fluctuating input costs, regulatory shifts, and unpredictable climatic conditions. Firm size plays a crucial role in developing dynamic capabilities, as larger agribusinesses may have more structured processes and financial buffers to support strategic transformation, whereas smaller firms must be more agile in responding to changes (Kimutai & Ennos, 2023). The ability of medium-sized agribusinesses to adapt and restructure operations in response to market demands would determine their sustainability and competitiveness. By applying DCT, this study would analyze how medium-sized agribusinesses in Kenya can leverage dynamic capabilities to enhance resilience, capitalize on emerging opportunities, and achieve long-term sustainable growth.

2.2.3 Triple Bottom Line Theory

Elkington (1994),the founder of the Triple Bottom Line Theory, posits that that a firm's core objective is not only making profits but also considering issues related to the environment and social impact. The theory postulates that firms should not only focus on commercial profits but also on the impact of their activities on the environment while making decisions and determining their performance. The theory is premised on the key social, financial and environmental components. The social component focuses on how firm activities affect labour practices, ethical business and community engagement. The environmental pillar considers how firm activities influence the surroundings, particularly resource consumption, pollution and climate change. On the other hand, the financial pillar focuses on revenue, profitability and return on investment.

The Triple Bottom Line Theory is becoming a tool for advocating environmental and social justice regarding the implications of firm commercial activities. Scholars have been supporting broadening performance measurement from financial metrics to social and environmental factors (Slapp & Hall, 2011). According to Norman and MacDonald (2004), this theory lacks a uniform standard for measuring environmental and social parameters. Milne and Gray, (2013) opined that this theory has been the driver of corporate social responsibility and sustainable development. Despite the antagonism of other scholars, the theory remains instrumental in driving ESG and creating a balance between economic demand and social and environmental needs.

Critics argue that the Triple Bottom Line Theory lacks clear metrics and standardization, making it difficult to measure and compare sustainability performance (Norman & MacDonald,2004). Some scholars claim that businesses often use this theory as a marketing tool rather than integrating real sustainability efforts (Milne & Gray, 2013). Additionally, balancing profit, people, and the planet can create conflicting priorities, leading firms to prioritize financial gains over social and environmental responsibilities (Montiel, 2008). Others question its practical impact, as many companies struggle to implement meaningful changes beyond compliance and reporting (Pope, Annandale, & Morrison-Saunders, 2004).

The Triple Bottom Line Theory is highly relevant to the sustainable growth of medium-sized agribusinesses, as it emphasizes the balance between profitability, environmental responsibility, and social impact. Agribusinesses rely on natural resources, making environmental sustainability crucial for long-term viability. Socially, engaging with local communities and ensuring fair labour practices enhance reputation and workforce stability. Profitability remains essential, but this theory encourages businesses to adopt sustainable farming practices, efficient resource use, and ethical supply chains. By integrating TBL principles, medium-sized agribusinesses can achieve resilience, regulatory compliance, and market competitiveness while contributing to food security and rural development.

2.3 Empirical Literature Review

This section provides a review of related empirical research in line with the study.

2.3.1 Entrepreneurial Experience and Sustainable Growth

Entrepreneurial experience has been widely recognized as a key determinant of firm growth, with numerous studies emphasizing its role in fostering sustainable business success. Erdogan (2023) highlights that firms led by experienced entrepreneurs exhibit higher growth rates due to their ability to navigate operational challenges and promote innovation. Abdul (2018) finds that Nigerian entrepreneurs with prior business experience demonstrated increased strategic foresight and adaptability, which improved financial performance and business survival. Similarly, Koryak et al. (2015) and Hensellek et al. (2023) argue that entrepreneurial experience is critical to business success, as experienced entrepreneurs are more likely to adopt flexible leadership approaches and invest in dynamic capabilities that enhance firm sustainability. These studies provide strong empirical support for the view that entrepreneurial experience contributes positively to SME growth. However, most of these studies focus on general SME performance rather than explicitly addressing the agricultural sector, creating a contextual gap in understanding how entrepreneurial experience influences agribusiness sustainability, particularly in Nairobi, Kenya.

Some studies suggest that entrepreneurial experience contributes to sustainable growth by fostering a deeper understanding of the business environment. Rosário et al. (2022) argue that experienced entrepreneurs are more likely to engage in sustainable business models because they have a nuanced understanding of market conditions and regulatory frameworks. Acosta et al. (2016) find a strong positive correlation between entrepreneurial experience and SME performance, suggesting that seasoned entrepreneurs can develop and sustain competitive advantages. While these findings reinforce the importance of experience, they largely rely on cross-sectional data, which captures only a snapshot of business performance rather than tracking long-term sustainability trends. Additionally, many of these studies focus on developed economies, highlighting a geographical gap, as factors influencing business sustainability in high-income countries may not directly apply to the Kenyan

agribusiness sector, which faces unique regulatory, financial, and infrastructural challenges. Furthermore, few studies explore how external factors, such as access to finance and policy stability, moderate the relationship between entrepreneurial experience and firm sustainability, leaving a conceptual gap in existing literature.

Contrary to the prevailing view that experience enhances business growth, some studies indicate that entrepreneurial experience does not always translate into SME success. Munyori (2014) argues that while experience is valuable, it does not necessarily lead to growth if external factors such as access to finance, policy stability, and market conditions are unfavorable. This suggests that entrepreneurial experience alone is insufficient without access to critical resources such as capital and technology. Wanjau (2020) finds that despite extensive industry experience, many SME owners in Kenya struggle to sustain growth, indicating that other variables play a critical role in ensuring business longevity. Marom et al. (2019) note that experienced entrepreneurs often become risk-averse over time, leading to stagnation in innovation and a reluctance to adopt new business models. This contradicts the assumption that experience always fosters adaptability and suggests that long-term entrepreneurs may require external incentives to continuously innovate. Yoshino and Taghizadeh-Hesary (2018) further argue that while experience improves financial decision-making, it does not always translate into sustainable growth in the long term, particularly if businesses fail to adapt to evolving market conditions. These mixed findings reveal inconsistencies in existing literature, necessitating further research to clarify the circumstances under which entrepreneurial experience contributes to sustainable growth in medium-sized agribusinesses in Kenya.

Given the gaps identified in prior studies, this study sought to address several critical issues. First, it would contribute to contextual knowledge by specifically examining how entrepreneurial experience influences the sustainable growth of medium-sized agribusinesses in Kenya, a sector that has been underrepresented in empirical research. Second, while previous studies have primarily relied on single-variable analysis, this study adopts a cross-sectional approach to comprehensively examine multiple determinants of sustainable agribusiness growth within a specific timeframe.

2.3.2 Access to Finance and Sustainable Growth

The relationship between access to finance and SME growth has been widely explored, with numerous studies highlighting its critical role in business sustainability. Access to finance enables SMEs to expand operations, invest in new technologies, and enhance productivity (Beck & Demirguc-Kunt, 2006). In the agribusiness sector, affordable and accessible credit is particularly essential, as it allows businesses to manage seasonal fluctuations, improve infrastructure, and adopt modern farming techniques (Munguti, 2023). However, despite the significance of financial access, SMEs in Kenya continue to face major financial constraints, which hinder their ability to scale operations and compete effectively (Geoffrey Kibet et al., 2020). This highlights a contextual gap, as many studies focus on general SME financing without considering the unique challenges faced by agribusiness SMEs in Kenya.

Empirical studies have largely established a positive correlation between access to finance and the growth of agribusinesses. Researchers such as Achoja et al. (2020), Munguti (2023), and Freeman et al. (2016) argue that increased access to financial services, including loans and microfinance, significantly contributes to SME growth. Namonyo (2019) and Achoja et al. (2020) further find that access to financial products improves SME productivity and competitiveness in Kenya. These studies reinforce the idea that financial accessibility is a key driver of business expansion, allowing agribusiness SMEs to overcome capital constraints and invest in market-driven solutions. However, most of these studies focus on the availability of finance rather than its effectiveness in driving sustainable business growth, creating a conceptual gap. Simply providing financial services does not guarantee that SMEs would achieve long-term sustainability, as various external and internal factors also influence growth.

Despite the widely accepted view that access to finance facilitates SME expansion, some studies present mixed findings and contradictory results. Teka (2022) and Reardon et al. (2024) argue that while finance is necessary, it is not a sufficient determinant of sustainable growth. Their studies suggest that market conditions, the institutional environment, and managerial competencies also play critical roles in business success. This indicates a methodological gap, as many studies fail to consider

the interplay between financial access and other growth determinants. Additionally, Maloba & Alhassan (2019) and Geoffrey Kibet et al. (2020) highlight limited credit history, lack of collateral, and high lending risks as significant barriers preventing agribusiness SMEs from securing affordable financing. Many financial institutions perceive agriculture as a high-risk sector, leading to stringent borrowing conditions that limit the ability of SMEs to access capital (Muli, 2013; Kambura & Mwenda, 2021). These challenges suggest that financial products should be tailored to the specific needs of agribusiness SMEs to enhance their effectiveness in promoting sustainable growth.

Given these gaps and inconsistencies, this study sought to examine the role of access to finance in the sustainable growth of medium-sized agribusinesses in Nairobi City County, Kenya. Unlike prior studies that focus on general SME financing, this research specifically analyzed how financing constraints and financial accessibility impact agribusiness sustainability.

2.3.3 Technology and Sustainable Growth

The relationship between technology and the sustainable growth of businesses has been widely studied with differing perspectives on whether adopting technology accelerates the growth of businesses or presents challenges. According to Kannan & Gambetta (2025), technology is a key enabler of sustainable growth, and its adoption enhances operational efficiency and resilience. Authors such as Kimura (2018) and Teka (2022) conclude that the relationship between technology and the sustainable growth of medium-sized businesses is positive and reinforcing.

(Awa et al., 2015) argues that the integration of technology in medium-sized enterprises through the adoption of cloud computing, Artificial Intelligence (AI) and automation helps businesses reduce operational costs and streamline processes. Abidemi (2024) assessed the role of technology and automation in streamlining business processes, finding that automation improves productivity in SMEs by 30% and reduces manual errors by 25%. (Triwahyono et al., 2023) also found that SMEs' adoption of digital tools enabled optimum resource utilisation, reduced operational costs, and enhanced competitiveness.

Authors have identified the key role that technology plays in expanding market access. According to Quarato et al. (2020), e-commerce adoption has enabled SMEs to reach global markets by overcoming geographic barriers, reducing reliance on physical outlets, and reducing distribution costs. (Vaillant & Herrero, 2019) Identifies online marketplaces such as Amazon, Alibaba, and Jumia that provide SMEs with a platform to access international customers and allow them to scale. (Aghazadeh et al., 2023) identified the role of digital transformation in reducing entry barriers in international markets, enhancing SME competitiveness, facilitating data utilisation and customer insights and strengthening digital resilience in the face of uncertainty in global markets.

Past studies have also investigated the role of technology and digital marketing; Taiminen & Karjaluoto (2015) found that social media platforms such as Facebook, Instagram, LinkedIn & Twitter provide companies with a cost-effective marketing tool to increase their brand awareness. (Ainin et al., 2015) shows the positive impact on business expansion that the adoption of digital marketing has on the sustainable growth of SMEs in emerging markets. Reto (2017) discusses the adoption of social media marketing as a tool for sustainable business growth, highlighting how the adoption of these platforms increases customer engagement, builds brand loyalty and improves sales performance.

Despite the advantages of the adoption of technology, some researchers highlight the barriers and unintended consequences of adoption by SMEs. Authors such as Triwahyono et al. (2023), and Kimura (2018) identify several challenges that hinder the adoption of technology, including limited financial resources, lack of technical expertise and concerns over data security. According to Ghobakhloo et al. (2012), SMEs often lack the financial resources and technical expertise to invest in advanced technologies. The high upfront cost of digital transformation may deter SMEs from fully leveraging technology.

The OECD (2021) notes that the digital gap has increased inequalities among people, places, and firms and raises concerns that the benefits of digital transformation may not be evenly distributed. This is supported by (Asongu & Odhiambo, 2018), who bring out that SMEs in developing economies face significant digital infrastructural gaps

limiting their ability to benefit from digital transformation. Janya Chanchaichujit et al. (2024) highlight that stakeholders' lack of knowledge and awareness of advanced technology poses a significant technology adoption barrier, particularly in agricultural supply chains.

(He & Zhang, 2019) points out that increased reliance on digital technology exposes SMEs to cybersecurity and data privacy risks, given that most SMEs cannot implement robust cybersecurity measures. These findings further align with those of Saha & Anwar (2024) and Carlos Rombaldo Junior et al. (2023), who highlighted the vulnerability of SMEs to cybersecurity challenges.

Technology plays a critical role in expanding market access and enhancing competitiveness. The effectiveness of these tools depends on an SME's ability to leverage digital infrastructure.

2.3.4 Firm Duration and Sustainable Growth

Firm duration has been widely studied as a determinant of sustainable business growth, but the findings remain inconclusive. Rahman and Yilun (2021) find a negative correlation between firm duration and profitability, arguing that as firms grow older, their profitability tends to decline due to bureaucratic inertia, inefficient decision-making, and a reduction in innovation. Similarly, Akben-Selcuk (2016) assesses the impact of firm duration on profitability and finds that older firms tend to experience lower return on assets, return on equity, and gross profit margins. These findings suggest that as firms mature, they may struggle with operational inefficiencies, rigid organizational structures, and decreased adaptability to market changes. However, these studies primarily focus on profitability as a measure of performance, leaving a conceptual gap in understanding how firm duration affects other dimensions of sustainable growth, such as market expansion, resilience, and long-term competitiveness.

The relationship between firm duration and SME sustainable growth remains inconsistent across empirical studies. Hui et al. (2013) acknowledge that prior research has produced mixed results, showing that firm duration can have a positive, negative, or moderating effect on SME growth. This variation suggests that firm duration does

not operate in isolation but interacts with other factors such as industry characteristics, managerial expertise, and access to financial resources. Erdogan (2023) challenges the assumption that firm duration directly influences SME growth, arguing that sustainable growth is determined not by a firm's age but by how it manages challenges and leverages opportunities at different stages of its lifecycle. This finding introduces a contextual gap, as the role of strategic management in different business life cycle phases has not been adequately explored in the Kenyan agribusiness sector.

Contrary to studies suggesting a negative relationship, some researchers find that firm duration positively correlates with profitability and business sustainability. Ilaboya and Ohiokha (2016) confirm a significant positive relationship between firm duration and profitability, supporting the economies of scale perspective, which suggests that older firms benefit from lower costs, accumulated knowledge, established customer bases, and better resource utilization. However, these findings are largely based on large corporations, which differ significantly from SMEs, particularly in terms of financial stability, market reach, and operational constraints. Additionally, most of these studies have been conducted in developed economies, highlighting a geographical gap in understanding how firm duration influences agribusiness sustainability in Kenya.

Given these inconsistencies in prior research, this study sought to clarify the relationship between firm duration and the sustainable growth of medium-sized agribusinesses in Kenya. It assessed whether firm duration serves as a growth enabler, a constraint, or a moderating factor by considering industry-specific challenges such as access to finance, market fluctuations, and policy regulations. By using a cross-sectional approach, this research would contribute to filling the conceptual and contextual gaps by providing empirical evidence on how firm duration influences agribusiness sustainability within Kenya's unique economic and institutional environment.

2.3.5 Firm Size and Sustainable Growth

The relationship between firm size and sustainable growth has been widely explored, particularly in the context of SMEs in the agribusiness sector. Some studies suggest that medium-sized firms face unique challenges in accessing growth-enabling resources

such as finance. Diabate et al. (2019) highlight that medium-sized businesses often fall into the missing middle, where they are too large for microfinance support but too small to attract traditional bank financing. This financial gap limits their ability to expand operations, invest in productivity-enhancing technologies, and achieve long-term sustainability. Freeman et al. (2016) reinforce this argument, noting that firm size plays a critical role in determining financial accessibility and resource allocation, making it an important factor in sustainable business growth. However, many of these studies focus primarily on financial access, creating a conceptual gap in understanding how firm size influences other growth-enabling factors such as market reach, competitive advantage, and operational efficiency.

Several empirical studies have identified a positive relationship between firm size and sustainable growth. Wathegi & Omagwa (2018) studied 104 SMEs in Nyeri County, Kenya, and found that larger firms experience higher growth rates due to better financial stability, which reduces their risk of collapse. Similarly, Ilaboya & Ohiokha (2016) reviewed 30 firms listed on the Nigerian Stock Exchange and provided empirical support for a positive correlation between firm size and long-term profitability, reinforcing the economies of scale perspective. Rahman & Yilun (2021) analyzed publicly listed firms in China from 2008 to 2018 and found that larger firms tend to be more profitable due to efficiency gains and cost advantages. Lee (2009) examined over 7,000 US-listed companies from 1987 to 2006 and found a non-linear relationship between firm size and profitability, suggesting that while larger firms are generally more stable, their growth rates may plateau beyond a certain point. Marom et al. (2019) further argue that larger firms prioritize innovation with lower risk, leading to sustainable and steady growth, whereas smaller firms often adopt high-risk strategies that may result in rapid but unstable expansion. However, these studies focus primarily on large firms in developed economies, highlighting a geographical gap in assessing how firm size influences agribusiness growth in Kenya, where financial constraints, regulatory barriers, and market access issues differ significantly.

Conversely, other studies suggest a negative or mixed relationship between firm size and growth. A study of 7,915 firms in Ireland by Ipinnaiye et al. (2016) found that smaller firms tend to grow faster than larger ones, experiencing higher sales and

employment growth rates. This finding aligns with Erdogan (2023), who analyzed SME growth in 80 developing economies across Africa, Asia, Latin America, and Eastern Europe. The study revealed that smaller firms exhibit higher growth rates due to greater market expansion opportunities, whereas growth declines for larger firms due to diseconomies of scale, bureaucratic inefficiencies, and market rigidity. Garcia-Martinez et al. (2023) conducted a systematic literature review of 154 studies from 2000 to 2020 and found that while smaller firms tend to grow faster, larger firms achieve more sustainable long-term growth due to their financial stability and economies of scale. These findings highlight methodological gaps, as many studies rely on single-variable analyses, failing to consider how firm size interacts with external factors such as competition, industry-specific challenges, and government policies.

Given these contradictions and gaps in existing literature, this study sought to clarify the relationship between firm size and the sustainable growth of medium-sized agribusinesses in Kenya. Unlike previous research that focuses on large firms or general SME growth, this study specifically analyzed the agribusiness sector, which faces unique financial, operational, and regulatory challenges. By adopting a cross-sectional approach, the study assessed whether firm size acts as a growth enabler, or a constraint in sustainable agribusiness development.

2.4 Research Gap

Existing literature on SME growth has extensively explored factors such as firm size, entrepreneurial experience, firm duration, and access to finance. Notably, gaps in geographical focus, the dynamic nature of entrepreneurial experience, the role of specific financial instruments, and the influence of firm duration on sustainable growth highlight the need for more comprehensive, multi-dimensional, and region-specific studies.

Abdul (2018) notes that most studies treat entrepreneurial experience as a static factor rather than a dynamic process that evolves through learning, which leads to a simplified understanding of its role in sustainability. Another key research gap identified by Munyori (2014) shows concerns that external contextual factors such as access to finance and market conditions are not considered moderating factors impacting

entrepreneurial experience and sustainable SME growth. Similarly, Wanjau (2020) argues that although experienced business owners possess knowledge and expertise, their success is often constrained by macroeconomic factors, including high taxation, policy uncertainty, and limited access to credit. Erdogan (2023) and Abdul (2018) highlighted the need for longitudinal studies that follow entrepreneurs over extended periods to capture how business experience impacts SME sustainable growth.

Ipinnaiye et al. (2016) noted that most studies analyse only one form of growth, turnover, rather than considering multiple performance measures. Additionally, many studies do not consider the impact of industry characteristics on sustainable growth. Erdogan (2023) also notes that firm size affects performance and growth at different quantiles of growth, which means that the relationship is not uniform. Further research is required to understand this dynamic. Ilaboya & Ohiokha (2016) note a gap exists in the geographical focus. Most studies assessing the relationship between firm size and growth are from developed economies in Europe and America, with a limited focus on developing economies where firm size may impact sustainable growth differently. In contrast, Rahman & Yilun (2021) see the gap in mixed and contradictory results and seek to clarify these relationships with a large data set.

While assessing the role of the firm's age in growth, Hui et al. (2013) note that prior studies have not assessed the impact of external factors such as the level of competition, government policies, and financial access on sustainable growth. According to Akben-Selcuk (2016), there exists a research gap due to contradictions and inconsistencies in the existing literature and the limited exploration of the impact of the firm's age on financial performance in developing economies presenting conceptual gaps.

According to Wanjau (2020), while many studies acknowledge that access to finance influences sustainable growth, few explore the role of specific financial products such as microfinance, venture capital, bank financing, leasing and alternative financing mechanisms. Martins et al. (2022) identify the lack of large-scale empirical studies on SMEs and sustainable growth, as these studies have primarily been undertaken on large enterprises. Chavez et al. (2018) also concur that most studies on access to finance and growth have focused on large firms with limited focus on SMEs. According to Mabula

and Dong (2018), most prior research has focused on the supply side of finance without considering the SME perspective presenting conceptual and contextual gaps.

The literature presents a variety of factors that impact the sustainable growth of medium-sized agribusinesses in Kenya, including access to finance, firm size, firm duration, and the entrepreneurial experience of business owners. While existing studies have identified positive correlations between these determinants and business growth, a consensus on their uniform influence remains elusive. Contradictory findings also indicate that external market conditions, industry-specific characteristics, and varying policy environments significantly mediate these relationships.

The study aims to bridge the knowledge gap and contradictory findings by exploring the interaction between these variables and sustainable growth for medium-sized agribusiness considering industry-specific challenges. Unlike previous studies that have examined these factors in isolation, this research provided a holistic analysis, considering the dynamic and institutional aspects influencing sustainable growth. By addressing these gaps, the study contributed to insights and policy recommendations tailored to the unique needs of medium-sized agribusinesses in Kenya. The summary of the gaps are presented in Table 2.1.

Table 2.1 Summary of Gaps

Source	Focus	Finding	Gap
Erdogan (2023)	Drivers of SMEs	Firms led by experienced entrepreneur's exhibit higher growth rates due to their ability to navigate operational challenges.	The adopted secondary data which may not reflect issues on the real time while the current study adopted primary data to mitigate this gap.
Koryak et al. (2015)	Assessed influence of entrepreneurial experience on growth.	entrepreneurial experience is critical to business success and firm sustainability	The study focused on general SME performance rather than explicitly addressing the agricultural sector creating a contextual gap.
Acosta et al. (2016)	Examined experienced entrepreneurs	Strong positive correlation between entrepreneurial	the study did not explore external factors, such as access

	and business sustainability	experience and SME performance, suggesting that seasoned entrepreneurs can develop and sustain competitive advantages.	to finance and policy stability, moderate the relationship between entrepreneurial experience and firm sustainability, leaving a conceptual gap in existing literature
Munyori (2014)	Focused on Factors Affecting the Growth of Small and Micro Enterprises	Experience is valuable and does not necessarily lead to growth if external factors such as access to finance, policy stability, and market conditions are unfavorable	The study selected 25 respondents and this is a small sample size that may result to biased results and thus amounted to methodological gap.
Marom et al. (2019)	Entrepreneurial strategy of SMEs	Experienced entrepreneurs often become risk-averse over time, leading to stagnation in innovation and a reluctance to adopt new business models.	The data collected was based on self-reporting and this may be subjective in nature resulting to methodological gap.
Taghizadeh-Hesary (2018)	Role of SMEs in Asia	Experience improves financial decision-making, it does not always translate into sustainable growth in the long term, particularly if businesses fail to adapt to evolving market conditions.	The finding of the study was not clear and hence mixed resulting to analytical gap.
Beck & Demirguc-Kunt, (2006)	Access to finance as a growth constraint	Affordable and accessible credit is particularly essential since it smoothen productivity.	The study did not factor use of financial technology in mitigating the constraint and this resulted to conceptual gap.
Ghobakhloo et al., 2012	Technology adoption in SMEs	Adoption of technology supports growth in SMEs however financial constraints are a common challenge	The focus is on general SMEs rather than agribusinesses
Triwahyono et al., 2023	Adoption of Technology in Agribusinesses	Adoption of technology provides significant initial benefits to agribusinesses	There is no focus on sustainability beyond adoption (training programs, continuous improrement)

Munguti, (2023)	Influence of Fintech on SMEs growth	Fintech have sustainable growth of SMEs.	The conceptual gap in this study lies in the limited exploration of alternative financing models and innovative financial solutions that could enhance access to finance for organic small-scale agri-business enterprises.
Diabate et al. (2019)	Firm and Entrepreneur Characteristics	Medium-sized businesses often fall into the missing middle, where they are too large for microfinance support but too small to attract traditional bank financing.	The study examined growth in agriculture but does not anchor its finding in established theoretical framework such as Unified Theory of Acceptance and Use of Technology and Resources Based Theory.
Freeman et al. (2016)	Firm size and Business growth	firm size plays a critical role in determining financial accessibility and resource allocation, making it an important factor in sustainable business growth	The study focused primarily on financial access, creating a conceptual gap in understanding how firm size influences other growth-enabling factors such as market reach, competitive advantage, and operational efficiency

2.5 Conceptual Framework

The conceptual framework illustrates the relationship between the independent variables—entrepreneurial experience, access to finance, technology the control variables – firm duration and firm size—and the dependent variable, sustainable growth of medium-sized agribusinesses in Nairobi City County. Entrepreneurial experience is measured through years in the field, cross-industry experience, education, and operational expertise, reflecting the strategic and managerial competencies necessary for business sustainability. Access to finance, which includes capital raised, cost and terms of finance, and collateral availability, determines the financial resources available to agribusinesses for expansion and sustainability. Technology is investigated through

process automation, adoption of technology, operational efficiencies and optimum resource allocation supported by data analytics.

Firm duration is assessed based on the inception year, years of operation, and management evolution, indicating its impact on business resilience and growth. Firm size, measured by annual sales, profitability, total assets, and number of employees, reflects the operational scale and stability of the business. These independent variables collectively influence sustainable growth, which is evaluated through revenue growth rate, employment generation and operational resilience, forming the basis for understanding the key drivers of agribusiness sustainability.

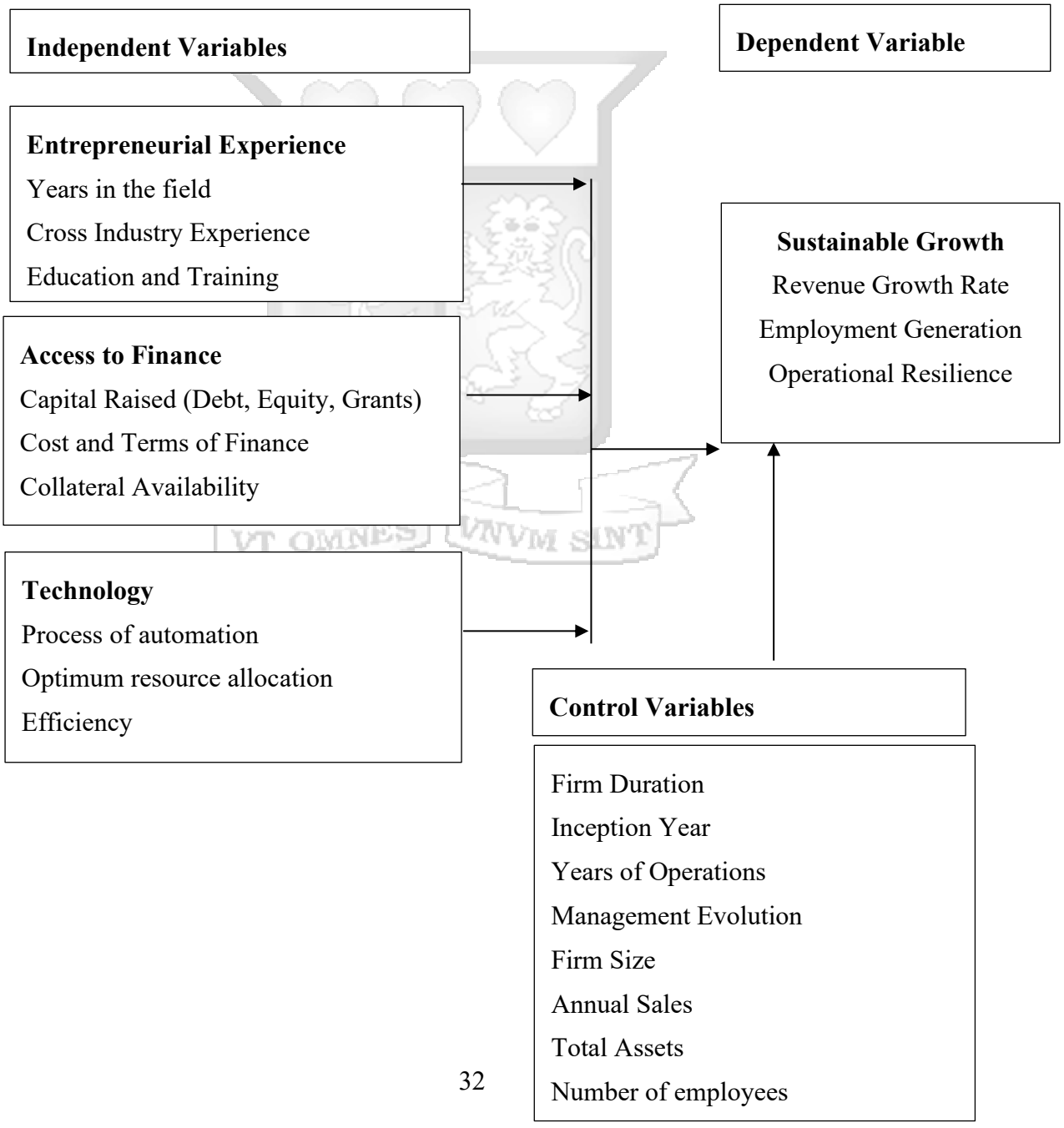

Figure 2.1: Conceptual Framework

Source: Researcher (2025)

2.6 Operationalization of Study Variables

Table 3 presents the operationalisation of study variables, detailing how each variable was measured and analysed. The table categorises the dependent variable (sustainable growth) and independent variables (entrepreneurial experience, access to finance, technology, firm duration, and firm size).

Table 2.1: Operationalization of Study Variables

Variable	Nature of Variable	Operational indicators	Supporting literature	Measurement scale	Data analysis
Sustainable growth	Dependent Variable	Revenue Growth Rate Employment Generation Operational Resilience	Ginting (2020)	Consistent revenue growth Increased employment opportunities Operational resilience	Descriptive Statistics Correlation Tests Regression Tests
Entrepreneurial experience	Independent Variable	Years in the field Cross Industry Experience Education and Training Operational Expertise	Roomi (2023)	Cross-industry experience Level of education and training Operational expertise	Descriptive Statistics Correlation Tests Regression Tests
Access to finance	Independent Variable	Capital Raised (Debt, Equity, Grants) Cost and Terms of Finance	Teka (2022)	Access to financial resources Financing terms Alternative financing options	Descriptive Statistics Correlation Tests Regression Tests

Variable	Nature of Variable	Operational indicators	Supporting literature	Measurement scale	Data analysis
		Collateral Availability Credit History			
Technology	Independent variable	Process of automation Optimum resource allocation Efficiency	Awa et al., (2015) and Triwahyono et al. (2023)	Reduction in time to complete a task Amount of costs cut	Descriptive Statistics Correlation Tests Regression Tests
Firm duration	Control Variable	Inception Year Years of Operations Management Evolution	Erdogan (2023)	Duration of the firm in operation in years The firm's experience in the industry	Descriptive Statistics Correlation Tests Regression Tests
Firm size	Control Variable	Annual Sales Total Assets Number of employees	Fajarika et al. (2024	The number of employees Sales revenue The firm's asset base	Descriptive Statistics Correlation Tests Regression Tests

2.7 Chapter Summary

This chapter provides a comprehensive literature review on the determinants of sustainable growth in medium-sized agribusinesses, focusing on entrepreneurial experience, access to finance, technology, firm duration, and firm size. It critically examines theoretical foundations, empirical studies, and research gaps, highlighting inconsistencies in prior findings and establishing the need for this study to contribute context-specific insights into Nairobi's agribusiness sector. The next chapter covers the research methodology adopted in the study.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter offers an overview of the investigation's methodology. It focuses on the study's design, data collection techniques, and suitable data analysis procedures to produce, present, and report the research findings.

3.2 Research Philosophy

Philosophy is a system of beliefs and assumptions that guides the development of knowledge. Philosophy guides research activities since every research action involves an assumption. The primary objective of a researcher is to select the most suitable philosophy that guided the research (Haig, 2018). However, researchers' beliefs may clash with existing philosophies that may be appropriate for such an investigation. Moreover, business management scholars disagree on the most appropriate philosophy guiding a given investigation or inquiry (Lim, 2023). Business research encompasses five major philosophies: positivism, critical realism, interpretivism, postmodernism, and pragmatism (Saunders et al., 2009).

According to Dudovskiy (2019) positivism relates to the philosophical stance of the natural scientist and entails working with an observable social reality to produce law-like generalisations. Scientific method: observable and measurable facts, Law-like generalisations, and numbers. Positivist philosophy typically employs research instruments that are deductive, highly structured, and involve large samples, measurement, and quantitative analysis methods, although a range of data can be analysed. Positivism emphasizes causal explanation and prediction as key contributions; therefore, correlational research design is more applicable (Park et al., 2020). On the other hand, critical realism philosophy focuses on explaining what we see and experience in terms of the underlying structures of reality that shape the observable events. It focuses on transient historical knowledge. The philosophy acknowledges any form of biases that may emanate from social and environmental conditions. This philosophy is aligned with research tools that employ a retrodictive, in-depth, historically situated analysis of pre-existing structures and emerging agencies (Dobson, 2001).

Interpretivism was developed as an alternative to critical realism, emphasizing the significant differences between humans and physical phenomena, as they create meaning. Interpretivism argues that human beings and their social worlds cannot be studied in the same way as physical phenomena, and that, therefore, social sciences research needs to differ from natural sciences research rather than trying to emulate the latter (Alharahsheh & Pius, 2019). The philosophy embraced research tools that are typically inductive. Small samples, in-depth investigations, and qualitative methods of analysis, but a range of data can be interpreted (Saunders et al. ,2009). On the other hand, Postmodernism emphasises the role of language and power relations, seeking to question accepted ways of thinking and give voice to alternative marginalised views. Philosophy assumes that any sense of order is provisional and foundationless and can only be brought about through our language with its categories and classifications. Studies in this philosophy relied on qualitative data as the primary source of information (Saunders & Bristow, 2019).

Pragmatism asserts that concepts are only relevant where they conform to actions. The proponent of this philosophy argues that research begins with a problem and aims to provide practical solutions that inform future practice (Shah et al., 2018). Researchers' values drive the reflexive process of inquiry, which is initiated by doubt and a sense that something is wrong or out of place and which re-creates belief when the problem has been resolved. This philosophy employs various data collection approaches in research, including mixed, multiple, qualitative, quantitative, and action research. Since the current investigation utilizes quantitative data, the most appropriate research philosophy is positivism (Pilcher & Cortazzi, 2023).

According to Kaboub (2008), the positivist approach is a philosophical paradigm based on empirical observation and logical analysis. The key characteristics include empirical observation, logical analysis, objectivity and quantitative methods. According to (Ali, 2024) the positivist research philosophy follows a deductive approach. This is based on empirical observations, utilizing a quantitative methodological approach and employing statistical and mathematical techniques to analyse data. Park et al. (2020) states that the positivist approach follows a hypothetico-deductive model where a theory is used to form a hypothesis, the hypothesis is tested through controlled experiments or observations, and the findings are used to refine the theory. In this

approach, quantitative methods, including experiments, surveys and statistical analysis, are commonly used.

According to Junjie and Yingxin (2022), the positivist approach is based on natural science, emphasising objectivity, empirical observation and systematic methods. However, there are criticisms of this approach, such as the fact that it ignores contexts and oversimplifies the social reality of human behaviour. Maksimović and Evtimov (2023) note that the positivist approach helps test hypotheses and predict outcomes and has high reliability and replicability. However, this approach is often criticized as being too rigid, ignoring human behavior's subjective and dynamic nature and cannot always account for contextual influences. The study has adopted a positivist approach, which allows for a systematic and objective analysis of the factors influencing the sustainable growth of medium-sized agribusinesses in Kenya. The positivist approach enhances the generalizability of findings, which ensures that the insights can be applied to similar agribusinesses.

3.3 Research Design

A correlational research design was utilised in this study. The correlational research design focuses on statistical analysis rather than on how the data is collected. This research design is explanatory. The correlational research design aims to determine whether changes in one variable are associated with changes in another. This design allows the researcher to collect data from two or more variables and measures the strength of the relationship between them. For two variables, the relationship is measured by calculating the correlation. A quantitative research approach enables the collection of numerical data and the application of statistical analysis to test hypotheses and draw conclusions. It emphasises neutrality and objectivity, uses numerical data, and uses structured data collection methods (Bryman, 2016).

3.4 Population

The population of this study comprises medium-sized agribusinesses in Nairobi City County, defined as enterprises with annual revenues between KES 50 million and KES 500 million and employing over 10 employees based on the Central Bank of Kenya (2023) and Researcher (2025) criteria and focus on medium-sized agribusinesses. These businesses operate across various agricultural subsectors, including agri-tech,

agro-processing, livestock processing and agri-services, making them crucial contributors to the economy. The study targets business owners and senior executives, such as CEOs, CFOs, COOs, and other senior management officers, who are directly involved in decision-making and strategic business growth. The target population that meets the research criteria is estimated to be 321, which is sourced from Nairobi City County's business registration of medium-sized agribusinesses for FY 2024.

3.5 Sampling Technique and Sample Size

This study employs a two-stage sampling approach, combining purposive sampling and simple random sampling to ensure a representative selection of medium-sized agribusinesses across various agricultural subsectors in Nairobi County. Purposive sampling is used to identify medium-sized agribusinesses that meet the inclusion criteria—annual revenues between KES 50 million and KES 500 million and over 10 employees—ensuring that only relevant firms are considered.

Once the eligible businesses are identified, simple random sampling is applied to select 100 agribusinesses, ensuring equal representation across different regions and value chains while minimizing selection bias. From each selected business, one senior executive (CEO, CFO, COO, or senior management officer) was surveyed, yielding a total of 100 respondents. This sampling technique ensures that the sample size is both manageable and statistically meaningful, allowing for generalizable findings on the determinants of sustainable growth among medium-sized agribusinesses in Kenya.

3.6 Data Collection Methods

The study collected primary data using structured questionnaires administered to business owners and senior executives, such as Chief Executive Officers (CEOs), chief Finance Officers (CFOs), Chief Operating Officers, and other Senior Management Officers. The selection of business owners and senior executives as respondents is justified by their strategic decision-making roles, direct involvement in financial and operational management, and deep understanding of the factors influencing business sustainability and growth, making them the most knowledgeable individuals to provide reliable data for the study. The questionnaire is designed to capture quantitative data related to the independent variables—entrepreneurial experience, firm size, firm duration, and access to finance—and the dependent variable, sustainable growth. The

structured format allows for standardised responses, facilitating comparative analysis. A pilot study was conducted before the entire data collection process to refine the questionnaire's structure and ensure clarity in wording, minimising potential misinterpretation.

3.7 Data Analysis

The collected data was analyzed using descriptive and inferential statistical methods to examine the relationship between the independent variables (entrepreneurial experience, access to finance, and technology), firm duration, and firm size control variables and the dependent variable (sustainable growth). Descriptive statistics, including means, standard deviations, and frequencies, was used to summarize the characteristics of the sample and provide insights into the distribution of responses. Correlation analysis was conducted to assess the strength and direction of relationships between the study variables.

To test the research hypotheses, multiple regression analysis was employed to determine the extent to which entrepreneurial experience, access to finance, and technology influence sustainable growth. The regression model took the form:

$$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\varepsilon$$

Where:

Y = Sustainable growth (dependent variable)

β0 = Intercept

β1, β2, β3, β4 = Regression coefficients

X_1 = Entrepreneurial Experience

X_2 = Access to Finance

X_3= Technology

ε = Error term

To determine the effect of firm duration and firm size on sustainable growth of agribusiness enterprises, hierarchical multiple regressions was used. Hierarchical regression involves theoretically based decisions for how predictors are entered into the

analysis. Hierarchical regression can be useful for evaluating the contributions of predictors above and beyond previously entered predictors, as a means of statistical control, and for examining incremental validity (Garson, 2013). Introducing firm size s the first control variable, the model is

$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\varepsilon$

Where:

Y = Sustainable growth (dependent variable)

β0 = Intercept

β1, β2, β3, β4 = Regression coefficients

X_1 = Entrepreneurial Experience

X_2 = Access to Finance

X_3= Technology

X_4= Firm size

ε = Error term

In the last step, firm duration is introduced as the control variable

$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\beta_5X_5+\varepsilon$

Where:

Y = Sustainable growth (dependent variable)

β0 = Intercept

β1, β2, β3, β4 = Regression coefficients

X_1 = Entrepreneurial Experience

X_2 = Access to Finance

X_3= Technology

X_4= Firm size

X_5= Firm duration

ε = Error term

The change in R-square was monitored to establish whether the control has a weakening or strengthening effect. In addition, the statistical significance of the predictors (independent variables) and control variables on the outcome was checked at 0.05 level of statistical significance to help in testing study hypothesis.

In the model, $\beta_i = 1….4$ predicts the change in predictor variable (Y) to unit changes in the independent X_1, X_2, X_3, X_4 and X_5. ε captures the unexplained variations in the model.

Hierarchical regression involves theoretically based decisions for how predictors are entered into the analysis. Hierarchical regression can be useful for evaluating the contributions of predictors above and beyond previously entered predictors, as a means of statistical control, and for examining incremental validity (Garson, 2013). The change in R-square was monitored to establish whether the moderator has a weakening or strengthening effect. In addition, the statistical significance of the predictors (independent variables) and moderator variables on the outcome was checked at 0.05 level of statistical significance to help in testing stud hypothesis.

3.8 Research Data Quality

Reliability and validity are the two most important quality control objects in research. The following are the explanation of validity and reliability in research and their application in the study.

3.8.1 Reliability

Reliability refers to the consistency and stability of the research instrument in measuring the intended variables. A pilot study was conducted on 10 firms (10% of the sample) to assess the reliability of the structured questionnaire before full data collection. The study employed Cronbach's alpha coefficient to determine the internal consistency of the questionnaire items, with a reliability threshold of 0.7 or higher considered acceptable. This ensures that the instrument produces consistent results when administered to different respondents under similar condition.

3.8.2 Validity

Validity refers to the degree to which the research instrument accurately measures what it is intended to measure. The study ensured content validity by aligning the questionnaire items with theoretical and empirical literature on sustainable growth and the study's independent variables—entrepreneurial experience, firm duration, access to finance, and firm size. Expert reviews from academicians and industry practitioners were sought to validate the questionnaire's clarity, relevance, and comprehensiveness. Additionally, construct validity was established through factor analysis, ensuring that the questions effectively capture the key dimensions of each variable. Face validity was also checked by pretesting the questionnaire with a small sample to assess clarity and interpretability, minimizing potential biases and misinterpretations in the main study.

3.9 Diagnostic Tests

To ensure the validity and reliability of the regression model, several diagnostic tests was conducted before data analysis. Normality tests were performed to determine whether the residuals of the regression model follow a normal distribution, which is essential for valid statistical inference. Multicollinearity tests, using the Variance Inflation Factor (VIF), was conducted to detect whether independent variables are highly correlated, as multicollinearity can distort the estimated coefficients and weaken the predictive power of the model. Heteroscedasticity tests, such as the Breusch-Pagan test, were used to check for non-constant variance in the residuals, as heteroscedasticity can lead to inefficient estimates and biased standard errors. Addressing these issues ensures that the model meets key statistical assumptions, thereby enhancing the accuracy and robustness of the findings.

3.9.1 Normality Test

Bera and Jarque (1981) tests were used to test for normality. The study tested the null hypothesis that the disturbances are not normally distributed. If the p-value is < 0.05, then we fail to reject the null hypothesis at the 5% level. However, if the p-value calculated is >0.05 the error variance is normally distributed.

3.9.2 Multicollinearity tests

For multicollinearity, the study used variance inflation factors (VIF), which helped to determine if the independent variables are correlated, and the extent of their correlation. A VIF of <5 implies acceptable level of multicollinearity while VIFs >5 implies severe multicollinearity.

3.9.3 Heteroscedasticity tests

To test for heteroscedasticity, the Breusch-Pagan/Godfrey test was used. The null hypothesis of this study was that the error variance is homoscedastic. If the null hypothesis is rejected and a conclusion made that heteroscedasticity is present in the panel data, then this would be accounted for by running a Feasible Generalized Least Squares model. When p-value is <0.05, there is heteroscedasticity; when p-value is >0.05, there is no heteroscedasticity (Breusch & Pagan, 1980).

3.9.4 Linearity Tests

Linearity test is undertaken to determine if the independent and dependent variable have linear relationship. This is vital because many models assume that for binding not to be biased the relationship among variables are supposed to be linear. Ramsey RESET test was used to determine linearity (Khoirunnisa, et al. 2016). This test check non-linearity in a regression model by checking by checking if an extra polynomial improves the significance of the model. The null hypothesis stated that model is correctly specified and follows the linear form. F statistic was used to determine if the model is linear and the decision rule involved checking the p value. If the p value is greater than significance level then fail to reject null hypothesis and conclusion is drawn that there is no evidence of non-linearity.

3.10 Ethical Consideration

This study adhered to ethical research principles, ensuring voluntary participation, confidentiality, and informed consent. An introductory letter from Strathmore Business School and a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI) were obtained to authorise data collection. Additionally, approval from the Institutional Ethics Review Committee (IERC) at Strathmore

University was sought to ensure that the research complies with ethical guidelines. Respondents were provided with informed consent forms, clearly outlining the study's purpose, their right to withdraw at any time, and assurance of confidentiality and anonymity. The collected data was stored securely and used exclusively for academic purposes, ensuring compliance with ethical standards and data protection regulations.

3.11 Chapter Summary

The chapter presented the methodology that was used in the investigation including research philosophy, research design, target population sampling techniques and sample size, data collection methods, data analysis, research data quality, diagnostic tests as well as ethical considerations.

CHAPTER FOUR

PRESENTATION OF RESULTS/FINDINGS

4.1 Introduction

The chapter presents the analysis of data as well as the presentation of the results. Primary data was used in the study and was collected using structured questionnaires that were administered to the respondents. The main aim of the study was to determine the determinants of sustainable growth of medium-sized agribusiness in Kenya. Specifically, the study sought to establish the effect of entrepreneur experience, access to finance and technology adoption on sustainable growth among medium sized agribusiness enterprises in Kenya.

4.2 Response Rate

The sample size for the study were 100 respondents comprising e senior executive (CEO, CFO, COO, or senior management officer who were surveyed in the respective SMEs under study. Thus, a total of 100 questionnaires were administered to the respondents. However, 73 questionnaires were dully filled and received back giving a response rate of 73% which is sufficient for a research study.

Table 4.1: Response Rate

	Frequency	**Percent**
Response	73	73
Non-Response	27	27
Total	**100**	**100**

For the 27% non-response, some of the questionnaires were not filled completely, other respondents did not fill the questionnaires at all citing time constraints while other respondents were inaccessible. Furthermore, concerns about privacy and confidentiality were cited by other respondents.

4.3 Demographic Information

This relates the information pertaining the respondents in the study. The study sought to analyse the demographic information of the respondents including their position in the organization, sector of the business, years in operation as well as the number of employees in the respective medium sized enterprises.

4.3.1 Position in the Organization

The study sought to determine the position of the respondents in the medium sized enterprises under study and the outcomes are presented in Table 4.2.

Table 4.2: Position in the Organization

	Frequency	Percent
Owner	28	38.4
Chief Executive Officer	9	12.3
Chief Operating Officer	9	12.3
Chief Finance Officer	8	11
Human Resources Manager	3	4.1
Marketing Director	11	15.1
Other	5	6.8
Total	**73**	**100**

From the results, 38.4% of the respondents were owners of the medium sized enterprises under investigation, 15.1% were marketing directors, 12.3% were chief executive officers and chief finance officers, 11% were chief finance officers and finally 6.8% held other positions in the organization.

4.3.2 Sector of the Business

The study further sought to determine the sector of the businesses under study and the results are outlined in Table 4.3.

Table 4.3: Sector of the Business

	Frequency	Percent
Crop Production	19	26
Livestock & Dairy	7	9.6
Agro-Processing	12	16.4
Agricultural Input Supply	9	12.3
Agritech	10	13.7
Other	16	21.9
Total	**73**	**100**

From the results, 21.9% of the respondents were from other sectors of the business, 16.4% from agro-processing, 13.7% from agritech, 12.3% from agricultural input supply, 26% from crop production and finally 9.6% from livestock and dairy.

4.3.3 Years in Operation

The study further sought to determine the years of operations of the businesses under study and the results are outlined in Table 4.4.

Table 4.4: Years of Operation

	Frequency	Percent
Less than 3 Years	15	20.5
3 - 5 Years	16	21.9
6 - 10 Years	25	34.2
More than 10 Years	17	23.3
Total	**73**	**100**

The results indicated that 34.2% of the businesses under study for between 6 and 10 years, 23.3% for more than 10 years, 21.9% for between 3 and 5 years and 20.5% had been in operation for less than 3 years.

4.3.4 Number of Employees

The study further sought to determine the number of employees of the businesses under study and the results are outlined in Table 4.5.

Table 4.5: Number of Employees

	Frequency	Percent
10-49	11	15.1
50 - 99	28	38.4
100 - 249	16	21.9
Over 250	18	24.7
Total	**73**	**100**

The outcomes indicated that 38.4% of the businesses under study had between 50 and 99 employees, 24.7% over 250 employees, 21.9% between 100 and 249 employees and finally 15.1% between 10 and 49 employees.

4.4 Descriptive Analysis

The investigation provided the descriptive statistics in the form of mean, SD and percentages. Primary data collected using structured questionnaires was used. A Likert scale of 1 to 5 was used in the measurement of the responses with the value of 5

representing strongly agree, 4 for agree, 3 neutral, 2 for disagree and 1 representing strongly disagree. Thus, a mean of 5 indicates that the average responses were strongly in disagree, 2 for disagreement, 3 for neutral, 4 for agreement and a mean of 5 implying that the responses were strongly in tandem.

4.4.1 Entrepreneurial Experience

Table 4.6 presents a summary of the responses on the questions on entrepreneurial experience.

Table 4.6: Descriptive Results for Entrepreneurial Experience

	SD %	D %	N %	A %	SA %	M	S Dev
Our business has benefited from the industry experience of the management team.	4.1%	6.8%	13.7%	31.5%	43.8%	4.0	1.1
Cross-industry experience has helped our firm adapt to market changes effectively.	1.4%	8.2%	15.1%	35.6%	39.7%	4.0	1.0
The level of education and training of the business owner(s) has influenced the firm's growth.	4.1%	8.2%	11.0%	35.6%	41.1%	4.0	1.1
Prior business experience helps in making strategic decisions that enhance sustainability.	4.1%	6.8%	12.3%	34.2%	42.5%	4.1	1.1
The operational expertise of management plays a key role in driving business expansion.	5.5%	5.5%	11.0%	30.1%	47.9%	4.1	1.0
Entrepreneurial experience enables the business to effectively handle financial and operational risks.	1.4%	6.8%	17.8%	31.5%	42.5%		

The statement on whether the business has benefited from the industry experience of the management team recorded responses as follows. 31.6% of the responses were in concurrence, 43.8% strongly in tandem and 13.7% being neutral. The line mean and

SD of the statement were 4.0 and 1.1 in that order implying the responses were in tandem on average. The question, cross- industry experience has helped our firm adapt to market changes effectively had an SD and a mean of 4.0 and 1.0 respectively. Furthermore, 39.7% of those contacted concurred strongly with the question, 35.6% agreed and 15.1% were neutral.

In addition, 25.6% of those contacted were in concurrence that the level of education and training of the business owner(s) has influenced the firm's growth, 41.1% strongly agreed and 11% did not take any position. The mean of the statement was 4.0 and its SD was 1.1. Prior business experience helps in making strategic decisions that enhance sustainability recorded the following responses. 12.3% of those contacted moderately agreed, 34.2% were in tandem and 42.5% strongly concurred with a mean of 4.0 and an SD of 1.1.

Furthermore, 47.9% of the participants were strongly in agreement with a mean of 4.1 and an SD of 1.1 that the operational expertise of management plays a key role in driving business expansion. 30.1% of them were in concurrence and 11% not taking sides. Entrepreneurial experience enables the business to effectively handle financial and operational risks received the following responses. 31.5% of the responses who were in tandem, 42.5% strongly agreed and 17.8% were neutral. The mean and SD of the statement were 4.1 and 1.0 in that order.

4.4.2 Access to Finance

A summary of the responses on the statements on access to finance are presented in Table 4.7.

Table 4.7: Descriptive Results for Access to Finance

	SD %	D %	N %	A %	SA %	M	S Dev
Our business has adequate access to financial resources for expansion and sustainability.	5.5%	9.6%	16.4%	39.7%	28.8%	3.8	1.1
High-interest rates and unfavourable financing	2.7%	8.2%	15.1%	32.9%	41.1%	4.0	1.1

terms hinder our firm's growth.							
The availability of collateral affects our ability to secure business financing.	5.5%	8.2%	12.3%	42.5%	31.5%	3.9	1.1
Limited access to credit restricts our firm's ability to invest in modern technology.	6.8%	4.1%	12.3%	43.8%	32.9%	3.9	1.1
Alternative financing options (grants, equity, venture capital) have been crucial for business growth.	8.2%	1.4%	20.5%	26.0%	43.8%	4.0	1.2
The financial support received by the business significantly influences its long-term sustainability.	5.5%	6.8%	6.8%	35.6%	45.2%	4.1	1.1

The question on whether the business has adequate access to financial resources for expansion and sustainability attracted responses as follows. 39.7% of the responses who were in concurrence, 28.8% agreed strongly and 16.4% were neutral. The mean and SD of the question were 3.8 and 1.1 in that order implying the responses were in concurrence on average. The statement, high- interest rates and unfavourable financing terms hinder our firm's growth had an SD and a mean of 4.0 and 1.1 respectively. Additionally, 41.1% of those contacted concurred strongly with the statement, 32.9% in agreement and 15.1% were neutral.

In addition, 42.5% of the respondents agreed that the availability of collateral affects our ability to secure business financing, 31.5% strongly agreed and 12.3% moderately concurred. The mean of the question was 3.9 and its SD was 1.1. Limited access to credit restricts our firm's ability to invest in modern technology had the following responses. 12.3% of those contacted moderately agreed, 43.8% were in tandem and 32.9% were strongly in agreement with a mean of 3.9 and an SD of 1.1.

Furthermore, 43.8% of the respondents were strongly in concurrence with a mean of 4.0 and an SD of 1.2 that alternative financing options (grants, equity, venture capital)

have been crucial for business growth. 26% of the respondents were in concurrence and 20.5% were moderately in tandem. The financial support received by the business significantly influences its long-term sustainability received responses that follows. 35.6% of the responses who were in tandem, 45.2% strongly agreed and 6.8% were neutral. The line mean and SD of the question were 4.1 and 1.1 in that order.

4.4.3 Technology Adoption

A summary of the responses on the statements on technology adoption are presented in Table 4.8.

Table 4.8: Descriptive Results for Technology Adoption

	SD	D	N	A	SA		
	%	%	%	%	%	M	S Dev
Our business has implemented process automation to improve efficiency.	6.8%	5.5%	16.4%	32.9%	38.4%	3.9	1.2
Our business effectively utilizes technology to optimize resource allocation.	6.8%	8.2%	12.3%	42.5%	30.1%	3.8	1.2
Our business has adopted data analytics to improve decision-making	5.5%	1.4%	23.3%	38.4%	31.5%	3.9	1.0
Our business leverages digital tools to enhance overall operational efficiency.	1.4%	9.6%	12.3%	38.4%	38.4%	4.0	1.0
Technology adoption has led to significant cost savings in the business.	8.2%	2.7%	15.1%	41.1%	32.9%	3.9	1.2
Our business has adopted technology in the management of stocks	8.2%	6.8%	12.3%	27.4%	45.2%	3.9	1.3
Our business has adopted technology in the management of sales inventories	2.7%	8.2%	16.4%	32.9%	39.7%	4.0	1.1

The question on whether the business has implemented process automation to improve efficiency recorded responses as follows. 32.4% of the responses were in tandem,

38.4% concurred strongly and 16.4% were moderately in tandem. The mean and SD of the question were 3.9 and 1.2 in that order implying the responses were in concurrence on average. The statement, our business effectively utilizes technology to optimize resource allocation had an SD and a mean of 3.8 and 1.2 respectively. In addition, 30.1% of the respondents concurred strongly with the statement, 42.5% in tandem and 12.3% were moderately in concurrence.

Furthermore, 38.4% of the respondents agreed that the business has adopted data analytics to improve decision-making, 31.5% strongly agreed and 23.3% were moderately in tandem. The mean of the question was 3.9 and its SD was 1.0. Technology adoption has led to significant cost savings in the business had the responses as follows. 15.1% of the respondents moderately agreed, 41.1% were in tandem and 32.9% strongly concurred with a mean of 3.9 and an SD of 1.2.

Furthermore, 45.2% of the responses were strongly in tandem with a mean of 3.9 and an SD of 1.3 that the business has adopted technology in the management of stocks. 27.4% of the responses were in concurrence and 12.3% were moderately in tandem. Our business has adopted technology in the management of sales inventories recorded the responses that follow. 32.9% of the responses who were in tandem, 39.7% strongly agreed and 16.4% were moderately in concurrence. The line mean and SD of the question were 4.1 and 1.1 respectively.

4.4.4 Firm Size

A summary of the responses on the statements on firm size are presented in Table 4.9.

Table 4.9: Descriptive Results for Firm Size

	SD %	D %	N %	A %	SA %	M	S Dev
The number of employees in our business has a direct impact on business growth and sustainability.	5.5%	4.1%	15.1%	34.2%	41.1%	4.0	1.1
Our annual sales revenue has steadily increased over time.	4.1%	6.8%	9.6%	46.6%	32.9%	4.0	1.0

The profitability of our business is positively influenced by its size.	4.1%	9.6%	17.8%	27.4%	41.1%	3.9	1.2
Larger businesses have better access to credit facilities and financial services.	5.5%	5.5%	11.0%	35.6%	42.5%	4.0	1.1
As our business has grown, operational efficiency has improved.	4.1%	8.2%	15.1%	31.5%	41.1%	4.0	1.1
The firm's asset base provides a competitive advantage in the industry.	5.5%	4.1%	15.1%	31.5%	43.8%	4.0	1.1

The statement on whether the number of employees in our business has a direct impact on business growth and sustainability received responses as follows. 34.2% of the respondents were in tandem, 41.1% strongly concurred and 15.1% moderately concurred. The line mean and SD of the statement were 4.0 and 1.1 respectively implying the responses were in tandem on average. The statement, our annual sales revenue has steadily increased over time had an SD and a mean of 4.0 and 1.0 respectively. In addition, 46.6% of those contacted were in tandem strongly with the question, 32.9% agreed and 9.6% were moderately in agreement.

Furthermore, 27.4% of the respondents agreed that the profitability of our business is positively influenced by its size, 41.1% strongly agreed and 17.8% were neutral. The line mean of the question was 3.9 and its SD was 1.2. Large businesses have better access to credit facilities and financial services received the following responses. 11% of the responses moderately agreed, 35.6% were in tandem and 42.5% concurred strongly with a mean of 4.0 and an SD of 1.1.

Additionally, 41.1% of responses were in tandem strongly with a mean of 4.0 and an SD of 1.1 that as their business has grown, operational efficiency has improved. 31.5% of the responses were in concurrence and 15.1% were neutral. With regards the statement, the firm's asset base provides a competitive advantage in the industry, 31.5% of the responses who were in tandem, 43.8% were in concurrence strongly and 15.1% were moderately in agreement. The line mean and SD of the question were 4.0 and 1.1 in that order.

4.4.5 Firm Duration

A summary of the responses on the statements on firm duration are presented in Table 4.10.

Table 4.10: Descriptive Results for Firm Duration

	SD %	D %	N %	A %	SA %	M	S Dev
The number of years our business has been operational has positively impacted its sustainability.	8.2%	2.7%	16.4%	32.9%	39.7%	3.9	1.2
Older businesses have a competitive advantage due to accumulated industry knowledge.	6.8%	2.7%	11.0%	41.1%	38.4%	4.0	1.1
The evolution of management practices over time has strengthened business growth.	5.5%	2.7%	11.0%	32.9%	47.9%	4.2	1.1
Our business has improved its efficiency and profitability as it has aged.	5.5%	4.1%	15.1%	26.0%	49.3%	4.1	1.1
The firm's experience in the industry helps in securing financing and market opportunities.	8.2%	4.1%	15.1%	30.1%	42.5%	3.9	1.2
Changes in business strategy over the years have enhanced long-term sustainability.	4.1%	8.2%	13.7%	35.6%	38.4%	4.0	1.1

The statement on whether the number of years our business has been operational has positively impacted its sustainability recorded responses as follows. 32.9% of the respondents were in concurrence, 39.7% strongly in tandem and 16.4% were moderately in agreement. The line mean and SD of the question were 3.9 and 1.2 respectively implying the responses were on average in concurrence. The question, order businesses have a competitive advantage due to accumulated industry knowledge had an SD and a mean of 4.0 and 1.1 respectively. Furthermore, 38.4% were in strong concurrence with the statement, 41.1% in tandem and 11% moderately in concurrence.

Furthermore, 47.9% of responses were strongly in tandem with a mean of 4.2 and an SD of 1.1 that the evolution of management practices over time has strengthened business growth. 32.9% were in concurrence and 11% were neutral. Regarding the question our business has improved its efficiency and profitability as it has aged, 26% of the responses who were in tandem, 49.3% strongly in concurrence and 15.1% were moderately in tandem. The line mean and SD of the statement were 4.1 and 1.1 in that order.

In addition, 42.5% of responses were strongly in tandem with a mean of 3.9 and an SD of 1.2 that the firm's experience in the industry helps in securing financing and market opportunities, 30.1% were in concurrence and 15.1% were neutral. Regarding the question changes in business strategy over the years have enhanced long-term sustainability, 30.1% of the responses who were in tandem, 38.4% strongly in concurrence and 13.7% were moderately in tandem. The line mean and SD of the statement were 4.0 and 1.1 in that order.

4.4.6 Sustainable Growth

A summary of the responses on the statements on sustainable growth are presented in Table 4.11.

Table 4.11: Descriptive Results for Sustainable Growth

	SD %	D %	N %	A %	SA %	M	S Dev
Our business has achieved a consistent revenue growth rate over the years.	8.2%	2.7%	12.3%	34.2%	42.5%	4.0	1.2
Our business has achieved a consistent revenue growth rate over the years.	6.8%	4.1%	12.3%	35.6%	41.1%	4.0	1.2
Our firm has steadily increased employment opportunities in the community.	8.2%	4.1%	13.7%	35.6%	38.4%	3.9	1.2
Our company demonstrates operational resilience by adapting to challenges like market or climate changes	5.5%	2.7%	11.0%	41.1%	39.7%	4.1	1.1

Our company reinvests profits to ensure long-term business sustainability.	8.2%	1.4%	8.2%	39.7%	42.5%	4.1	1.1
The business has adopted environmentally and socially responsible growth strategies.	1.4%	11.0%	13.7%	39.7%	34.2%	3.9	1.0
Over time there has been enhanced efficiency and customer satisfaction in our business	4.1%	4.1%	16.4%	34.2%	41.1%	4.0	1.1

The statement on whether the business has achieved a consistent revenue growth rate over the years received responses as follows. 34.2% of the respondents were in tandem, 42.5% strongly concurred and 12.3% moderately concurred. The line mean and SD of the statement were 4.0 and 1.2 respectively implying the responses were in tandem on average. The statement, our business has achieved a consistent revenue growth rate over the years had an SD and a mean of 4.0 and 1.2 respectively. In addition, 41.1% of those contacted were in tandem strongly with the question, 35.6% agreed and 12.3% were moderately in agreement.

Furthermore, 35.6% of the respondents agreed that the firm has steadily increased employment opportunities in the community, 38.4% strongly agreed and 13.7% were neutral. The line mean of the question was 3.9 and its SD was 1.2. Our company demonstrates operational resilience by adapting to challenges like market or climate changes received the following responses. 11% of the responses moderately agreed, 41.1% were in tandem and 39.7% concurred strongly with a mean of 4.1 and an SD of 1.1.

Additionally, 42.5% of responses were in tandem strongly with a mean of 4.1 and an SD of 1.1 that as their company reinvests profits to ensure long-term business sustainability. 39.7% of the responses were in concurrence and 8.2% were neutral. With regards the statement, the business has adopted environmentally and socially responsible growth strategies, 39.7% of the responses who were in tandem, 34.2% were in concurrence strongly and 13.7% were moderately in agreement. The line mean and SD of the question were 3.9 and 1.0 in that order. The statement, over time there has

been enhanced efficiency and customer satisfaction in our business, recorded responses as follows. 34.2% of the responses who were in tandem, 41.1% were in concurrence strongly and 16.4% were moderately in agreement. The line mean and SD of the question were 4.0 and 1.1 in that order.

4.5 Diagnostic Tests

The diagnostics tests were carried out in the study to ascertain the suitability of the model to be estimated. The tests included tests for normality, multicollinearity, heteroscedasticity and linearity tests.

4.5.1 Normality Tests

Bera and Jarque (1981) tests were used to test for normality. The study tested the null hypothesis that the disturbances are not normally distributed. If the p-value is < 0.05, then we fail to reject the null hypothesis at the 5% level. However, if the p-value calculated is >0.05 the error variance is normally distributed. The normality test results are outlined in Table 4.12.

Table 4.12: Normality Test Results

	Obs	Pr(Skewness)	Pr(Kurtosis) adj	chi2(2)	Prob> chi2
Sustainable Growth	73	0.635	0.474	0.128	0.262
Entrepreneurial Experience	73	0.352	0.601	0.564	0.078
Access to Finance	73	0.031	0.112	28.514	0.187
Technology Adoption	73	0.069	0.229	23.689	0.202
Firm Size	73	0.521	0.655	8.453	0.071
Firm Duration	73	0.743	0.398	1.769	0.111

From the results, all the calculated p values for the variables in the study are all >0.05 (0.262>0.05, 0.078>0.05, 0.187>0.05, 0.202>0.05, 0.071>0.05 and 0.111>0.05). This implies that the data collected follows normal distribution and can be used for further analysis and inferences.

4.5.2 Multicollinearity Tests

For multicollinearity, the study used variance inflation factors (VIF), which helped to determine if the independent variables are correlated, and the extent of their correlation. A VIF of <5 implies acceptable level of multicollinearity while VIFs >5 implies severe multicollinearity.

Table 4.13: Multicollinearity Test Results

	Collinearity Statistics	
	Tolerance	**VIF**
(Constant)		
Entrepreneurial Experience	0.816	1.226
Access to Finance	0.758	1.32
Technology Adoption	0.675	1.482
Firm Size	0.817	1.225
Firm Duration	0.666	1.502

The results indicate that all the VIF values as indicated in the results in Table 4.13 are <5 implying that the independent variables in the study are not highly correlated and hence all the variables were retained for further analysis.

4.5.3 Test for Heteroscedasticity

To test for heteroscedasticity, the Breusch-Pagan/Godfrey test was used. The null hypothesis of this study was that the error variance is homoscedastic. If the null hypothesis is rejected and a conclusion made that heteroscedasticity is present in the panel data, then this would be accounted for by running a Feasible Generalized Least Squares model. When p-value is <0.05, there is heteroscedasticity; when p-value is >0.05, there is no heteroscedasticity (Breusch & Pagan, 1980).

Table 4.14: Heteroscedasticity Test Results

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant Variance
Variables: Fitted values for Sustainable Growth
chi2(1) = 1.87
Prob > chi2 = 0.1675

From the outcomes, the estimated p value was 0.1675>0.05 implying of the absence of heteroscedasticity.

4.5.4 Linearity Tests

Linearity assumes a straight-line relationship between the predictor variables and the criterion variable. This was assessed by examination of normal probability plots of all the variables in the study. The P - P plot of sustainable growth outlined in Figure 4.1 points out to a normal distribution. There seems to be no outliers in the data. Thus, the approximation of sustainable growth was close to normal implying that the data can be used for regression analysis.

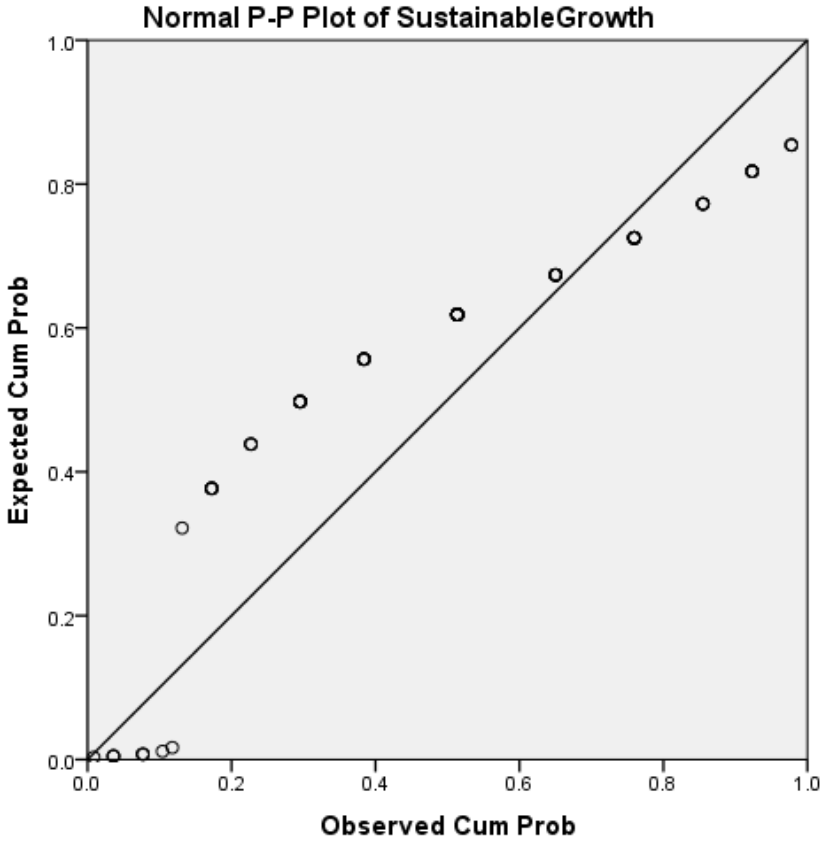

Figure 4.1: P-P Plot for Sustainable Growth

The P - P plot of entrepreneurial experience presented in Figure 4.2 points out to a normal distribution. There seems to be no outliers in the data. Thus, the approximation of entrepreneurial experience was close to normal implying that the data can be used for regression analysis.

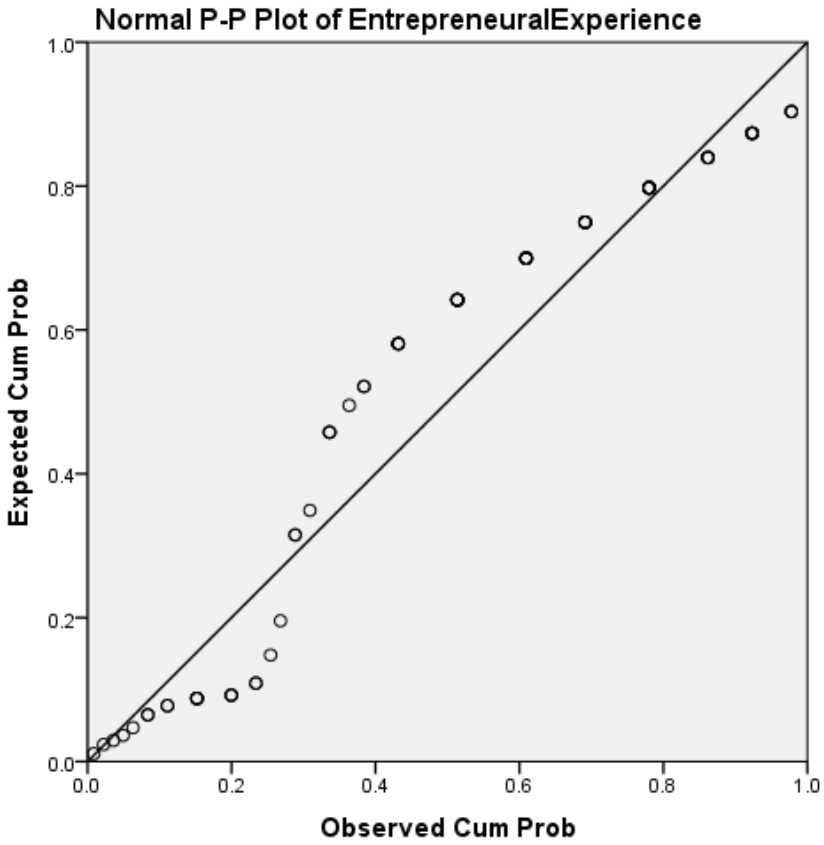

Figure 4.2: P-P Plot for Entrepreneurial Experience

The P - P plot of access to finance presented in Figure 4.3 points out to a normal distribution. There seems to be no outliers in the data. Thus, the approximation of access to finance was close to normal implying that the data can be used for regression analysis.

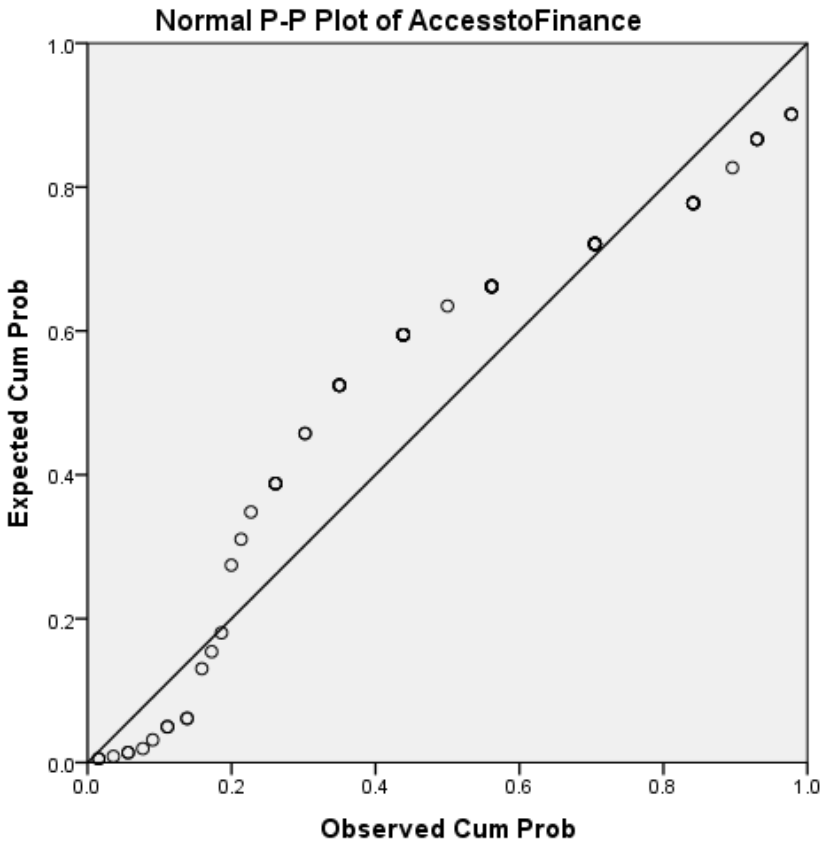

Figure 4.3: P-P Plot for Access to Finance

The P - P plot of technology adoption presented in Figure 4.4 points out to a normal distribution. There seems to be no outliers in the data. Thus, the approximation of technology adoption was close to normal implying that the data can be used for regression analysis.

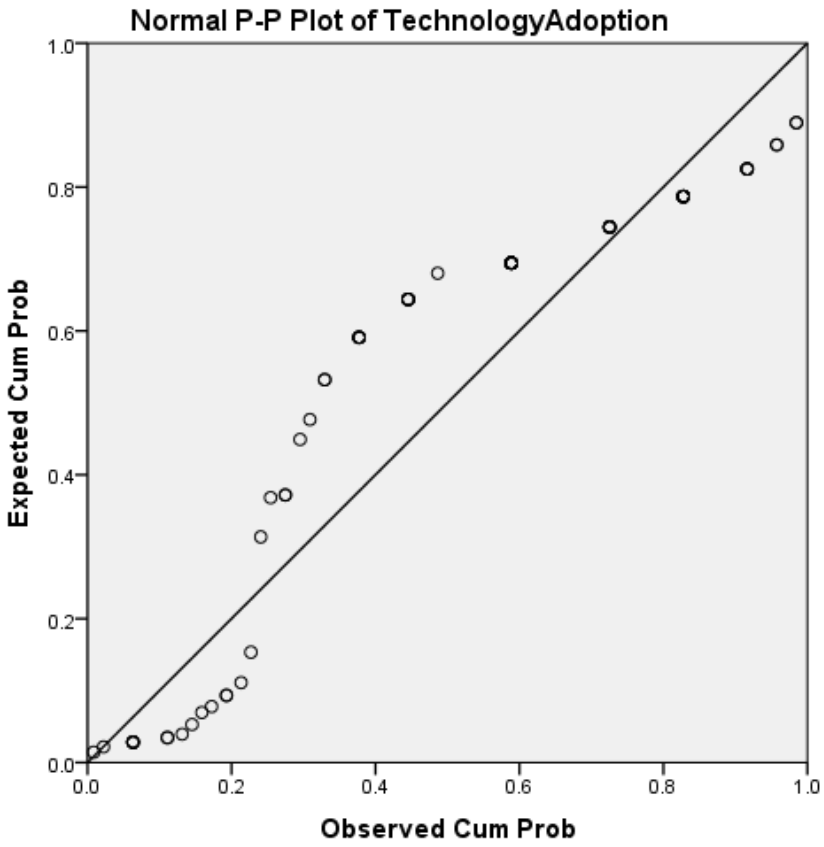

Figure 4.4: P-P Plot for Technology Adoption

The P - P plot of firm size presented in Figure 4.5 points out to a normal distribution. There seems to be no outliers in the data. Thus, the approximation of firm size was close to normal implying that the data can be used for regression analysis.

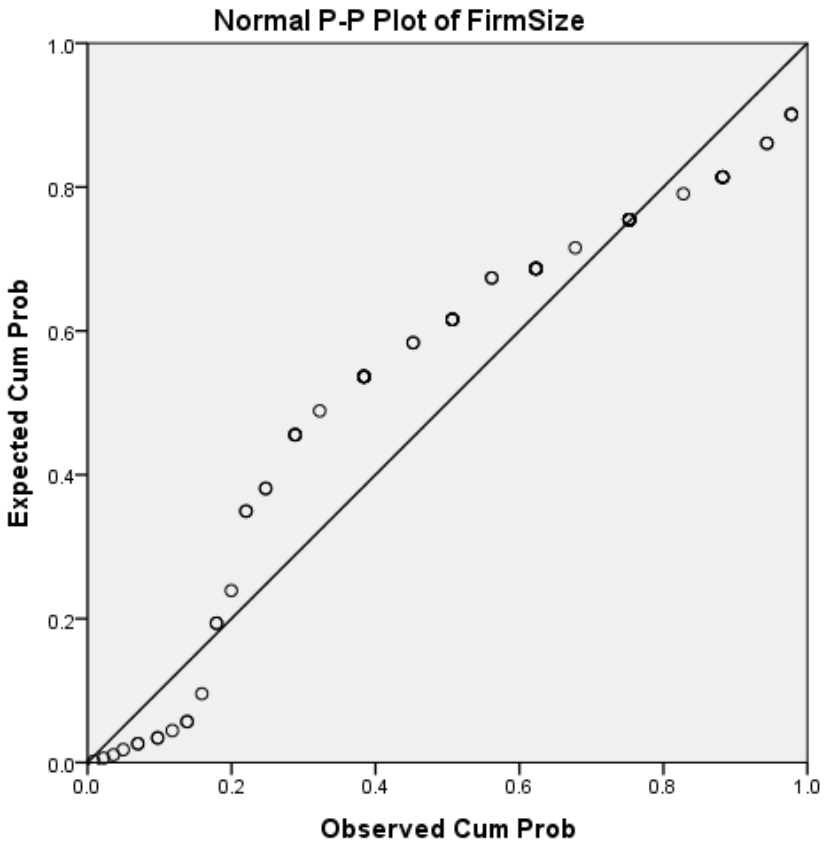

Figure 4.5: P-P Plot for Firm Size

The P - P plot of firm duration presented in Figure 4.6 points out to a normal distribution. There seems to be no outliers in the data. Thus, the approximation of firm duration was close to normal implying that the data can be used for regression analysis.

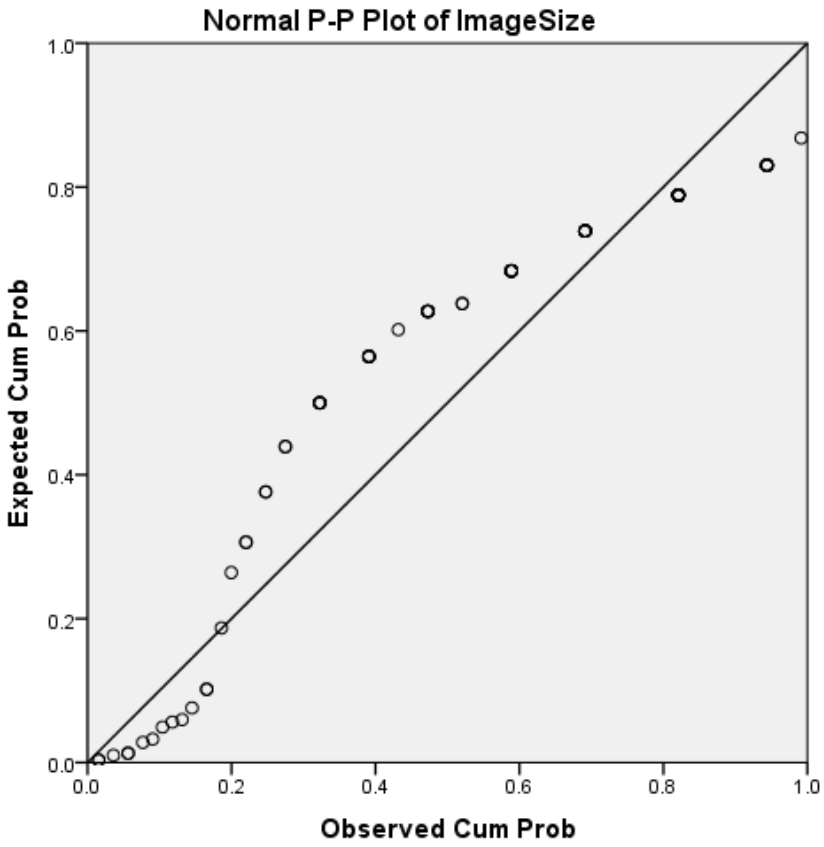

Figure 4.6: P-P Plot for Firm Duration

4.6 Inferential Analysis

The analysis involved the correlation analysis as well as the regression analysis.

4.6.1 Correlation Analysis

Correlation analysis was used to explore the direction and strength of relationship between entrepreneurial experience, access to finance, technology adoption, firm size and firm duration and sustainable growth of medium sized agribusiness in Nairobi County. The correlation results are presented in Table 4.7.

Table 4.15: Correlation Results

		Sustainable Growth	Entrepreneurial Experience	Access to Finance	Technology Adoption	Firm Size	Firm Duration
Sustainable Growth	Pearson Correlation	1	.557**	.570**	.562**	.546**	.552**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.000
	N	73	73	73	73	73	73
Entrepreneurial Experience	Pearson Correlation	.557**	1	.337**	.287*	.301**	.251*
	Sig. (2-tailed)	0.000		0.004	0.014	0.01	0.032
	N	73	73	73	73	73	73
Access to Finance	Pearson Correlation	.570**	.337**	1	.259*	.302**	.388**
	Sig. (2-tailed)	0.000	0.004		0.027	0.009	0.001
	N	73	73	73	73	73	73
Technology Adoption	Pearson Correlation	.562**	.287*	.259*	1	.322**	.510**
	Sig. (2-tailed)	0.000	0.014	0.027		0.006	0.000
	N	73	73	73	73	73	73
Firm Size	Pearson Correlation	.546**	.301**	.302**	.322**	1	0.186
	Sig. (2-tailed)	0.000	0.01	0.009	0.006		0.114
	N	73	73	73	73	73	73
Firm Duration	Pearson Correlation	.552**	.251*	.388**	.510**	0.186	1
	Sig. (2-tailed)	0.000	0.032	0.001	0.000	0.114	
	N	73	73	73	73	73	73

The correlation between entrepreneurial experience and sustainable growth was both positive and statistically significant (r=.557, p=0.000<0.05). The correlation between access to finance and sustainable growth was both positive and statistically significant (r=.570, p=0.000<0.05). The correlation between technology adoption and sustainable growth was both positive and statistically significant (r=.562, p=0.000<0.05). The correlation between firm size and sustainable growth was both positive and statistically significant (r=.546, p=0.000<0.05). The correlation between firm duration and sustainable growth was both positive and statistically significant (r=.552, p=0.000<0.05).

4.6.2 Regression Analysis

The analysis served to determine the linear relationship between the dependent and the independent variables under review. The dependent variable was sustainable growth of medium sized agribusiness in Nairobi County while the independent variables were entrepreneurial experience, access to finance, technology adoption, firm size and firm duration.

Table 4.16: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.774a	0.599	0.582	0.60933

The outcomes in the estimated model pointed out that the model explains to a tune of 59.9% of the total variations in the sustainable growth of the medium sized enterprises agribusiness in Nairobi County. This is provided for by the estimated R Squared value of 0.599. Therefore, the variables technology adoption, access to finance and entrepreneurial experience are significant in explaining the sustainable growth of the medium sized enterprises agribusiness in Nairobi County. The remaining 40.1% of the variations is explained by other factors not included in the investigation that are also significant in explaining growth of the medium sized enterprises agribusiness in Nairobi County.

Table 4.17: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	38.323	3	12.774	34.406	.000b
Residual	25.618	69	0.371		
Total	**63.941**	**72**			

The outcomes indicate that the estimated model is significant. This is evidenced by the p value (0.000<0.05) in the estimated model and also the calculated F value (34.406) less than the critical F value from the F tables.

Table 4.18: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.336	0.369		0.909	0.367
Entrepreneurial Experience	0.290	0.073	0.328	3.952	0.000
Access to Finance	0.359	0.081	0.363	4.410	0.000
Technology Adoption	0.350	0.076	0.374	4.622	0.000

From the results, the coefficient of entrepreneurial experience was positive and statistically significant (β= 0.29, p=0.000<0.05). Thus, a unit improvement in entrepreneurial experience would result in 0.29 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, entrepreneurial experience is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of access to finance was positive and statistically significant (β= 0.359, p=0.000<0.05). Thus, a unit improvement in access to finance would result in 0.359 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, access to finance is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of technology adoption was positive and statistically significant (β= 0.35, p=0.000<0.05). Thus, a unit improvement in technology adoption would result in 0.35 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, technology adoption is a significant determinant of sustainable growth of the medium sized agribusiness.

To determine the effect of firm duration and firm size on sustainable growth of agribusiness enterprises, hierarchical multiple regressions was used. Introducing firm size the first control variable, the model is;

Table 4.19: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.811a	0.657	0.637	0.56775

The outcomes in the estimated model pointed out that the model explains to a tune of 65.7% of the total variations in the sustainable growth of the medium sized enterprises agribusiness in Nairobi County. This is provided for by the estimated R Squared value of 0.657. Therefore, the variables technology adoption, access to finance, firm size and entrepreneurial experience are significant in explaining the sustainable growth of the medium sized enterprises agribusiness in Nairobi County. The remaining 34.3% of the variations is explained by other factors not included in the investigation that are also significant in explaining growth of the medium sized enterprises agribusiness in Nairobi County. As firm size is introduced, the R Square improves from59.9% to 65.7% meaning that it is a significant determinant for sustainable growth.

Table 4.20: ANOVA

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	42.022	4	10.505	32.591	.000b
Residual	21.919	68	0.322		
Total	63.941	72			

The outcomes indicate that the estimated model is significant. This is evidenced by the p value (0.000<0.05) in the estimated model and also the calculated F value (32.591) less than the critical F value from the F tables.

Table 4.21: Regression Coefficients

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	-0.305	0.393		-0.776	0.441
Entrepreneurial Experience	0.249	0.069	0.282	3.589	0.001
Access to Finance	0.31	0.077	0.313	4.016	0.000
Technology Adoption	0.294	0.072	0.314	4.063	0.000
Firm Size	0.299	0.088	0.266	3.387	0.001

From the results, the coefficient of entrepreneurial experience was positive and statistically significant (β= 0.249, p=0.001<0.05). Thus, a unit improvement in entrepreneurial experience would result in 0.249 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, entrepreneurial

experience is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of access to finance was positive and statistically significant (β= 0.31, p=0.000<0.05). Thus, a unit improvement in access to finance would result in 0.31 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, access to finance is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of technology adoption was positive and statistically significant (β= 0.294, p=0.000<0.05). Thus, a unit improvement in technology adoption would result in 0.294 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, technology adoption is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of firm size was positive and statistically significant (β= 0.299, p=0.001<0.05). Thus, a unit increase in firm size would result in 0.299 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, firm size is a significant determinant of sustainable growth of the medium sized agribusiness. When firm size is introduced, it reduces the coefficients of entrepreneurial experience, access to finance and technology adoption.

In the last step, firm duration (control variable is introduced) and the results are as follows;

Table 4.22: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.831a	0.691	0.668	0.54308

The outcomes in the estimated model pointed out that the model explains to a tune of 69.1% of the total variations in the sustainable growth of the medium sized enterprises agribusiness in Nairobi County. This is provided for by the estimated R Squared value of 0.691. Therefore, the variables technology adoption, access to finance, firm size, firm duration and entrepreneurial experience are significant in explaining the sustainable growth of the medium sized enterprises agribusiness in Nairobi County. The remaining 30.9% of the variations is explained by other factors not included in the

investigation that are also significant in explaining growth of the medium sized enterprises agribusiness in Nairobi County. The introduction of firm duration enhance the R Square value of the model.

Table 4.23: ANOVA

	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Regression	44.18	5	8.836	29.96	.000b
Residual	19.76	67	0.295		
Total	**63.941**	**72**			

The outcomes indicate that the estimated model is significant. This is evidenced by the p value (0.000<0.05) in the estimated model and also the calculated F value (29.96) less than the critical F value from the F tables.

Table 4.24: Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-0.531	0.385		-1.38	0.172
Entrepreneurial Experience	0.24	0.067	0.271	3.603	0.001
Access to Finance	0.249	0.077	0.252	3.226	0.002
Technology Adoption	0.201	0.077	0.215	2.595	0.012
Firm Size	0.313	0.085	0.278	3.694	0.000
Firm Duration	0.203	0.075	0.225	2.706	0.009

From the outcomes, the coefficient of entrepreneurial experience was positive and statistically significant (β= 0.24, p=0.001<0.05). Thus, a unit improvement in entrepreneurial experience would result in 0.24 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, entrepreneurial experience is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of access to finance was positive and statistically significant (β= 0.249, p=0.002<0.05). Thus, a unit improvement in access to finance would result in 0.249 units improvement in the sustainable growth of the medium sized agribusiness in

Nairobi County. Thus, access to finance is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of technology adoption was positive and statistically significant (β= 0.201, p=0.012<0.05). Thus, a unit improvement in technology adoption would result in 0.201 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, technology adoption is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of firm size was positive and statistically significant (β= 0.313, p=0.001<0.05). Thus, a unit increase in firm size would result in 0.313 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, firm size is a significant determinant of sustainable growth of the medium sized agribusiness.

The coefficient of firm duration was positive and statistically significant (β= 0.203, p=0.009<0.05). Thus, a unit increase in firm duration would result in 0.203 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. Thus, firm duration is a significant determinant of sustainable growth of the medium sized agribusiness. The introduction of firm duration weakens the explanatory power of the other variables in the model.

4.7 Chater Summary

The chapter presented the analysis of data and presentation of the results. The chapter outlined the response rate, the demographic information of the respondents, descriptive analysis presented in accordance with the variables in the study, diagnostic tests as well as the inferential analysis including both correlation and regression analysis.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The section outlines the discussion of the analysis outcomes as well as presents the conclusions of the investigation and makes recommendations based on the conclusions. The discussion of the results as well as the conclusions are was done in accordance with the objectives of the research.

5.2 Summary of Key Findings

From the results, the coefficient of entrepreneurial experience was positive and statistically significant. Thus, a unit improvement in entrepreneurial experience would result significant improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. The coefficient of access to finance was positive and statistically significant. Thus, a unit improvement in access to finance would result in significant improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. The coefficient of technology adoption was positive and statistically significant. Thus, a unit improvement in technology adoption would result in significant improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. The coefficient of firm size was positive and statistically significant. Thus, a unit increase in firm size would result in significant improvement in the sustainable growth of the medium sized agribusiness in Nairobi County. When firm size is introduced, it reduces the coefficients of entrepreneurial experience, access to finance and technology adoption. The coefficient of firm duration was positive and statistically significant. Thus, a unit increase in firm duration would result in 0.203 units improvement in the sustainable growth of the medium sized agribusiness in Nairobi County.

5.3 Discussion

5.3.1 Entrepreneurial Experience and Sustainable Growth

Entrepreneurial experience is a significant determinant of sustainable growth of the medium sized agribusiness. The results are in tandem with the arguments of Erdogan (2023) which highlights that firms led by experienced entrepreneurs exhibit higher

growth rates due to their ability to navigate operational challenges and promote innovation. Abdul (2018) finds that Nigerian entrepreneurs with prior business experience demonstrated increased strategic foresight and adaptability, which improved financial performance and business survival. Similarly, Koryak et al. (2015) and Hensellek et al. (2023) argue that entrepreneurial experience is critical to business success, as experienced entrepreneurs are more likely to adopt flexible leadership approaches and invest in dynamic capabilities that enhance firm sustainability. Rosário et al. (2022) argue that experienced entrepreneurs are more likely to engage in sustainable business models because they have a nuanced understanding of market conditions and regulatory frameworks. Acosta et al. (2016) find a strong positive correlation between entrepreneurial experience and SME performance, suggesting that seasoned entrepreneurs can develop and sustain competitive advantages.

However, Munyori (2014) argues that while experience is valuable, it does not necessarily lead to growth if external factors such as access to finance, policy stability, and market conditions are unfavorable. This suggests that entrepreneurial experience alone is insufficient without access to critical resources such as capital and technology. Wanjau (2020) finds that despite extensive industry experience, many SME owners in Kenya struggle to sustain growth, indicating that other variables play a critical role in ensuring business longevity. Marom et al. (2019) note that experienced entrepreneurs often become risk-averse over time, leading to stagnation in innovation and a reluctance to adopt new business models. This contradicts the assumption that experience always fosters adaptability and suggests that long-term entrepreneurs may require external incentives to continuously innovate. Yoshino and Taghizadeh-Hesary (2018) further argue that while experience improves financial decision-making, it does not always translate into sustainable growth in the long term, particularly if businesses fail to adapt to evolving market conditions.

5.3.2 Access to Finance and Sustainable Growth

Access to finance is a significant determinant of sustainable growth of the medium sized agribusiness. Access to finance enables SMEs to expand operations, invest in new technologies, and enhance productivity (Beck & Demirguc-Kunt, 2006). In the agribusiness sector, affordable and accessible credit is particularly essential, as it allows businesses to manage seasonal fluctuations, improve infrastructure, and adopt modern

farming techniques (Munguti, 2023). The outcomes concur with the findings of Achoja et al. (2020), Munguti (2023), and Freeman et al. (2016) which argued that increased access to financial services, including loans and microfinance, significantly contributes to SME growth. Namonyo (2019) and Achoja et al. (2020) further find that access to financial products improves SME productivity and competitiveness in Kenya. These studies reinforce the idea that financial accessibility is a key driver of business expansion, allowing agribusiness SMEs to overcome capital constraints and invest in market-driven solutions.

However, Teka (2022) and Reardon et al. (2024) argue that while finance is necessary, it is not a sufficient determinant of sustainable growth. Additionally, Maloba & Alhassan (2019) and Geoffrey Kibet et al. (2020) highlight limited credit history, lack of collateral, and high lending risks as significant barriers preventing agribusiness SMEs from securing affordable financing. Many financial institutions perceive agriculture as a high-risk sector, leading to stringent borrowing conditions that limit the ability of SMEs to access capital (Muli, 2013; Kambura & Mwenda, 2021).

5.3.3 Technology Adoption and Sustainable Growth

Technology adoption is a significant determinant of sustainable growth of the medium sized agribusiness. The results concur with the findings of Kannan & Gambetta (2025) which pointed out that technology is a key enabler of sustainable growth, and its adoption enhances operational efficiency and resilience. Authors such as Kimura (2018) and Teka (2022) conclude that the relationship between technology and the sustainable growth of medium-sized businesses is positive and reinforcing. Awa et al. (2015) argued that the integration of technology in medium-sized enterprises through the adoption of cloud computing, AI and automation helps businesses reduce operational costs and streamline processes. Abidemi (2024) assessed the role of technology and automation in streamlining business processes, finding that automation improves productivity in SMEs by 30% and reduces manual errors by 25%. Triwahyono et al. (2023) also found that SMEs' adoption of digital tools enabled optimum resource utilisation, reduced operational costs, and enhanced competitiveness.

According to Quarato et al. (2020), e-commerce adoption has enabled SMEs to reach global markets by overcoming geographic barriers, reducing reliance on physical

outlets, and reducing distribution costs. Vaillant and Herrero (2019) Identifies online marketplaces such as Amazon, Alibaba, and Jumia that provide SMEs with a platform to access international customers and allow them to scale. Aghazadeh et al. (2023) identified the role of digital transformation in reducing entry barriers in international markets, enhancing SME competitiveness, facilitating data utilisation and customer insights and strengthening digital resilience in the face of uncertainty in global markets. Taiminen and Karjaluoto (2015) found that social media platforms such as Facebook, Instagram, LinkedIn & Twitter provide companies with a cost-effective marketing tool to increase their brand awareness. Ainin et al. (2015) shows the positive impact on business expansion that the adoption of digital marketing has on the sustainable growth of SMEs in emerging markets. Reto (2017) highlighted how the adoption of these platforms increases customer engagement, builds brand loyalty and improves sales performance.

However, Triwahyono et al. (2023) and Kimura (2018) identify several challenges that hinder the adoption of technology, including limited financial resources, lack of technical expertise and concerns over data security. According to Ghobakhloo et al. (2012), SMEs often lack the financial resources and technical expertise to invest in advanced technologies. The high upfront cost of digital transformation may deter SMEs from fully leveraging technology. The OECD (2021) notes that the digital gap has increased inequalities among people, places, and firms and raises concerns that the benefits of digital transformation may not be evenly distributed. This is supported by (Asongu & Odhiambo, 2018), who bring out that SMEs in developing economies face significant digital infrastructural gaps limiting their ability to benefit from digital transformation. Janya Chanchaichujit et al. (2024) highlight that stakeholders' lack of knowledge and awareness of advanced technology poses a significant technology adoption barrier, particularly in agricultural supply chains. He and Zhang (2019) further pointed out that increased reliance on digital technology exposes SMEs to cybersecurity and data privacy risks, given that most SMEs cannot implement robust cybersecurity measures.

5.3.4 Firm Size and Sustainable Growth

Firm size is a significant determinant of sustainable growth of the medium sized agribusiness. When firm size is introduced, it reduces the coefficients of entrepreneurial experience, access to finance and technology adoption. The results are in tandem with the findings of Freeman et al. (2016) which noted that firm size plays a critical role in determining financial accessibility and resource allocation, making it an important factor in sustainable business growth. The findings of Wathegi & Omagwa (2018) further indicate that larger firms experience higher growth rates due to better financial stability, which reduces their risk of collapse. Ilaboya & Ohiokha (2016) found a positive correlation between firm size and long-term profitability, reinforcing the economies of scale perspective. Rahman & Yilun (2021) found that larger firms tend to be more profitable due to efficiency gains and cost advantages. Lee (2009) suggested that while larger firms are generally more stable, their growth rates may plateau beyond a certain point. Marom et al. (2019) further argue that larger firms prioritize innovation with lower risk, leading to sustainable and steady growth, whereas smaller firms often adopt high-risk strategies that may result in rapid but unstable expansion.

However, Ipinnaiye et al. (2016) found that smaller firms tend to grow faster than larger ones, experiencing higher sales and employment growth rates. Erdogan (2023) revealed that smaller firms exhibit higher growth rates due to greater market expansion opportunities, whereas growth declines for larger firms due to diseconomies of scale, bureaucratic inefficiencies, and market rigidity. Garcia-Martinez et al. (2023) found that while smaller firms tend to grow faster, larger firms achieve more sustainable long-term growth due to their financial stability and economies of scale. Diabate et al. (2019) highlight that medium-sized businesses often fall into the missing middle, where they are too large for microfinance support but too small to attract traditional bank financing. This financial gap limits their ability to expand operations, invest in productivity-enhancing technologies, and achieve long-term sustainability.

5.3.5 Firm Duration and Sustainable Growth

Firm duration is a significant determinant of sustainable growth of the medium sized agribusiness. The introduction of firm duration weakens the explanatory power of the other variables in the model. The results are in tandem with the findings of Ilaboya and

Ohiokha (2016) which confirm a significant positive relationship between firm duration and profitability, supporting the economies of scale perspective, which suggests that older firms benefit from lower costs, accumulated knowledge, established customer bases, and better resource utilization. However, Rahman and Yilun (2021) find a negative correlation between firm duration and profitability, arguing that as firms grow older, their profitability tends to decline due to bureaucratic inertia, inefficient decision-making, and a reduction in innovation. Similarly, Akben-Selcuk (2016) assesses the impact of firm duration on profitability and finds that older firms tend to experience lower return on assets, return on equity, and gross profit margins. These findings suggest that as firms mature, they may struggle with operational inefficiencies, rigid organizational structures, and decreased adaptability to market changes.

The findings of Hui et al. (2013) acknowledge that prior research has produced mixed results, showing that firm duration can have a positive, negative, or moderating effect on SME growth. Erdogan (2023) challenges the assumption that firm duration directly influences SME growth, arguing that sustainable growth is determined not by a firm's age but by how it manages challenges and leverages opportunities at different stages of its lifecycle.

5.4 Conclusion

The relationship between entrepreneurial experience and sustainable growth of the medium sized agribusiness in Nairobi County was positive and statistically significant. Thus, the study concluded that entrepreneurial experience is a significant determinant of sustainable growth of the medium sized agribusiness. Entrepreneurs with industry knowledge, strategic vision and adaptive capabilities are better equipped to identify market opportunities, implement innovative practices and manage operational challenges. Entrepreneurial experience ensures that these businesses remain agile, responsive to market trends, and committed to continuous improvement. The results are in tandem with the propositions of resource-based view theory. The theory directly links to the variables in this study. Entrepreneurial experience, as an internal resource, contributes to the strategic management of agribusinesses by enhancing decision-making, risk assessment, and innovation.

The relationship between access to finance and sustainable growth of the medium sized agribusiness in Nairobi County was positive and statistically significant. Thus, the study concluded that access to finance is a significant determinant of sustainable growth of the medium sized agribusiness. Finance provides the necessary capital for investment in infrastructure, technology, and expansion initiatives. Adequate financing allows these businesses to improve productivity, manage risks, and explore new markets, ultimately enhancing their competitiveness and profitability. When financial resources are accessible, agribusinesses can scale operations, innovate, and build resilience against market and environmental shocks. The results are in tandem with the propositions dynamic capabilities theory. DCT directly aligns with the variables in this study, particularly access to finance. Entrepreneurs with extensive experience are better equipped to sense and seize opportunities while transforming their business strategies in response to changing market dynamics.

The relationship between technology adoption and sustainable growth of the medium sized agribusiness in Nairobi County was positive and statistically significant. Thus, the study concluded that technology adoption is a significant determinant of sustainable growth of the medium sized agribusiness. Technology adoption enables businesses to enhance efficiency, reduce costs, and increase output quality. The integration of modern tools such as precision farming, digital platforms, and data analytics enables agribusinesses to make informed decisions, optimize resource use, and respond swiftly to market demands. Technological innovation also facilitates better supply chain management and access to broader markets, strengthening competitiveness and scalability. The results concur with the propositions of dynamic capability theory. This theory provides a framework for understanding how businesses develop resilience and adaptability by continuously sensing market changes, seizing new opportunities, and transforming their business models to sustain growth.

The relationship between firm size and sustainable growth of the medium sized agribusiness in Nairobi County was positive and statistically significant. Thus, the study concluded that firm size is a significant determinant of sustainable growth of the medium sized agribusiness. When firm size is introduced, it reduces the coefficients of entrepreneurial experience, access to finance and technology adoption and hence firm size is a control variable on the determinants of sustainable growth of medium-sized

agribusiness. Medium-sized firms often possess enough resources to invest in technology, skilled labor, and market expansion, while still maintaining the agility to adapt to changing market conditions. Their size allows for economies of scale without the bureaucratic limitations of larger corporations, fostering innovation and efficient decision-making. The results are in tandem with the propositions dynamic capabilities theory. DCT directly aligns with the variables in this study, particularly firm size. Entrepreneurs with extensive experience are better equipped to sense and seize opportunities while transforming their business strategies in response to changing market dynamics.

The relationship between firm duration and sustainable growth of the medium sized agribusiness in Nairobi County was positive and statistically significant. Thus, the study concluded that firm duration is a significant determinant of sustainable growth of the medium sized agribusiness. The introduction of firm duration weakens the explanatory power of the other variables in the model and hence firm size is a control variable on the determinants of sustainable growth of medium-sized agribusiness. Older firms often benefit from accumulated experience, established market relationships, and refined operational processes. With time, these businesses develop institutional knowledge, brand recognition, and resilience that can support long-term stability and strategic growth. However, sustainable success also depends on the firm's ability to remain innovative and responsive to evolving industry trends, regardless of age. The results are in line with the propositions of Triple Bottom Line Theory. The theory postulates that firms should not only focus on commercial profits but also on the impact of their activities on the environment while making decisions and determining their performance.

5.5 Recommendations

The study recommends that medium sized agribusinesses should strengthen entrepreneurial experience through targeted capacity building, mentorship programs, and exposure to best practices in agribusiness management. Entrepreneurs should be equipped with skills in strategic planning, financial management, innovation, and market analysis to effectively navigate the complex agricultural landscape and support their long-term sustainable growth.

It is also essential for the medium-sized agribusinesses to improve access to finance through the development of tailored financial products, flexible credit facilities, and risk-sharing mechanisms. Financial institutions should collaborate with agribusiness stakeholders to design loan packages that align with the seasonal nature and unique risks of agriculture. Promoting financial literacy among agribusiness owners and strengthening credit guarantee schemes can increase their confidence and eligibility for funding.

The medium sized agribusinesses should be encouraged and supported to adopt modern technologies through targeted incentives, training programs, and accessible digital infrastructure. Governments and development partners can play a key role by offering subsidies, tax relief, or grants for the acquisition of agricultural technologies such as precision farming tools, irrigation systems, and digital supply chain platforms. Furthermore, creating awareness about the benefits of technology and providing technical support can help overcome resistance and knowledge gaps.

Medium-sized agribusinesses should strategically build on their existing scale by expanding market reach, strengthening supply chains, and investing in capacity development. Policymakers and industry stakeholders can support this by facilitating access to larger markets, infrastructure, and export opportunities tailored to mid-sized enterprises. Collaboration through cooperatives can also help these firms pool resources, share knowledge, and achieve greater economies of scale.

The medium-sized agribusinesses should leverage on institutional knowledge of older firms while encouraging continuous innovation and adaptability. Long-standing agribusinesses should be supported in modernizing their operations through training in emerging technologies, market trends, and sustainable practices.

5.6 Limitations for the Study

There are a number of research philosophies. However, the study was limited to a positivism research philosophy and a correlational research design. There are several agribusinesses operating within Nairobi County. However, the study was also limited to 100 medium sized agribusinesses operating within Nairobi City County, Kenya and hence the researcher administered 100 questionnaires to the respondents. The respondents were limited to the CEO, CFO, COO, or senior management officer. Thus,

a census study of the 100 respondents and primary data that was gathered using a structured questionnaire.

5.7 Suggestions for Further Studies

The study recommends that further studies be conducted on the influence of digital capabilities and sustainable growth of agribusinesses in Nairobi County Kenya. The studies may focus on the application of digital skills in agribusinesses, expanding market access through digital channels including social media as well as building digital partnerships. Further studies on the drivers of sustainable growth in medium-sized agribusinesses could explore the interplay between access to finance, adoption of agri-technologies, value chain integration, and environmental sustainability practices. Research could examine how financial inclusion through credit, insurance, or blended capital; enables innovation and scalability, while also investigating the impact of digital tools and precision agriculture on productivity and environmental resilience. Additionally, analyzing the role of skilled management, workforce training, and inclusive policies particularly those supporting gender equity and smallholder integration can offer insights into holistic growth strategies of agribusinesses.

5.8 Chapter Summary

The chapter presented the discussion of the results, conclusion and recommendations of the study. The presentation of chapter is done according to the objectives of the study. The chapter concluded by presenting limitations for the study as well as suggestions for further studies.

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APPENDICES

Appendix I: Letter of Introduction

February 2025

Dear Respondent,

RE: REQUEST FOR RESEARCH DATA

I am a student at Strathmore Business School where I am undertaking a degree in Master of Business Administration. I am required to submit as part of my course work assessment, research on **"ASSESSING THE DRIVERS OF SUSTAINABLE GROWTH OF AGRIBUSINESSES IN KENYA: A FOCUS ON MEDIUM-SIZED ENTITIES".**

You have been selected for generating data needed for this study. The purpose of this information will be only for academia and nowhere in the report will your name be mentioned. In case you need the findings of this research we shall avail it to you.

Your assistance will be truly valued.

Thank you in advance.

ERIC MWANGI WAINAINA

Appendix II: Questionnaire for agribusinesses

Dear respondent,

This questionnaire has been designed to collect information on the determinants of sustainable growth of medium-sized agribusiness in Kenya. Kindly read the questions thoroughly and respond as truthfully as possible. The information collected will be used only for scholarly study purposes and will be held in strict confidentiality.

Instructions

1. Tick appropriately

2. Please feel free to add some additional appropriate information to the study.

PART A: BACKGROUND INFORMATION

Name of the Agribusiness (Optional): _____

Position in the Organization**:**

- Owner
- Chief Executive Officer
- Chief Operating Officer
- Chief Financial Officer
- Human Resources Manager
- Marketing Director
- Other (Specify): _____

Sector of Agribusiness:

- Crop Production
- Livestock & Dairy
- Agro-processing
- Agricultural Input Supply
- Agritech

- Other (Specify): _____

Location of Business (County): _____

Years in Operation:

- Less than 3 years
- 3–5 years
- 6–10 years
- More than 10 years

Number of Employees:

- 10–49 employees
- 50–99 employees
- 100–249 employees
- Over 250 employees

PART B: ENTREPRENEURIAL EXPERIENCE

To what extent do you agree with the following statements? Rate in a scale of 1 to 5 (1 Strongly disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree)

STATEMENT	**1**	**2**	**3**	**4**	**5**
Our business has benefited from the industry experience of the management team.					
Cross-industry experience has helped our firm adapt to market changes effectively.					
The level of education and training of the business owner(s) has influenced the firm's growth.					
Prior business experience helps in making strategic decisions that enhance sustainability.					

The operational expertise of management plays a key role in driving business expansion.					
Entrepreneurial experience enables the business to effectively handle financial and operational risks.					

PART C: ACCESS TO FINANCE

To what extent do you agree with the following statements? Rate in a scale of 1 to 5 (1 Strongly disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree)

STATEMENT	**1**	**2**	**3**	**4**	**5**
Our business has adequate access to financial resources for expansion and sustainability.					
High-interest rates and unfavourable financing terms hinder our firm's growth.					
The availability of collateral affects our ability to secure business financing.					
Limited access to credit restricts our firm’s ability to invest in modern technology.					
Alternative financing options (grants, equity, venture capital) have been crucial for business growth.					
The financial support received by the business significantly influences its long-term sustainability.					

PART D: TECHNOLOGY ADOPTION

To what extent do you agree with the following statements? Rate in a scale of 1 to 5 (1 Strongly disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree)

STATEMENT	**1**	**2**	**3**	**4**	**5**
Our business has implemented process automation to improve efficiency.					
Our business has adopted data analytics to improve decision-making					

We actively use mobile or digital platforms for our operations					
Digital solutions have reduced time taken for key processes					
Adoption of technology has improved our access to markets					
Our operations have become more resilient due to data-driven decision making					
Adoption of technology has improved our revenue and profitability					

PART E: FIRM SIZE

To what extent do you agree with the following statements? Rate in a scale of 1 to 5 (1 Strongly disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree)

STATEMENT	**1**	**2**	**3**	**4**	**5**
The number of employees in our business has a direct impact on business growth and sustainability.					
Our annual sales revenue has steadily increased over time.					
The profitability of our business is positively influenced by its size.					
Larger businesses have better access to credit facilities and financial services.					
As our business has grown, operational efficiency has improved.					
The firm's asset base provides a competitive advantage in the industry.					

PART F: FIRM DURATION

To what extent do you agree with the following statements? Rate in a scale of 1 to 5 (1 Strongly disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree)

STATEMENT	1	2	3	4	5
The number of years our business has been operational has positively impacted its sustainability.					
Older businesses have a competitive advantage due to accumulated industry knowledge.					
The evolution of management practices over time has strengthened business growth.					
Our business has improved its efficiency and profitability as it has aged.					
The firm's experience in the industry helps in securing financing and market opportunities.					
Changes in business strategy over the years have enhanced long-term sustainability.					

PART G: SUSTAINABLE GROWTH

To what extent do you agree with the following statements? Rate in a scale of 1 to 5 (1 Strongly disagree, 2 Disagree, 3 Neutral, 4 Agree, 5 Strongly Agree)

STATEMENT	1	2	3	4	5
Our business has achieved a consistent revenue growth rate over the years.					
Our business has achieved a consistent revenue growth rate over the years.					
Our firm has steadily increased employment opportunities in the community.					
Our company demonstrates operational resilience by adapting to challenges like market or climate changes					
Our company reinvests profits to ensure long-term business sustainability.					
The business has adopted environmentally and socially responsible growth strategies.					
Over time there has been enhanced efficiency and customer satisfaction in our business					

Appendix III: Ethical Strathmore University Institutional Scientific and Ethical Review Committee

22nd April 2025

Mr Wainaina Eric,
eric.wainaina@strathmore.edu

Dear Mr Wainaina,

RE: Assessing the Drivers of Sustainable Growth in Medium-Sized Agribusinesses in Nairobi County

This is to inform you that SU-ISERC has reviewed and **approved** your above **SU- Masters** proposal. Your application reference number is **SU-ISERC2851/25.** The approval period is from **22nd April 2025 to 21st April 2026.**

This approval is subject to compliance with the following requirements:

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

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

Yours sincerely,

Mr Ambrose Rachier,
Chairperson; SU-ISERC

Ole Sangale Rd, Madaraka Estate. PO Box 59857-00200, Nairobi, Kenya. Tel +254 (0)703 034000
Email admissions@strathmore.edu www.strathmore.edu

Appendix IV: Research Permit NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **581334**

Date of Issue: **08/April/2025**

RESEARCH LICENSE

This is to Certify that Mr.. Eric Mwangi Wainaina of Strathmore University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: ASSESSING THE DRIVERS OF SUSTAINABLE GROWTH IN MEDIUM-SIZED AGRIBUSINESSES IN NAIROBI COUNTY for the period ending : 08/April/2026.

License No: **NACOSTI/P/25/418068**

581334

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

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.

National Commission for Science, Technology and
Innovation(NACOSTI),
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P. O. Box 30623 - 00100 Nairobi, KENYA
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